UNITED STATES OF AMERICA

CONSUMER PRODUCT SAFETY COMMISSION

OFFICE OF THE SECRETARY
2001 DEC -6 P 12:04

In the matter of	)	
QUANTUM NORTH AMERICA, INC., and e4L, Inc.	)	CPSC Docket No.: 01-2

INITIAL DECISION

I. PROCEDURAL HISTORY

This is an administrative proceeding of the Consumer Product Safety Commission ("CPSC" or "the Agency"), initiated pursuant to Section 15 of the Consumer Product Safety Act, 15 U.S.C. § 2051 *et seq.*, ("CPSA"). The CPSC came into being October 27, 1972, with the passage of the Consumer Public Safety Act, Pub. L. No. 92-573, 86 Stat. 1207, amended by Consumer Product Safety Commission Improvements Act of 1976, Pub. L. No. 94-284, 90 Stat. 503. Among the congressional findings upon which the legislation rests are that "an unacceptable number of consumer products which present unreasonable risks of injury are distributed in commerce" and that "the public should be protected against unreasonable risks of injury associated with consumer products. . . ." *Id.*, 15 U.S.C. § 2051(a)(1), (3). The Commission's mandate includes the power, after conducting an adjudicatory hearing, to declare appropriate products to be "substantial product hazards" and to order notice and a repair, replacement or refund action plan. 15 U.S.C. § 2064.

This proceeding was instituted by complaint dated May 29, 2001, published in the Federal Register on June 6, 2001, for purposes of public notification and remedial action, whereby, in the public interest, the Legal Division of the Office of Compliance of the CPSC ("Complaint Counsel") seeks to protect the public from substantial risks of injury alleged to be presented by the Red Devil gas grill. The complaint seeks an order requiring Respondents Quantum North America, Inc. ("Quantum") and e4L, Inc. ("e4L") to give public notice of the defect and to elect to repair the defect, replace the grill with a product that does not contain the defect, or refund the purchase price.

The United States Office of Personnel Management, by Loan No. 2001-20-01, dated June 15, 2001, under the authority of 5 U.S.C. § 3344 and 5 C.F.R. § 930.213, at the request of the CPSC and with the consent of the Federal Trade Commission, has designated the undersigned Administrative Law Judge to be the Presiding Officer in this matter.

The Respondents in this proceeding, Quantum and e4L, are alleged to have manufactured the Red Devil gas grill. Respondents have failed to appear and answer the complaint in this matter, as required by 16 C.F.R. § 1025.12. Accordingly, on September 5, 2001, Complaint Counsel filed a Motion for Default Judgment. Respondents did not file an opposition to the motion for default judgment. By Order dated December 6, 2001 issued simultaneously herewith, Complaint Counsel's motion for default judgment was granted, pursuant to 16 C.F.R. § 1025.12(c).

II. STANDARDS WHERE DEFAULT JUDGMENT IS GRANTED

The Rules of Practice governing adjudicatory proceedings brought under the Consumer Product Safety Act require the Presiding Officer to file an Initial Decision with the Commission "based upon a consideration of the entire record" and "supported by reliable, probative, and substantial evidence." 16 C.F.R. § 1051(b). Where respondents are in default, as in this case, "the Presiding Officer may make such findings of fact and conclusions of law as are just and reasonable under the circumstances." 16 C.F.R. § 1025.12(c). Under the analogous Rule 55 of the Federal Rules of Civil Procedure, no hearing is required before an entry of default. If the court determines that a defendant is in default, the factual allegations of the complaint will be taken as true. *Thomson v. Wooster*, 114 U.S. 104 (1885); *Klapprott v. United States*, 335 U.S. 601, 603 (1949) (district court necessarily accepts the undenied allegations of the complaint as true). This rule applies to cases seeking equitable as well as legal relief. *Thomson*, 114 U.S. at 110; *Federal Trade Comm'n v. Kitco*, 612 F. Supp. 1282, 1297 (D. Minn. 1985).

III. FINDINGS OF FACT

The findings of fact, as alleged in the complaint and taken as true as they must be where default judgment has been granted, are as follows:

The Red Devil gas grill connects to a propane gas container. A plastic locking mechanism sits atop a collapsible three legged stand. A top threaded venturi tube, which contains four symmetrical air intake openings, is placed through the underside of a plastic locking mechanism, and is vertically locked into place by flipping a handle. The lower

end of the venturi tube is attached to a gas regulator. A burner pan is then placed on top of the venturi tube. (Complaint ¶ 9.)

The Red Devil gas grill design leads consumers to light the grill at the air intake openings on the venturi tube. If the grill is lit at this location, the consumer is igniting the combustible gas inside the tube. The grill will appear to function as intended, however, the venturi tube will reach temperatures up to 750°F. (Complaint ¶¶ 10 & 16.)

The plastic locking mechanism will melt and deform when subject to temperatures over 230°F. When the plastic deforms, it allows the grill to collapse and fall to the ground. If the Red Devil gas grill tips over, following the melting of the plastic locking mechanism, flames from the burner may ignite surrounding combustibles. It is also reasonably foreseeable that a consumer who is present would attempt to catch the falling grill, and receive severe burns to his or her hands or other body parts. (Complaint ¶¶ 11, 16 & 17.) Although the complaint does not allege that such injuries occurred, the List and Summary of Documentary Evidence filed with the Complaint, per 16 C.F.R. § 1025.11(b)(3), references complaints and claims of fires and personal injury related to melting of the plastic locking mechanism. Declaration of Jimmie L. Williams, Jr., Complaint Counsel for CPSC [hereinafter "Williams Declaration"].

Each Red Devil gas grill is packaged with an instruction booklet. The booklet calls for the grill to be lit at the burner, but does not contain an illustration that shows the consumer where to light the grill. The booklet also does not warn consumers of the danger of lighting the grill at the venturi opening. It is also foreseeable that this booklet will not remain with the grill. (Complaint ¶¶ 12 & 13; Williams Declaration).

IV. CONCLUSIONS OF LAW

A consumer product is defined as "any article, or component part thereof, produced or distributed (i) for sale to a consumer for use in or around a permanent or temporary household or residence, a school, in recreation, or otherwise, or (ii) for the personal use, consumption or enjoyment of a consumer in or around a permanent or temporary household or residence, a school, in recreation, or otherwise." 15 U.S.C. § 2064(a)(1).

A substantial product hazard is defined as "a product defect which (because of the pattern of defect, the number of defective products distributed in commerce, the severity of the risk, or otherwise) creates a substantial risk of injury to the public." 15 U.S.C. § 2064(a)(2).

Although the CPSA does not define the term defect, the Commission's interpretive rules governing Substantial Product Hazard Reports states that at a minimum, defect includes the dictionary or commonly accepted meaning of the word. 16 C.F.R. § 1115.4. "Thus, a defect is a fault, flaw, or irregularity that causes weakness, failure, or inadequacy in form or function. . . . [T]he design of and materials used in a consumer product may . . . result in a defect. Thus, a product may contain a defect even if the product is manufactured exactly in accordance with its design and specifications, if the design presents a risk of injury to the public. A design defect may also be present if the risk of injury occurs as a result of the operation or use of the product . . . ." *Id.* Additionally, inadequate product warnings or instructions can create a defect, even with reasonably foreseeable consumer use or misuse, if the lack of proper safety warnings and

instructions could result in injury. 16 C.F.R. § 1115.4(d).

The allegations of the complaint are sufficient to establish the presence of a defect in design, since it is likely that consumers will light the grill at the venturi tube, but the locking mechanism melts when that occurs. Further, the allegations support a finding of a defect for failure to properly warn or instruct on how to light the Red Devil gas grill, or to warn consumers about the danger in lighting the grill at the venturi opening, as set forth above, under 15 U.S.C. § 2064.

To determine the substantiality of a product hazard created by a defect, the Commission considers the factors listed in Section 15(a)(2) of the CPSA: the pattern of defect, the number of defective products, or the severity of the risk. 15 U.S.C. § 2064(a)(2). The existence of any one of these factors could create a substantial product hazard. 16 C.F.R. § 1115.12(g)(1).

All of the approximately 155,544 Red Devil gas grills have the same venturi tube and plastic locking mechanism design. It is foreseeable that consumers will light the grill at the venturi openings. Each grill has the potential to cause a severe burn injury. Details provided in the Williams Declaration show that more than one thousand incidents have occurred where the plastic locking mechanism melted. Forty-four consumers, including a four and five year old child, sustained burn injuries to their fingers, hands or legs. In four incidences, the grill fell over and ignited surrounding combustibles.

THEREFORE, it is just and reasonable under the circumstances to find based on the uncontested allegations of the complaint that Respondents' Red Devil gas grill presents a "substantial product hazard" within the meaning of Section 15(a)(2) of the

CPSA, 15 U.S.C. § 2064(a)(2).

Once it is determined "that a product . . . presents a substantial product hazard and that notification is required to adequately protect the public from such substantial product hazard, the Commission may order the manufacturer or any distributor or retailer of the product to . . . give public notice of the defect." 15 U.S.C. § 2064(c). Further, the Commission "may order the manufacturer or any distributor or retailer . . . (1) to repair the defect . . . (2) to replace such product with a . . . product . . . which does not contain the defect[,] . . . [or] (3) to refund the purchase price . . . ." 15 U.S.C. § 2064(d).

The foregoing constitutes my findings, conclusions and Initial Decision in this proceeding. This Initial Decision and Order shall be promptly served on all parties.

ORDER

Upon consideration of the Complaint, the Respondents' failure to answer, and the memorandum filed by Complaint Counsel in support of its Motion for Default Judgment, this Presiding Officer finds the following:

(1) Respondents Quantum North America, Inc. and e4L, Inc. are manufacturers of the Red Devil gas grill, as that term is defined in the CPSA, 15 U.S.C. § 2052(a)(4).

(2) The Red Devil gas grill is a consumer product, as that term is defined in the CPSA, 15 U.S.C. § 2052(a)(1).

(3) The Red Devil gas grill presents a substantial product hazard, as that term is defined in the CPSA, 15 U.S.C. § 2064(a)(2).

As set forth above, Section 15(c) of the CPSA, 15 U.S.C. § 2064(c) provides that the Commission may order respondents to give notice to purchasers and members of the public. Complaint Counsel's prayer for relief sets forth notice provisions entirely consistent with Section 15(c) of the CPSA, 15 U.S.C. § 2064(c), and ordering Respondents to give such notice is just and reasonable under the circumstances.

Accordingly, within ten days after service of the Final Decision and Order, Respondents shall submit their notification plan to the Commission. That plan shall include the following:

(1) Give public notice via in store posters, telephone, fax, certified mail, news release, web site, and other means acceptable to the Commission that the Red Devil gas grill presents an injury and fire hazard to consumers and of the remedies available to remove the risk of injury;

(2) Mail the notice, within twenty days after service of the Final Decision and Order, to each person who is or has been a distributor or retailer of the Red Devil gas grill;

(3) Mail the notice, within twenty days after service of the Final Decision and Order, to every person to whom Respondents know the Red Devil gas grill was delivered or sold; and

(4) Include in the notice required by (1), (2) and (3) above a complete description of the hazard presented, a warning to stop using the Red Devil gas grill immediately, and clear instructions to inform consumers how to avail themselves of the remedy ordered by the Commission.

IT IS FURTHER ORDERED, ADJUDGED AND DECREED that action under Section 15(d) of the CPSA, 15 U.S.C. § 2064(d), is in the public interest and ordering such action is just and reasonable under the circumstances of this case. Accordingly, it is ordered that Respondents shall:

(1) Elect to repair all the Red Devil gas grills so they will not create an injury and fire hazard; replace all the Red Devil gas grills with a like or equivalent product which will not create an injury or fire hazard; or refund to consumers the purchase price of the Red Devil gas grill;

(2) Make no charge to consumers and reimburse consumers for any foreseeable expenses incurred in availing themselves of the remedy provided under the order issued in this matter;

(3) Reimburse distributors and dealers for expenses in connection with carrying out the Commission's Order issued in this matter;

(4) Submit a plan satisfactory to the Commission, within ten days of service of the Final Order, directing that actions specified in paragraphs (1) through (3) above be taken in a timely manner;

(5) Submit monthly reports documenting progress of the corrective action program;

(6) For a period of five years after entry of a Final Order in this matter, to keep records of actions taken to comply with paragraphs (1) through (3) above, and to supply these records upon request to the Commission for the purpose of monitoring compliance with the Final Order;

(7) Notify the Commission at least 60 days prior to any change in Respondents' business (such as incorporation, dissolution, assignment, sale or petition for bankruptcy) that results in, or is intended to result in, the emergence of successor ownership, the creation or dissolution of subsidiaries, going out of business, or any other change that might affect compliance obligations under the Final Order issued by the Commission.

AND, IT IS FURTHER ORDERED that, pursuant to Rule 1025.52 of the Commission's Rules of Practice, this Initial Decision and Order shall become the Final Decision and Order of the Commission unless an appeal is noted and perfected or unless review is ordered by the Commission on or before forty days after issuance.

ORDERED:

D. Michael Chappell
Administrative Law Judge

Date: December 6, 2001

UNITED STATES OF AMERICA

CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETARY
2001 DEC -6 P 12:09

In the matter of	)	
QUANTUM NORTH AMERICA, INC., and e4L, Inc.	)	CPSC Docket No.: 01-2

ORDER GRANTING DEFAULT JUDGMENT

I.

On May 29, 2001, the United States Consumer Product Safety Commission ("CPSC") filed an administrative complaint against respondents, Quantum North America, Inc. ("Quantum") and e4L, Inc. ("e4L"), which seeks a determination that the Red Devil gas grill presents a substantial product hazard. The complaint seeks an order requiring Quantum and e4L to give public notice of the defect and to elect to repair the defect, replace the grill with a product that does not contain the defect, or refund the purchase price.

According to the declaration of Complaint Counsel, the respondents, Quantum and e4L, were regularly served with process, via certified mail, in accordance with 16 C.F.R. § 1025.17(b) on June 4, 2001, June 7, 2001, and June 9, 2001. (Declaration of Jimmie L. Williams, Jr.). Respondents failed to appear and answer the complaint in this matter, as required by 16 C.F.R. § 1025.12. On August 17, 2001, Complaint Counsel filed a Motion for a Default Judgment. Respondents have not filed an opposition to this motion.

For the reasons set forth below, Complaint Counsel's Motion for a Default Judgment is GRANTED.

II.

Under the Rules of Practice governing adjudicatory proceedings brought under the Consumer Product Safety Act, default judgment may be granted when a respondent fails to file an answer.

> Default. Failure of a respondent to file an answer within the time provided, unless extended, shall constitute a waiver of the right to appear and contest the allegations of the complaint, and the Presiding Officer may make such findings of fact and conclusions of law as are just and reasonable under the circumstances.

16 C.F.R. § 1025.12(c).

The Commission's Rule 1025.12(c) is closely modeled after Rule 55(b) of the Federal Rules of Civil Procedure. Under Rule 55(a), judgment by default may be entered "[w]hen a party against whom a judgment for affirmative relief is sought has failed to plead or otherwise defend [the lawsuit] . . . ." Fed. R. Civ. Pro. 55(a). Under Rule 55 of the Federal Rules of Civil Procedure, no hearing is required before an entry of default. If the court determines that a defendant is in default, the factual allegations of the complaint will be taken as true. *Thomson v. Wooster*, 114 U.S. 104 (1885); *Klapprott v. United States*, 335 U.S. 601, 603 (1949) (district court necessarily accepts the undenied allegations of the complaint as true). This rule applies to cases seeking equitable as well as legal relief. *Thomson*, 114 U.S. at 110; *Federal Trade Comm'n v. Kitco*, 612 F. Supp. 1282, 1297 (D. Minn. 1985).

The respondents have been regularly served with process and have failed to appear and answer the complaint filed in this matter. Accordingly, pursuant to 16 C.F.R. § 1025.12(c), it is

hereby ORDERED that default judgment be entered against Respondents. An Initial Decision containing findings of fact and conclusions of law as are just and reasonable under the circumstances will be issued separately herewith.

ORDERED:

D. Michael Chappell
Administrative Law Judge

Date: December 6, 2001

October 8, 2003

FACSIMILE AND REGULAR MAIL
Mr. Todd Stevenson
U.S. Consumer Product Safety Commission
Office of the Secretary
4330 East West Highway
Room 502, South Tower
Bethesda, Maryland 20814

Re: In the Matter of Daisy Manufacturing Company
CPSC Docket No. 02-2

Dear Mr. Stevenson:

Enclosed are two Orders directing that this proceeding, which had been stayed, is now resumed. One Order is filed *in camera* because it makes reference to the transmittal of an Offer of Settlement. The other is a public version of the Order announcing the resumption of the proceedings without reference to any details, other than noting that the matter had been stayed. Please fax and mail copies of these Orders to the parties.

Sincerely,

William B. Moran

William B. Moran
United States Administrative Law Judge

Enclosures

CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of

DAISY MANUFACTURING COMPANY d/b/a Daisy Outdoor Products 400 West Stribling Drive Rogers, Arkansas 72756 Respondent	)	CPSC Docket No. : 02-2

In Camera

Order Notifying Parties of Resumption of Proceedings

[redacted]

William B. Moran
United States Administrative Law Judge

Dated: October 8, 2003

[redacted]

In the Matter of Daisy Manufacturing Company, Inc.
d/b/a Daisy Outdoor Products, Respondent
Docket No. CPSC Docket No.: 02-2

CERTIFICATE OF SERVICE

I hereby certify that the foregoing ***In Camera*** **Order Notifying Parties of Resumption of Proceedings** dated October 8, 2003, was sent this day by facsimile and regular mail.

Nelida Torres
Legal Staff Assistant

Dated: October 8, 2003

Mark W. Porter, Esq.
Eric L. Stone, Esq.
Alan H. Schoem, Esq.
U.S. Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814-4408

Todd Stevenson, Secretary
U.S. Consumer Product Safety Commission
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Marianne McBeth, Esq.
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Rogers, AR 72756

Aaron Locker, Esq.
Jeffrey M. Locker, Esq.
Locker, Greenberg & Brainin, P.C.
420 Fifth Avenue, 26th Floor
New York, NY 10018

CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of

DAISY MANUFACTURING COMPANY	)	CPSC Docket No. : 02-2
d/b/a Daisy Outdoor Products 400 West Stribling Drive Rogers, Arkansas 72756	)	
Respondent	)	

Order of Notification of Resumption of Proceedings

This proceeding, which had been stayed, is now resumed.

William B. Moran
William B. Moran
United States Administrative Law Judge

Dated: October 8, 2003

In the Matter of Daisy Manufacturing Company, Inc.
d/b/a Daisy Outdoor Products, Respondent
Docket No. CPSC Docket No.: 02-2

CERTIFICATE OF SERVICE

I hereby certify that the foregoing **Order of Notification of Resumption of Proceedings** dated October 8, 2003, was sent this day by facsimile and regular mail.

Nelida Torres
Legal Staff Assistant

Dated: October 8, 2003

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF ADMINISTRATIVE LAW JUDGES
MAIL CODE 1900L
1200 PENNSYLVANIA AVE., NW
WASHINGTON, DC 20460

TELEPHONE: 202 564-6255 FACSIMILE: 202 565-0044

FAX TRANSMITTAL PAGE

Date: October 8, 2003

From: Judge Moran

To: Mr. Todd Stevenson, Secretary, USCPSC

Fax: 301-504-0127 Telephone: 301-504-0800x1232

Hard Copy To Be Mailed: X Yes No
Any Questions or Problems May Be Directed To:

Nelly Torres Telephone: 202 564-6258

In the Matter of Daisy Manufacturing Company, Inc., CPSC Docket No. 02-2

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
ROYAL BEDDING COMPANY, a corporation and EDWARD KRUGMAN, and BARRY WOLF, individually and as officers of the corporation.	)	AGREEMENT CONTAINING CONSENT ORDER TO CEASE AND DESIST

The staff of the Consumer Product Safety Commission (Commission) has investigated certain practices of Royal Bedding Company and Edward Krugman and Barry Wolf, individually and as officers of the Corporation. The Corporation, Edward Krugman and Barry Wolf (Consenting Parties) are willing to enter into an agreement with the Commission containing an order to cease and desist.

Therefore, the Consenting Parties and counsel for the Commission agree:

1. THAT the Consumer Product Safety Commission has jurisdiction in this matter under the following Acts: the Flammable Fabrics Act (15 U.S.C. 1191 et seq.); the Federal Trade Commission Act (15 U.S.C. 41 et seq.); and the Consumer Product Safety Act (15 U.S.C. 2051 et seq.).

2. THAT Royal Bedding Company is a corporation organized and doing business under the laws of the State of Illinois.

Edward Krugman and Barry Wolf are officers of the Corporation. They formulate, direct and control the acts, practices and policies of the Corporation.

The Consenting Parties engage in the manufacture and sale of mattresses; their office and principal place of business is located at 3601 South Halsted, Chicago, Illinois 60609.

002380

3. THAT Consenting Parties state that they are now and have been engaged in one or more of the following: the manufacture for sale, sale or offering for sale, in commerce, and the introduction, delivery for introduction, transportation and causing to be transported in commerce, and the sale or delivery after sale or shipment in commerce, of products, as the terms "commerce" and "product" are defined in the Flammable Fabrics Act, which products are subject to the requirements of the Flammable Fabrics Act, the Standard for the Flammability of Mattresses (And Mattress Pads)(FF 4-72), (16 CFR Part 1632, Subparts A and B) and the regulations issued by the Commission to implement the Mattress Standard (16 CFR 1632.31).

4. THAT in accepting the terms of the Order, the Consenting Parties AGREE

(a) THAT the terms of the Order take effect upon their receipt of written notice that the Commission accepts the Consent Agreement, and that the Agreement and Order are available for public view at the Office of the Secretary, Consumer Product Safety Commission, 1750 K Street, N.W., Washington, D.C. 20207,

(b) TO forego any administrative and/or judicial review of the facts presented herein,

(c) THAT within 15 days of receipt of the Commission's written acceptance of this Agreement, a written, notarized compliance report shall be filed with the Commission, detailing their compliance with this Order, specifically, Paragraphs II and V,

(d) THAT they may be liable for a civil penalty of not more than $10,000 for each violation of the Order after the Order becomes effective,

(e) THAT the Commission retains the right to pursue criminal penalties under section 7 of the Flammable Fabrics Act if it believes the facts warrant such a course.

In issuing the Order and accepting the Consent Agreement, the Commission agrees:

5. THAT this Agreement is for settlement purposes only and does not constitute an admission by the Consenting Parties that the law has been violated. Therefore, if this Agreement is not accepted by the Commission it may not be used in adjudicative proceedings, either administrative or judicial.

6. THAT no agreement, understanding, representation or interpretation not contained in this Agreement or Order may be used to vary or contradict the terms of the Order.

ORDER

I

IT IS ORDERED that Royal Bedding Company (Corporation), its successors and its officers, and Edward Krugman, and Barry Wolf, individually and as officers of the corporation, and their agents, assigns, representatives and employees directly or through any corporation, subsidiary, division or other instrumentality, do forthwith cease and desist from manufacturing for sale, selling, or offering for sale, in commerce, or importing into the United States, or introducing, delivering for introduction, transporting or causing to be transported in commerce, or selling or delivering after sale or shipment in commerce, any product, fabric, or related material; or manufacturing for sale, selling, offering for sale, any product made of fabric or related material which has been shipped or received in commerce, as "commerce," "product," and "related material" are defined in the Flammable Fabrics Act, which product, fabric or related material fails to conform to the requirements of an applicable standard or regulation issued under the provisions of the Act.

Specifically the Corporation and Edward Krugman, and Barry Wolf are ordered to cease and desist from:

a. failing to conduct prototype flammability tests of each mattress prototype which they manufacture as required by the Standard for the Flammability of Mattresses (And Mattress Pads)(FF 4-72) at 16 CFR 1632.4(b)(2)(i)(A) and 1632.4(c).

b. failing to conduct production testing on their mattresses at specified production intervals in the manner required by the Standard for the Flammability of Mattresses (And Mattress Pads)(FF 4-72) at 16 CFR 1632.4(b)(2)(i)(B).

c. failing to establish production units and to randomly select a mattress or mattresses from each such unit for production testing as required by the Standard for the Flammability of Mattresses (And Mattress Pads)(FF 4-72) at 16 CFR 1632.4(b)(2).

d. failing to label each mattress manufactured with a permanent, accessible and legible label containing the appropriate production unit identification, as required by the Commission's Regulations implementing the Mattress Standard at 16 CFR 1632.31(b).

e. failing to fully and completely maintain records which establish a line of continuity through the manufacturing and distribution process showing sampling plans used, production units, test results, details of sampling and testing procedures, disposition of rejected mattresses, manufacturing specifications, date and quantity of each sale, and name and address of each purchaser as required by the Commission's Regulations implementing the Mattress Standard at 16 CFR 1632.31(c).

II

IT IS FURTHER ORDERED that Royal Bedding Company and Edward Krugman, and Barry Wolf, shall within fifteen (15) days after service upon them of this Order, file with the Commission a special written and notarized report which:

(A) Sets forth the manner in which they intend to comply with this Order and certifies that they will maintain the records listed in Paragraph VI of this Order.

(B) Advises the Commission fully and specifically concerning (1) identification and description of the products which gave rise to the Order, and (2) the steps taken to insure that all mattresses manufactured will conform to the requirements of the Mattress Standard including affirmative statements showing (a) identification of the particular sampling plan to be used, (b) establishment of mattress production or batch units, labeling of each mattress to identify it with a production or batch unit, (d) flammability testing of mattress surfaces from each production or batch unit; and (e) maintenance of records clearly relating sales to production or batch units and showing all unit sizes, test results, and the disposition of all rejected mattresses and units.

III

IT IS FURTHER ORDERED for a period of 10 years from the date this Order is issued that Royal Bedding Company and Edward Krugman, and Barry Wolf notify the Commission at least 30 days prior to any proposed change in the Corporation such as dissolution, assignment or sale resulting in the emergence of a successor corporation, the creation or dissolution of subsidiaries or any other change in the Corporation which may affect compliance obligations arising out of the Order.

IV

IT IS FURTHER ORDERED for a period of 10 years from the date this Order is issued that, Edward Krugman, and Barry Wolf promptly notify the Commission of the discontinuance of their present business or employment and of their affiliation with a new business or employment. Such notice shall include their current business address and a statement as to the nature of the business or employment in which they are engaged as well as a description of their duties and responsibilities.

V

IT IS FURTHER ORDERED that Royal Bedding Company shall distribute a copy of this Order to each of its operating divisions.

VI

The Commission may conduct inspections and/or require written reports to determine compliance with this Order and may direct Royal Bedding Company and Edward Krugman, and Barry Wolf to submit or permit the Commission to select mattresses sufficient to repeat the testing required by the Mattress Standard of any mattress prototype, production unit or batch unit which they are currently marketing. The Commission may examine and/or require the submission of copies of the records required to be maintained by 16 CFR 1632.31(c) and the Mattress Standard including prototype test reports and related records including photographs which are identified to show their relationship to each test and each production or batch unit, (2) test reports and related records where there has been substitution of one or more materials going into mattresses manufactured, (3) records showing the basis for reduced sampling, if used, (4) description and manufacturing specifications of mattress prototypes and types of mattresses including size of each production or batch unit and details as to fiber content of ticking, thread, tape edge, core and upholstery of any guarantees or certifications received from manufacturers of ticking, thread, tape edge, core and upholstery materials, and also (6) records of notification, recall, and reprocessing or destruction of violative products.

VII

The requirements of this Order are in addition to and not to the exclusion of other remedies such as criminal penalties which may be pursued under Section 7 of the Flammable Fabrics Act, the rules, regulations and standards promulgated thereunder or any other provision of federal law.

Signed this 26th day of October, 1976.

ROYAL BEDDING COMPANY,
a corporation

By _____, _____
(Title)

1445 S 51st Ct
(Street)

Chicago Ill 60650
(City and State)

_____
Edward Krugman, individually and
as an officer of Royal Bedding Company

_____
Barry Wolf, individually and
as an officer of Royal Bedding Company

_____
Counsel for the Consumer Product
Safety Commission

UNITED STATES OF AMERICA
BEFORE CONSUMER PRODUCT SAFETY COMMISSION

Commissioners: S. John Byington, Chairman
Barbara Hackman Franklin
Thaddeus Garrett, Jr.
Lawrence M. Kushner
R. David Pittle

In the Matter of ROYAL BEDDING COMPANY, a corporation and EDWARD KRUGMAN, and BARRY WOLF, individually and as officers of the corporation	CPSC DOCKET NO. 76-3 DECISION AND ORDER

The Consumer Product Safety Commission having initiated an investigation of certain acts and practices of the respondents named in the caption hereof, and the respondents having been served with the Notice of Enforcement issued by the Commission staff on December 12, 1975, which charges respondents with violation of the Flammable Fabrics Act, as amended, and the Federal Trade Commission Act; and

The respondents and counsel for the Commission having executed an agreement containing a consent order, an admission by the respondents of all the jurisdictional facts set forth in the aforesaid Notice of Enforcement, a statement that the signing of said agreement is for settlement purposes only concerning respondents' civil liability under Section 3 of the Flammable Fabrics Act, and does not constitute an admission by respondents that the law has been violated; and

The Commission having considered the matter and having determined that it had reason to believe that the respondents have violated the said Acts and that the Notice of Enforcement should issue stating its charges in that respect, and having thereupon accepted the executed consent agreement, makes the following jurisdictional findings and enters the following order:

JURISDICTIONAL FINDINGS

1. Respondent Royal Bedding Company is a corporation organized, existing and doing business under and by virtue of the laws of the State of Illinois.

Respondents Edward Krugman and Barry Wolf are officers of said corporation. They participate in the formulation, direction and control of the acts, practices and policies of the corporation.

Respondents are engaged in the manufacture and sale of mattresses; their office and principal place of business is located at 3601 South Halsted, Chicago, Illinois 60609.

Respondents are now and have been engaged in one or more of the following: the manufacture for sale, or offering for sale, in commerce, and the introduction, delivery for introduction, delivery after sale or shipment in commerce, of products, as the terms "commerce" and "products" are defined in the Flammable Fabrics Act as amended (15 U.S.C. 1191 et seq.), which products are subject to the requirements of the Flammable Fabrics Act, (FF 4-72) (16 CFR Part 1632, Subparts A and B), and the regulations issued by the Commission to implement the Mattress Standard (16 CFR 1632.31).

2. The Consumer Product Safety Commission has jurisdiction of the subject matter of this proceeding and of the respondents, and the proceeding is in the public interest.

ORDER

I

IT IS ORDERED that Royal Bedding Company (Corporation), its successors and its officers, and Edward Krugman, and Barry Wolf, individually and as officers of the corporation, and their agents, assigns, representatives and employees directly or through any corporation, subsidiary, division or other instrumentality, do forthwith cease and desist from manufacturing for sale, selling, or offering for sale, in commerce, or importing into the United States, or introducing, delivering for introduction, transporting or causing to be transported in commerce, or selling or delivering after sale or shipment in commerce, any product, fabric, or related material; or manufacturing for sale, selling, offering for sale, any product made of fabric or related material which has been shipped or received in commerce, as "commerce," "product," and "related material" are defined in the Flammable Fabrics Act, which product, fabric, or related material fails to conform to the requirements of an applicable standard or regulation issued under the provisions of the Act.

Specifically the Corporation and Edward Krugman, and Barry Wolf are ordered to cease and desist from:

a. failing to conduct prototype flammability tests of each mattress prototype which they manufacture as required by the Standard for the Flammability of Mattresses (And Mattress Pads) (FF 4-72) at 16 CFR 1632.4(b)(2)(i)(A) and 1632.4(c).

b. failing to conduct production testing on their mattresses at specified production intervals in the manner required by the Standard for the Flammability of Mattresses (And Mattress Pads) (FF 4-72) at 16 CFR 1632.4(b)(2)(i)(B).

c. failing to establish production units and to randomly select a mattress or mattresses from each such unit for production testing as required by the Standard for the Flammability of Mattresses (And Mattress Pads) (FF 4-72) at 16 CFR 1632.4(b)(2).

d. failing to label each mattress manufactured with a permanent, accessible and legible label containing the appropriate production unit identification, as required by the Commission's Regulations implementing the Mattress Standard at 16 CFR 1632.31(b).

e. failing to fully and completely maintain records which establish a line of continuity through the manufacturing and distribution process showing sampling plans used, production units, test results, details of sampling and testing procedures, disposition of rejected mattresses, manufacturing specifications, date and quantity of each sale, and name and address of each purchaser as required by the Commission's Regulations implementing the Mattress Standard at 16 CFR 1632.31(c).

II

IT IS FURTHER ORDERED that Royal Bedding Company and Edward Krugman, and Barry Wolf, shall within fifteen (15) days after service upon them of this Order, file with the Commission a special written and notarized report which:

(A) Sets forth the manner in which they intend to comply with this Order and certifies that they will maintain the records listed in Paragraph VI of this Order.

(B) Advises the Commission fully and specifically concerning (1) identification and description of the products which gave rise to the Order, and (2) the steps taken to insure that all mattresses manufactured will conform to the requirements of the Mattress Standard including affirmative statements showing (a) identification of the particular sampling plan to be used, (b) establishment of mattress production or batch units, labeling of each mattress to identify it with a production or batch unit, (d) flammability testing of mattress surfaces from each production or batch unit; and (e) maintenance of records clearly relating sales to production or batch units and showing all unit sizes, test results, and the disposition of all rejected mattresses and units.

III

IT IS FURTHER ORDERED for a period of 10 years from the date this Order is issued that Royal Bedding Company and Edward Krugman, and Barry Wolf, notify the Commission at least 30 days prior to any proposed change in the Corporation such as dissolution, assignment or sale resulting in the emergence of a successor corporation, the creation or dissolution of subsidiaries or any other change in the Corporation which may affect compliance obligations arising out of the Order.

IV

IT IS FURTHER ORDERED for a period of 10 years from the date this Order is issued that Edward Krugman and Barry Wolf promptly notify the Commission of the discontinuance of their present business or employment and of their affiliation with a new business or employment. Such notice shall include their current business address and a statement as to the nature of the business or employment in which they are engaged as well as a description of their duties and responsibilities.

V

IT IS FURTHER ORDERED that Royal Bedding Company shall distribute a copy of this Order to each of its operating divisions.

VI

The Commission may conduct inspections and/or require written reports to determine compliance with this Order and may direct Royal Bedding Company and Edward Krugman and Barry Wolf to submit or permit the Commission to select mattresses sufficient to repeat the testing required by the Mattress Standard of any mattress prototype, production unit or batch unit which they are currently marketing. The Commission may examine and/or require the submission of copies of the records required to be maintained

by 16 CFR 1632.31(c) and the Mattress Standard including prototype test reports and related records including photographs which are identified to show their relationship to each test and each production or batch unit, (2) test reports and related records where there has been substitution of one or more materials going into mattresses manufactured, (3) records showing the basis for reduced sampling, if used, (4) description and manufacturing specifications of mattress prototypes and types of mattresses including size of each production or batch unit and details as to fiber content of ticking, thread, tape edge, core and upholstery of any guarantees or certifications received from manufacturers of ticking, thread, tape edge, core and upholstery materials, and also (6) records of notification recall, and reprocessing or destruction of violative products.

VII

The requirements of this Order are in addition to and not to the exclusion of other remedies such as criminal penalties which may be pursued under Section 7 of the Flammable Fabrics Act, the rules, regulations and standards promulgated thereunder or any other provision of federal law.

BY THE COMMISSION.

ORIGINAL SIGNED BY
SADYE DUNN

Sadye E. Dunn, Secretary

JAN 27 1977

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of F & D ASSOCIATES, INC., a corporation, and JOSEPH GOODMAN, individually and as an officer of said corporation	AGREEMENT CONTAINING CONSENT ORDER TO CEASE AND DESIST

The staff of the Consumer Product Safety Commission (Commission) has investigated certain practices of F & D Associates, Inc., a corporation and Joseph Goodman, individually and as an officer of the Corporation. The Corporation and Goodman (Consenting Parties) are willing to enter into an agreement with the Commission containing an order to cease and desist.

Therefore, the Consenting Parties and counsel for the Commission agree:

1. THAT the Consumer Product Safety Commission has jurisdiction in this matter under the following Acts: the Flammable Fabrics Act (15 U.S.C. 1191 et seq.); the Federal Trade Commission Act (15 U.S.C. 41 et seq.); and the Consumer Product Safety Act (15 U.S.C. 2051 et seq.).

2. THAT F & D Associates, Inc. is a corporation organized and doing business under the laws of the State of New York.

Joseph Goodman is an officer of the Corporation. He formulates, directs and controls the acts, practices and policies of the Corporation.

The Consenting Parties engage in the manufacture and sale of new and renovated mattresses; their office and principal place of business is located at 701-711 Avenue U, Brooklyn, New York 11223.

3. THAT the Consenting Parties state that they are now and have been engaged in one or more of the following: the manufacture for sale, sale or offering for sale, in commerce, and the introduction, delivery for introduction, transportation and causing to be transported in commerce, and the sale or delivery after sale or shipment in commerce, of products, as the terms "commerce" and "product" are defined in the Flammable Fabrics Act, which products are subject to the requirements of the Flammable Fabrics Act, the Standard for the Flammability of Mattresses (And Mattress Pads) (FF 4-72) (16 CFR Part 1632, Subparts A and B), and the regulations issued by the Commission to implement the Mattress Standard (16 CFR 1632.31).

4. THAT in accepting the terms of the Order, the Consenting Parties AGREE

(a) THAT, the terms of the Order take effect upon their receipt of written notice that the Commission accepts the Consent Agreement, and that the Agreement and Order are available for public view at the Office of the Secretary, Consumer Product Safety Commission, 1750 K Street, N.W., Washington, D.C. 20207,

(b) TO forego any administrative and/or judicial review of the facts presented herein,

(c) THAT within 15 days of receipt of the Commission's written acceptance of this Agreement, a written, notarized compliance report shall be filed with the Commission, detailing their compliance with this Order, specifically, Paragraphs V and IX,

(d) THAT they may be liable for a civil penalty of not more than $10,000 for each violation of the Order after the Order becomes effective,

(e) THAT the Commission retains the right to pursue criminal penalties under section 7 of the Flammable Fabrics Act if it believes the facts warrant such a course.

In issuing the Order and accepting the Consent Agreement, the Commission agrees:

5. THAT this Agreement is for settlement purposes only and does not constitute an admission by the Consenting Parties that the law has been violated. Therefore, if this Agreement is not accepted by the Commission it may not be used in adjudicative proceedings, either administrative or judicial.

6. THAT no agreement, understanding, representation or interpretation not contained in this Agreement or Order may be used to vary or contradict the terms of the Order.

ORDER

I

IT IS ORDERED that F & D Associates, Inc. (Corporation), its successors and its officers, and Joseph Goodman (Goodman), individually and as an officer of the corporation, and their agents, assigns, representatives and employees directly or through any corporation, subsidiary, division or other instrumentality, do forthwith cease and desist from manufacturing for sale, selling, offering for sale, in commerce, or importing into the United States, or introducing, delivering for introduction, transporting or causing to be transported in commerce, or selling or delivering after sale or shipment in commerce, any product, fabric, or related material; or manufacturing for sale, selling, or offering for sale, any product made of fabric or related material which has been shipped or received in commerce, as "commerce," "product," "fabric" and "related material" are defined in the Flammable Fabrics Act, which product, fabric or related material fails to conform to the requirements of an applicable standard or regulation issued under the provisions of the Act.

Specifically the Respondents are ordered to cease and desist from:

a. failing to conduct prototype flammability tests of each mattress prototype which they manufacture as required by the Standard for the Flammability of Mattresses (and Mattress Pads) (FF 4-72) at 16 CFR 1632.4(b)(2)(i)(a) and 1632.4(c).

b. failing to conduct production testing on their mattresses at specified production intervals in the manner required by the Standard for the Flammability of Mattresses (and Mattress Pads) (FF 4-72) at 16 CFR 1632.4(b)(2)(i)(B).

c. failing to establish production units and to randomly select a mattress or mattresses from each such unit for production testing as required by the Standard for the Flammability of Mattresses (and Mattress Pads) (FF 4-72) at 16 CFR 1632.4(b)(2).

d. failing to label each mattress manufactured with a permanent, accessible and legible label containing the appropriate production unit identification, as required by the Commission's regulations implementing the Mattress Standard at 16 CFR 1632.31(b).

e. failing to fully and competely maintain records which establish a line of continuity through the manufacturing and distribution process showing sampling plans used, production units, test results, details of sampling and testing procedures, disposition of rejected mattresses, manufacturing specifications, date and quantity of each sale, and name and address of each purchaser as required by the Commission's regulations implementing the Mattress Standard at 16 CFR 1632.31(c).

II

IT IS FURTHER ORDERED that the Respondents shall notify all of their customers who have purchased, or to whom have been delivered, mattresses manufactured by them between June 22, and December 22, 1973, that all such customers may return the mattresses to the Respondents for complete refund or replacement at the option of the Respondents, plus an allowance for reasonable transportation costs (the means of transportation to be determined by the Respondents) under the following conditions:

(1) That within 60 days from the effective date of this agreement, the Corporation and Goodman shall develop a method of collecting samples consistent with 16 CFR 1632 which will be approved by the Commission's Bureau of Compliance. In the presence of a CPSC representative, consenting parties shall collect samples for testing from the universe of mattresses manufactured and sold between June 22 and December 22, 1973.

(2) That the samples collected under these prescribed conditions shall be tested by the Respondents in accordance with the Mattress Standard and the test results shall be reported to the Commission within ten (10) days of receipt of the results. In addition, the Commission may collect samples at any time and conduct production testing in accordance with the Mattress Standard.

(3) That in the event the Commission or the Respondents discover that said mattresses fail to comply with the Mattress Standard, all such customers shall be notified of such flammability failures and that at the time of the sale the mattresses failed to comply with the labeling requirements of the Mattress Standard, to wit: (i) such mattresses were required to have firmly affixed thereto, a conspicuously displayed warning label at least five inches square with the word "WARNING" no less than 1/2 inch in height, reading as follows:

WARNING: This mattress does not meet the Consumer Product Safety Commission Flammability Standard for Mattresses (FF 4-72, as amended). It may be subject to ignition and hazardous smoldering from cigarettes.

and (ii) all invoices and sales papers relating to these mattresses were to have the same warning displayed thereon; and, furthermore, that respondents shall refund or replace in accordance with the terms and conditions of this section.

III

IT IS FURTHER ORDERED that the Respondents shall notify all of of their customers who have purchased, or to whom have been delivered mattresses manufactured by them between March 22, 1974 and October 31, 1974, that all such customers may return the mattresses to the Respondents for complete refund or replacement at the option of the Respondents, plus an allowance for reasonable transportation costs (the means of transportation to be determined by the Respondents) under the following conditions.

(1) That within 90 days from the effective date of this agreement, the Respondents shall develop a method of collecting samples consistent with 16 CFR 1632 which will be approved by the Commission's Bureau of Compliance. In the presence of a Commission representative, consenting parties shall collect samples for testing from the universe of mattresses manufactured and sold between March 22 and October 31, 1974.

(2) That the samples collected under these prescribed conditions shall be tested by the Respondents in accordance with the Mattress Standard and the test results shall be reported to the Commission within ten (10) days of receipt of the results. In addition, the Commission may collect samples at any time and conduct production testing in accordance with the Mattress Standard.

(3) In the event the Commission or the Respondents discover that said mattresses fail to comply with the Mattress Standard, all such customers shall be notified of such failures and to the effect that at the time of the sale (i) such mattresses were not subject to production unit testing, (ii) were not labeled with production unit identification number labeling and, (iii) furthermore, that respondents shall refund or replace in accordance with the terms and conditions of this section.

IV

IT IS FURTHER ORDERED that the Respondents either process the products recalled or in inventory so as to bring them into conformance with the Mattress Standard (FF 4-72), or destroy the products.

V

IT IS FURTHER ORDERED that the Respondents shall maintain records sufficient to establish the notification, recall, reprocessing and/or destruction of the products specified in Paragraphs II, III and IV of this Order.

VI

IT IS FURTHER ORDERED that the Respondents shall, within fifteen (15) days after service upon them of this Order, file with the Commission a special written and notarized report which:

(A) Sets forth the manner in which they intend to comply with this Order and certifies that they will maintain the records listed in Paragraphs V and IX of this Order.

(B) Advises the Commission fully and specifically concerning (1) identification and description of the products which gave rise to the Order, and (2) the steps taken to insure that all mattresses manufactured will conform to the requirements of the Mattress Standard including affirmative statements showing (a) identification of the particular sampling plan to be used, (b) establishment of mattress production or batch units, (c) labeling of each mattress to identify it with a production or batch unit, (d) flammability testing of mattress surfaces from each production or batch unit and (e) maintenance of records clearly relating sales to production or batch units and showing all unit sizes, test results, and the disposition of all rejected mattresses.

VII

IT IS FURTHER ORDERED for a period of 10 years from the date of the acceptance of this Order by the Commission that the Respondents notify the Commission at least 30 days prior to any proposed change in the status of any corporation named a Respondent in this Order, such as dissolution, assignment or sale resulting in the emergence of a successor corporation, the creation or dissolution of subsidiaries or any other change in the Corporation which may affect compliance obligations arising out of this Order.

VIII

IT IS FURTHER ORDERED that the Respondents shall distribute a copy of this Order to each of its operating divisions.

IX

The Commission may conduct inspections and/or require the Respondents to submit written reports to determine compliance with this Order and may direct the Respondents to submit or permit the Commission to select mattresses sufficient to repeat the testing required by the Mattress Standard of any mattress prototype, production unit or batch unit which they are currently marketing. The Commission may examine and/or require the submission of copies of the records required to be maintained by 16 CFR 1632.31(c) and the Mattress Standard including (1) prototype test reports and related records including photographs which are identified to show their relationship to each test and each production or batch unit; (2) test reports and related records where there has been substitution of one or more materials going into mattresses manufactured; (3) records showing the basis for reduced sampling, if used; (4) description and manufacturing specifications of mattress prototypes and types of mattresses including size of each production or batch unit and details as to fiber content of ticking, thread, tape edge, core and upholstery materials, and type of flame retardant treatment, if any; (5) copies of any guarantees or certifications received from manufacturers of ticking, thread, tape edge, core and upholstery materials, and also (6) record of notification, recall, and reprocessing or destruction of violative products.

X

The requirements of this Order are in addition to and not to the exclusion of other remedies such as criminal penalties which may be pursued under Section 7 of the Flammable Fabrics Act, the rules, regulations and standards promulgated thereunder or any other provision of federal law.

Signed this 16 day of June, 1976.

F & D ASSOCIATES, INC.,
a corporation.

By _____
(Title)

707 17th St
(Street)

Brooklyn N.Y.
(City and State)

_____
Joseph Goodman, individually and as an officer of F & D Associates, Inc.

_____
Counsel for the Consumer Product Safety Commission.

APPROVED:

_____
Director, Bureau of Compliance

(9)

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of F & D ASSOCIATES, Inc., a corporation, and JOSEPH GOODMAN, individually and as an officer of said corporation	ON REQUESTED APPROVAL OF CONSENT DECREE CPSC 76-4

ORDER

On July 9, 1976 the Administrative Law Judge submitted to the Commission a proposed consent agreement in the above entitled matter which has been executed by staff counsel and respondents. Respondent corporation is a manufacturer and distributor of mattresses in interstate commerce. It is the Commission's understanding that certain violations of the Standard for the Flammability of Mattresses (and Mattress Pads) (FF4-72), 16 CFR 1632, have been alleged, including the failure to conduct proper sampling, prototype and production testing and to comply with the record keeping and labeling requirements. The alleged violations occurred during the periods June 22 -December 22, 1973 and March 22 - October 31, 1974. The mattresses in question are now in the hands of the ultimate consumer and apparently have been used. It is also the Commission's understanding that the mattresses in question were sold to institutional consumers and can be adequately traced.

Under the proposed consent agreement, respondents, inter alia, will develop a method for selection of the mattresses for testing which is "consistent" with the standard and which is subject to prior approval by the Commission's Bureau of Compliance. Thereafter the samples selected will be tested by respondents "in accordance with the Mattress Standard." Under the agreement the Commission staff will be permitted to "collect samples at any time and conduct production testing in accordance with the Mattress Standard". The agreement further provides "that in the event the Commission or respondent discovers that said mattresses fail to comply with the Mattress Standard, then all customers of the subject mattresses are to be notified of the flammability failures," and the failure to comply with the labeling requirements in the regulations. Also in the event of such failure to comply, the customers who purchased the subject mattresses will be able to return them to respondents for a complete refund or replacement (at the option of respondents) plus compensation for transportation and handling.

The proposed agreement raises important policy considerations concerning violations of the pre-market sampling and testing requirements of the mattress standard and the Commission's ability to deal with the problem through remedial administrative relief. The Commission is concerned that respondents may be unable, on a post-market basis, to obtain

an adequate sampling of the mattresses for testing and that flammability testing under the standard may not be appropriate for used mattresses. Moreover, the Commission is concerned about its ability to administer the mattress standard on an ad hoc, after the fact, basis.

The Standard for the Flammability of Mattresses is designed to screen out potentially flammable mattresses prior to the time they are placed on the market or in the possession of the consuming public. Without the information developed through compliance with the pre-market requirements of the standard, the Commission has no basis for determining the flammability of the product.

It is the Commission's view that the only meaningful manner in which it can administer the mattress standard, and thus protect the public, is to presume that mattresses produced and marketed in violation of the standard present an unreasonable risk of the occurrence of fire leading to death or personal injury or significant property damage in violation of the Flammable Fabrics Act. In a situation where this presumption of flammability has arisen, such as in the present case, the Commission will require a manufacturer or other person or entity subject to the Act to recall the mattresses (offering replacements or refunds) or to come forward with evidence demonstrating to the Commission's satisfaction that the product does not present an unreasonable

risk of the occurrence of fire. Any such evidence must closely approximate the sampling and testing provisions of the mattress standard. Because of the impossibility of complying with the strict requirements of the standard once untested and uncontrolled mattresses are produced and marketed, the Commission will only accept evidence where the Commission staff has supervised and approved the evidentiary accumulation. If the evidence presented is sufficient to satisfy the Commission that the mattresses do not present an unreasonable risk of the occurrence of fire, then the Commission will not require recall. It may, in such instances, order relief short of recall including cease and desist orders, requirements of notice to consumers and others, placement of labels on the non-complying products or other remedial requirements deemed necessary and proper. In the event that the evidence presented is deemed insufficient to allow the Commission to determine whether the product presents an unreasonable risk of the occurrence of fire or if the evidence demonstrates that the mattresses present such an unreasonable risk, then the Commission will require recall of the product.

The foregoing determination is not to be interpreted as an alternative to strict pre-market compliance with the mattress standard, nor will it relieve a non-complying party

from other remedies or sanctions under the Flammable Fabrics Act. In conjunction with the remedial action referred to above, the Commission will carefully investigate all cases of non-compliance for any willful failures to comply and will refer appropriate cases to the Department of Justice for criminal prosecution.

In the case of consent decrees, the Commission will, in the future, require the submission of a sampling plan, acceptance criteria and special testing procedures to be included in the agreement at the time it is submitted to the Commission for approval. Also the Commission will require along with such consent decrees*/ a detailed submission of data concerning the numbers of mattresses in question, their condition and availability for sampling and testing.

In accordance with the foregoing discussion, the Commission has decided that it will accept and approve the consent agreement presented herein under the following conditions:

(1) That the Commission's description of the agreement set forth above comports with the intent of the parties;

(2) That sufficient numbers of samples can be obtained which are adequate for testing;

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*/ In the present case the Commission has experienced difficulty in assessing the practicality of post-market sampling and testing because of the lack of adequate information. To avoid delay in implementing the sampling and testing, the Commission has conditioned its acceptance on certain modifications which allow the Commission staff to approve the sampling and testing procedures.

(3) That the sampling methods established by respondents are approved by the Commission staff;

(4) That the sampling to be done by the Commission staff under the agreement is not on a statistically random basis but on the basis of reasonably representative sampling;

(5) That the precise number of samples to be tested and the acceptance and failure criteria be determined in advance of any testing and that both the number of samples and criteria used be acceptable to the Commission staff;

(6) That testing is to conform as closely as possible to the test methods prescribed in the standard and in a manner acceptable to the Commission staff;

(7) That all testing by respondents under the terms of the agreement be done in the presence of and to the satisfaction of a member of the Commission staff;

(8) That, in the event the sample mattresses do not meet the acceptance criteria established, respondents will (a) notify their customers of their right to return the subject mattresses for refund or replacement plus compensation for transportation and handling, (b) accept the mattresses returned, and (c) immediately give such customers a complete refund or replacement mattress plus compensation for transportation and handling.

(9) That, in the event the sample mattresses pass the testing, respondents notify customers who purchased the mattresses subject to the order that the products were not tested in accordance with the mattress standard and provide such customers with labels containing the warning specified in 16 CFR 1632.5(c)(3):

> WARNING: This mattress does not meet the Consumer Product Safety Commission Flammability Standard for Mattresses (FF 4-72, as amended). It may be subject to ignition and hazardous smoldering from cigarettes.

(10) That all other provisions of the consent agreement be carried out in strict conformance with their terms.

The parties will be given ten (10) days to file their consent or objections to the agreement as modified herein. Consents or objections must be filed in written form with the Secretary of the Commission. If consents are received, the Commission will deem the conditions to be consented to and incorporated into the agreement. Once consents are received, failure to comply with the conditions set out herein will be considered a breach of the consent agreement for which the Commission may, at its option, revoke its acceptance of the agreement or seek civil penalties. If consents are not filed or if objections are received, the Commission will further consider the matter and will

determine whether or not to remand the case for adjudicative hearings.

BY THE COMMISSION

Sadye E. Dunn

SADYE E. DUNN
Secretary
Consumer Product Safety
Commission

DATED: October 29, 1976

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION
1998 MAR 26 P 4:02

IN THE MATTER OF	
CENTRAL SPRINKLER CORP.	**CPSC DOCKET NO. 98-2**
and	
CENTRAL SPRINKLER CO.,	
Respondents	

RESPONDENTS' FIRST REQUEST
FOR PRODUCTION OF DOCUMENTS AND THINGS

Respondents Central Sprinkler Corp. ("CSC") and Central Sprinkler Co. ("Central") (collectively, "Respondents"), through their undersigned counsel, hereby propound to the Consumer Product Safety Commission (the "CPSC" or the "Complainant") the following request for documents pursuant to 16 C.F.R. § 1025.33. Complainant is requested to produce the documents and things described herein within thirty (30) days of the service of this request. Complainant's responses should be sent to the offices of Morgan, Lewis and Bockius LLP, 2000 One Logan Square, Philadelphia, PA 19103.

For the purposes of this Request, the following instructions and definitions apply:

INSTRUCTIONS

Respondents hereby fully incorporate by reference the Instructions set forth in Respondents' First Set of Interrogatories.

DEFINITIONS

Respondents hereby fully incorporate by reference the Definitions set forth in Respondents' First Set of Interrogatories.

DOCUMENTS AND THINGS TO BE PRODUCED

1. All documents identified in the "List and Summary of Documentary Evidence" attached to the Complaint.

2. All documents identified in the CPSC's responses to Respondents' First Set of Interrogatories.

3. All documents that constitute the entirety of the CPSC administrative file regarding the Omegas.

4. All documents that constitute subpoenas from the CPSC or other requests for documents to any person, organization, business, or any other entity regarding or related to the Omegas.

5. All documents provided to the CPSC in response to subpoenas from the CPSC or other requests for documents to any person, organization, business, or any other entity regarding or related to the Omegas.

6. All documents provided to the CPSC by Respondents regarding the Omegas.

7. All documents provided to the CPSC by any person, organization, business, or any other entity regarding or related to the Omegas and/or Respondents.

8. All documents that constitute, provide evidence of, refer, or relate to any testing of the Omegas conducted by or on behalf of the CPSC.

9. All documents that constitute, provide evidence of, refer, or relate to any testing of the Omegas conducted by on or behalf of any other person, organization, business, or other entity.

10. All documents that constitute, provide evidence of, refer, or relate to any testing of non-Omega sprinkler heads conducted by on or behalf of the CPSC.

11. All documents that constitute, provide evidence of, refer, or relate to testing of non-Omega sprinkler heads conducted by on or behalf of any other person, organization, business, or other entity.

12. All documents that constitute, provide evidence of, refer, or relate to the alleged jurisdiction of the CPSC over the Omegas.

13. All documents that constitute, provide evidence of, refer, or relate to the jurisdiction of the CPSC over any product, including without limitation any memoranda or other interanal correspondence that addresses the extent of or any limitations on the jurisdiction of the CPSC.

14. All documents that constitute, provide evidence of, refer, or relate to CSC manufacturing, selling, or marketing Omegas.

15. All documents that constitute, provide evidence of, refer, or relate to any fires where Omegas allegedly failed to activate properly.

16. All documents that constitute, provide evidence of, refer, or relate to any fires where Omegas allegedly activated properly.

17. All documents that constitute, provide evidence of, refer, or relate to any fires where non-Omega sprinkler heads allegedly failed to activate properly.

18. All documents that constitute, provide evidence of, refer, or relate to any fires where non-Omega sprinkler heads allegedly activated properly.

19. All documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and former employees of Respondents, including but not

limited to interview notes, questions asked, answers received, documents exchanged or revealed by or between either party, and any audiotape or videotape of such communications.

20. All documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and current employees of Respondents, including but not limited to interview notes, questions asked, answers received, documents exchanged or revealed by or between either party, and any audiotape or videotape of such communications.

21. All documents that constitute, provide evidence of, refer, or relate to "[the] multiple random inquiries of sprinkler contractors across the nation," as referenced in a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo.

22. All documents that constitute, provide evidence of, refer, or relate to "what has been, and remains, customarily required to remove and install sprinklers," as referenced in a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo.

23. All documents that constitute, provide evidence of, refer, or relate to "the evidence we have gathered does not support the view [that] dezincification alone is the cause of the above-required operating pressures in Omegas from plastic pipes," as referenced in a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo.

24. All documents that constitute, provide evidence of, refer, or relate to "the evidence we have gathered does not support the view . . . that swollen o-rings due to cutting oil exposure are the exclusive cause of non-activation in Omegas manufactured before 1996," as referenced in a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo.

25. All documents that constitute, provide evidence of, refer, or relate to "the data [which] point to multiple failure modes rooted in the design and construction of these sprinklers," as referenced in a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo.

26. All documents that constitute, provide evidence of, refer, or relate to any testing, evaluation, consideration, or analyses done by or on behalf of the CPSC regarding the "testing based corrective action," as referenced in a February 19, 1998 letter from Eric Stone of the CPSC to Kathleen Sanzo.

27. All documents that constitute, provide evidence of, refer, or relate to any testing, evaluations, or analyses done by or on behalf of the CPSC which reflects the "serious concerns" of the CPSC regarding whether "Omega sprinklers with silicone o-rings will function in the long term," as referenced in a February 19, 1998 letter from Eric Stone of the CPSC to Kathleen Sanzo.

28. All documents that constitute, provide evidence of, refer, or relate to any testing, evaluations, consideration, or analyses done by or on behalf of the CPSC which addressed Omegas where "the internal shaft was cocked or tipped slightly and jammed in that position," as referenced in a February 24, 1998 letter from Eric Stone of the CPSC to Kathleen Sanzo.

29. All documents that constitute, provide evidence of, refer, or relate to "automatic fire sprinklers' historical rate of proving 99.5 percent effective," as referenced in a January 6, 1998 letter from Eric Singer of the CPSC to state attorneys general.

30. All documents that constitute, provide evidence of, refer, or relate to the CPSC Recall Handbook.

31. All documents received by the CPSC from Respondents or any agent, employee, or representative of Respondents.

32. All Omegas in possession of the CPSC.

33. All non-Omega sprinkler heads in the possession of the CPSC.

34. All audio and/or video tapes regarding or relating to any testing of Omegas.

35. All audio and/or video tape regarding or relating to any testing of non-Omega sprinkler heads.

36. All documents that constitute, provide evidence of, refer, or relate to any personal journals, diaries, or correspondence maintained by the CPSC Staff regarding the Omegas and/or Respondents.

37. All documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and any dealers, retailers, contractors, or any distributors regarding or related to the Omegas and/or Respondents.

38. All documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and any Authorities Having Jurisdiction regarding or related to the Omegas and/or Respondents.

39. All documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and any consumers regarding or related to the Omegas and/or Respondents.

40. All documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and any state law enforcement authorities regarding or related to the Omegas and/or Respondents.

41. All documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and any federal law enforcement authorities regarding or related to the Omegas and/or Respondents.

42. All documents that constitute, provide evidence of, refer, or relate to scripts, talking points, outlines, or any other material prepared by, for, or on behalf of the CPSC for any press conferences or news releases regarding the Omegas and/or Respondents.

43. All documents that constitute, provide evidence of, refer, or relate to any material regarding the Omegas and/or Respondents created by or on behalf of the CPSC public relations department, media department, or any other CPSC internal department charged with communicating with or providing information to the public media.

44. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 5 of the Complaint that CSC is a "manufacturer" of consumer products.

45. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 6 of the Complaint that the Omegas are "consumer products."

46. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 8 of the Complaint that the Omegas are "designed to perform in accordance with" UL Standard 199 and NFPA Standard 13.

47. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 8 of the Complaint that the Omegas are designed to perform in accordance with certain standards "when exposed to certain temperatures."

48. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 10 of the Complaint that the Omegas "do not and/or will not function in a significant percentage of instances."

49. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 10 of the Complaint that the "Omegas are defective pursuant to 15 U.S.C. § 2064(a)(2) and 16 C.F.R. § 1115.4."

50. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 13 of the Complaint that "failure of the Omegas to function exposes the public to bodily injury and/or death."

51. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 15 of the Complaint that the "defect or defects in the Omegas create a

substantial risk of injury to the public within the meaning of § 15(a)(2) of the CPSA, 15 U.S.C. § 2064(a)(2)."

52. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 16 of the Complaint that "Omegas present a substantial product hazard as described in Sections 15(a)(2), (c) and (d) of the CPSA, 15 U.S.C. §§ 2064(a) (2), (c) and (d)."

53. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 16 of the Complaint that "action under these provisions is in the public interest."

54. A current curriculum vitae or resume for each and every expert witness whom the CPSC expects to testify on its behalf at the hearing in this matter.

55. All publications of any nature authored by any expert witness whom the CPSC expects to testify on its behalf at the hearing in this matter.

56. Any and all written statements made by Respondents that the CPSC contends constitute an admission with reference to any of the issues raised in the Complaint.

57. All documents that constitute, provide evidence of, refer, or relate to the use of silicone o-rings in sprinkler heads.

58. All documents that constitute, provide evidence of, refer, or relate to the use of EPDM o-rings in sprinkler heads.

59. All documents that constitute, provide evidence of, refer, or relate to the use in sprinkler heads of o-rings comprised of any other material or compound.

60. All documents that constitute, provide evidence of, refer, or relate to the reasons giving rise to the CPSC's decision to investigate alleged risks associated with the Omegas.

61. All documents that constitute, provide evidence of, refer, or relate to any and all incidents known to the CPSC in which a consumer or other person has reported any form of property damage in connection with the Omegas.

62. All documents that constitute, provide evidence of, refer, or relate to any and all incidents known to the CPSC in which a consumer or other person has reported any form of personal injury in connection with the Omegas.

63. Any and all testing protocols used by the CPSC or by any expert or other person on behalf of the CPSC in testing the Omegas.

64. All documents that constitute, provide evidence of, refer, or relate to any alternative design features for the Omegas.

65. All documents that constitute, provide evidence of, refer, or relate to the feasibility and/or propriety of any alternative design features for the Omegas.

66. All documents that constitute, provide evidence of, refer, or relate to the CPSC's preliminary determination of the alleged risks associated with the Omegas.

67. All documents that constitute, provide evidence of, refer, or relate to any changes in the CPSC's preliminary determination and/or initial assignment of the level of hazard allegedly presented by the Omegas.

68. All documents that constitute, provide evidence of, refer, or relate to any corrective action proposal for the Omegas.

69. All documents that constitute, provide evidence of, refer, or relate to the requested recall of the Omegas.

70. All documents that constitute, provide evidence of, refer, or relate to the corrective action proposal presented by Respondents regarding the Omegas.

71. All documents that constitute, provide evidence of, refer, or relate to the CPSC's decision to initiate the instant adjudicative proceeding against the Respondents.

DATED: March 26, 1998

J. Gordon Cooney, Jr. (MEH)

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Attorneys for Respondents
CENTRAL SPRINKLER CORP. and
CENTRAL SPRINKLER CO.

CERTIFICATE OF SERVICE

I, Michael F. Healy, hereby certify that on this date a true and correct copy of the foregoing Respondents' First Request for Production of Documents and Things was served by hand upon the following:

Eric L. Stone
Director
Division of Administrative Litigation
U. S. Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

Alan H. Schoem
Assistant Executive Director
Office of Compliance
U.S. Consumer Product Safety Commission
4430 East West Highway
Bethesda, MD 20814

Date: March 26, 1998

Michael F. Healy
Michael F. Healy

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION
1998 MAR 26 P 4:02

IN THE MATTER OF **CENTRAL SPRINKLER CORP.** **and** **CENTRAL SPRINKLER CO.,** **Respondents**	**CPSC DOCKET NO. 98-2**

RESPONDENTS' FIRST SET OF INTERROGATORIES

Respondents Central Sprinkler Corp. ("CSC") and Central Sprinkler Co. ("Central") (collectively, "Respondents"), through their undersigned counsel, hereby propound the following interrogatories to the Consumer Product Safety Commission (the "CPSC" or the "Complainant") pursuant to 16 C.F.R. § 1025.32. Complainant is requested to respond within thirty (30) days of the service of these interrogatories. Complainant's responses should be sent to the offices of Morgan, Lewis & Bockius LLP, 2000 One Logan Square, Philadelphia, PA 19103.

For the purposes of these Interrogatories, the following definitions and instructions apply:

INSTRUCTIONS

A. In answering these Interrogatories, Document Requests, and/or Requests for Admissions (collectively, the "Discovery Requests"), furnish all information available to you, including any such information in possession of your attorneys or anyone acting on your behalf, and not merely such information known of your own personal knowledge. If you cannot answer the Discovery Requests in full after exercising due diligence to secure the information to do so, so state and answer to the extent possible.

B. If the answer to any of the Discovery Requests is that you lack knowledge of some or all of the requested information, describe all efforts made by you to obtain the information necessary to answer that Discovery Request.

C. If any matter responsive to any of the Discovery Requests is withheld based on any claim of privilege, describe generally the matter withheld, state the privilege being relied upon, and identify all persons or entities who have or have had access to said matters. If you refuse to describe and/or produce any document on the basis of a claim of privilege or protection from discovery of any kind, with respect to each such document, set forth the following information:

(i) the date of the document;

(ii) its authors;

(iii) all recipients of the document;

(iv) the present location and custodian of the document; and

(v) the basis of the claim of privilege or protection from discovery.

D. Each lettered sub-part of a numbered Discovery Request is to be considered a separate Discovery Request for the purpose of Complainant's answers and objections. You must object separately to each sub-part and must answer any other sub-parts.

E. These Discovery Requests are to be deemed continuing in nature, and you shall promptly supply, by way of supplemental response, any additional responsive information that may become known to you or anyone acting on your behalf after your answers have been prepared or served.

F. For all documents produced by Complainant, identify by Bates number which document or documents are responsive to each separate Interrogatory and/or each separate Request for Documents.

DEFINITIONS

A. The "Complaint" means whichever version of the Complaint was last filed and in effect at the time of service of the relevant Discovery Request.

B. "Complainant" and/or the "CPSC" refers to the Consumer Product Safety Commission, the Legal Division of the Office of Compliance of the CPSC, and any employees or agents thereof.

C. "Respondents" refers to Central Sprinkler Corp. and Central Sprinkler Co., all corporate affiliates thereof, and all current or former employees of Central and corporate affiliates

thereof.

D. "CSC" refers to Central Sprinkler Corporation.

E. "Central" refers to Central Sprinkler Company.

F. "Omega" or "Omegas" refers to the line of sprinkler heads identified in the Complaint, including the following models: C-1; C-1A; C-1A PRO; C-1A PRO ID; EC-20; EC-20A; EC-20 AID; HEC-12; HEC-12 ID; HEC-12 PRO; HEC-12A PRO; HEC-12 RES; HEC-20; HEC-20 ID; R-1; R-1A; R-1M; AC; M; and Flow Control.

G. "Person" or "persons" means all individuals and entities, including natural persons, representative persons, public or private corporations, companies, unincorporated associations, partnerships, organizations, government entities or groups, plus any divisions, departments, or units thereof.

H. "Document" or "documents" means any written, printed, typed, recorded, or graphic matter, whether produced or reproduced or stored on paper, cards, tapes, film, electronic facsimile, computer storage devices or any other devices or media, including, but not limited to papers; books; letter; photographs; objects; tangible things; correspondence; telegrams; cables; telex messages; memoranda; notes; notations; records; work papers; transcripts; minutes; reports and recordings of telephone or other conversations, or of interviews, or of conferences, or of other meetings; affidavits; statements; opinions; proposals; reports; studies; analyses; audits; evaluations; contracts; agreements; journals; statistical records; ledgers; books of account; bookkeeping entries; financial statements; tax returns; vouchers; checks; check stubs; invoices; receipts; desk calendars; appointment books; diaries; lists; tabulations; summaries; sound recordings; computer printouts; data processing input and output; microfilms; all records kept by electronic, photographic, or mechanical means; and things similar to any of the foregoing, however denominated. When one or more of the following documents is requested or referred to, the request or reference shall include, but is not limited to, the original and each and every copy and draft thereof having writings, notations, corrections, or markings unique to such copy or draft.

I. "Oral communication" means any and all non-written forms of expression or communication, whether face-to-face or by telephone, in a conference or otherwise.

J. "Identify" or "identification", when used in reference to a document, means to:

1. state the type of document (e.g., letter, log, report, etc.);

2. state its date;

3. state its title, heading or other designation and any other information (e.g., index or file number) which would facilitate the identification thereof;

4. identify the person(s) who prepared and/or signed the document;

5. identify the persons (or if widely distributed, the organization or classes of persons) to whom it was sent;

6. identify the last known location of the document and of each copy thereof having notations or markings unique to such copy;

7. if the document was, but no longer is, in your possession or subject to your control, identify its last know custodian, describe the circumstances under which it passed from your control to that person, and identify each person having knowledge of such circumstances;

8. describe its general subject matter and contents; and

9. if the document exceeds one page in length, or is contained in a series of documents or a larger portion, identify the specific document by appropriate identifying name or symbol, the number of the particular page or pages (or other descriptive aid) and of the line or lines thereof upon which the information referred to in the Discovery Request or your response appears.

K. "Identify" or "identification", when used in reference to a natural person, means to provide the following information:

1. his or her full name;

2. his or her business affiliation(s), position(s), title(s), and job description(s) during the period delineated in the Discovery Request (and the dates during which each affiliation, position, title, and job description applied to him or her);

3. his or her present or last known business address (and the date of that last knowledge); and

4. his or her present or last known residence address (and the date of that last knowledge).

L. "Identify" or "identification", when used in reference to an oral communication or statement, means to:

1. state the date of the oral communication or statement;

2. state the place where it occurred;

3. identify the persons(s) making and listening to the oral communication or statement;

4. identify all other persons present at the time it was made;

5. if by telephone, identify the persons participating in the conversation and where each was located at the time of the call; and

6. describe the substance of the oral communication or statement.

M. "Date" means the exact day, month, and year if ascertainable, or, if not, the best approximation thereof or best approximation in relation to other events.

N. "Describe" means to set forth fully and clearly every relevant fact and/or event, including particulars of time, place and manner.

O. Where the context so requires:

1. the terms "and" and "or" mean "and/or";

2. the plural of a word includes the singular, and the singular includes the plural;

3. the past tense of verb includes the present, and the present tense includes the past;

4. the masculine gender includes feminine and neuter genders, and the neuter gender include the masculine and feminine.

P. All other words are to be given their ordinary and usual meanings, according to a current edition of Webster's Dictionary.

INTERROGATORIES

A. Allegations of the Complaint

1. (a) State whether CSC manufactures Omegas.

If so:

(b) identify and describe any such manufacturing;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such manufacturing;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such manufacturing; and

(e) describe in detail the substance of each such person's knowledge and/or information.

2. (a) State whether CSC sells Omegas.

If so:

(b) identify and describe any such sales;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such sales;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such sales; and

(e) describe in detail the substance of each such person's knowledge and/or information.

3. (a) State whether CSC markets Omegas.

If so:

(b) identify and describe any such marketing;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such marketing;

(d) identify each and every person whom Complainant knows and/or believes to

have knowledge of such marketing; and

(e) describe in detail the substance of each such person's knowledge and/or information.

4. With respect to the allegation of Paragraph 5 of the Complaint that CSC is a "manufacturer" of consumer products:

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

5. (a) State whether the C-1 model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

6. (a) State whether the C-1A model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

7. (a) State whether the C-1A PRO model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

8. (a) State whether the C-1A PRO ID model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or

information.

9. (a) State whether the EC-20 model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

10. (a) State whether the EC-20A model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

11. (a) State whether the EC-20 AID model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

12. (a) State whether the HEC-12 model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

13. (a) State whether the HEC-12 ID model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

14. (a) State whether the HEC-12 PRO model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

15. (a) State whether the HEC-12A PRO model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

16. (a) State whether the HEC-12 RES model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

17. (a) State whether the HEC-20 model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

18. (a) State whether the HEC-20 ID model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

19. (a) State whether the R-1 model of the Omegas constitutes a "consumer product"

pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

20. (a) State whether the R-1A model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

21. (a) State whether the R-1M model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to

have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

22. (a) State whether the AC model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

23. (a) State whether the M model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

24. (a) State whether the Flow Control model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

25. With respect to the allegation of Paragraph 6 of the Complaint that the Omegas are "consumer products":

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

26. (a) Separately for each model of the Omegas listed in the Complaint, state whether such model is sold by Respondents directly to consumers.

If so:

(b) identify all documents which describe, evidence, refer, or relate to any such sales;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such sales; and

(d) describe in detail the substance of each such person's knowledge and/or information.

27. (a) Separately for each model of the Omegas listed in the Complaint, state whether Respondents market such a model to consumers.

If so:

(b) identify all documents which describe, evidence, refer, or relate to any such marketing;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such marketing; and

(d) describe in detail the substance of each such person's knowledge and/or information.

28. (a) Separately for each model of the Omegas listed in the Complaint, state whether such a model is installed by consumers themselves (as opposed to professional contractors).

If so:

(b) identify all documents which describe, evidence, refer, or relate to any such installation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such installation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

29. (a) Separately for each model of the Omegas listed in the Complaint, state whether such a model is serviced by consumers themselves (as opposed to professional contractors).

If so:

(b) identify all documents which describe, evidence, refer, or relate to any such servicing;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such servicing; and

(d) describe in detail the substance of each such person's knowledge and/or

information.

30. (a) Separately for each model of the Omegas listed in the Complaint, state whether such a model is repaired by consumers themselves (as opposed to professional contractors). If so:

(b) identify all documents which describe, evidence, refer, or relate to any such repairs;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such repairs; and

(d) describe in detail the substance of each such person's knowledge and/or information.

31. State whether Omegas installed in buildings used only as storage facilities constitute "consumer products" pursuant to 15 U.S.C. § 2052(a)(1).
If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

32. State whether Omegas installed in warehouses constitute "consumer products" pursuant to 15 U.S.C. § 2052(a)(1).
If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates

in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

33. State whether Omegas installed in factories constitute "consumer products" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

34. State whether Omegas installed in computer facilities constitute "consumer products" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

35. State whether there are any factual circumstances under which any Omegas would not constitute a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) identify and describe any such circumstances;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such circumstances;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such circumstances; and

(e) describe in detail the substance of each such person's knowledge and/or information.

36. (a) State whether there are any factual circumstances under which any non-Omega sprinkler heads would not constitute a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) identify and describe any such circumstances;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such circumstances;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such circumstances; and

(e) describe in detail the substance of each such person's knowledge and/or information.

37. (a) Separately for each model of the Omegas listed in the Complaint, describe any and all ways in which consumers use, consume, and/or enjoy such a model.

(b) identify all documents which describe, evidence, refer, or relate to any such use, consumption, or enjoyment;

(c) identify each and every person whom Complainant knows and/or believes to

have knowledge of any such use, consumption, or enjoyment; and

(d) describe in detail the substance of each such person's knowledge and/or information.

38. With respect to the allegation of Paragraph 8 of the Complaint that the Omegas are "designed to perform in accordance with" NFPA Standard 13:

(a) identify which specific sub-sections of NFPA Standard 13, if any, address the operating water pressure at which previously installed sprinkler heads should activate when such heads are removed and tested;

(b) identify which specific sub-sections of NFPA Standard 13, if any, address the operating water pressure at which installed sprinkler heads should activate when such heads are still incorporated into the sprinkler system;

(c) identify which specific sub-sections of NFPA Standard 13, if any, address the required residual water pressure at the most remote sprinkler head in a system after the other sprinkler heads are open and flowing;

(d) identify which specific sub-sections of NFPA Standard 13, if any, are applicable to the allegations of the Complaint; and

(e) describe in terms of psi (pounds per square inch) the testing standard that Complainant contends is created by NFPA Standard 13 that applies to the Omegas.

39. With respect to the allegation of Paragraph 8 of the Complaint that the Omegas are "designed to perform in accordance with" UL Standard 199:

(a) identify which specific sub-sections of UL Standard 199, if any, address the operating water pressure at which previously installed sprinkler heads should activate when such heads are removed and tested;

(b) identify which specific sub-sections of UL Standard 199, if any, address the operating water pressure at which installed sprinkler heads should activate when such heads are still incorporated into the sprinkler system;

(c) identify which specific sub-sections of UL Standard 199, if any, address the required residual water pressure at the most remote sprinkler head in a system after the other sprinkler heads are open and flowing;

(d) identify which specific sub-sections of UL Standard 199, if any, are applicable to the allegations of the Complaint; and

(e) describe in terms of psi the testing standard that Complainant contends is created by UL Standard 199 that applies to the Omegas.

40. With respect to the allegation of Paragraph 8 of the Complaint that the Omegas are "designed to perform in accordance with" UL Standard 199 and NFPA Standard 13:

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

41. With respect to the allegation of Paragraph 8 of the Complaint that the Omegas are designed to perform in accordance with certain standards "when exposed to certain temperatures":

(a) describe in terms of both degrees Fahrenheit and Celsius what temperatures are meant by the phrase "certain temperatures";

(b) set forth the factual basis for this allegation;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(e) describe in detail the substance of each such person's knowledge and/or

information.

42. (a) State whether Complainant contends that there is a single standard of water pressure (in psi) at which previously installed sprinkler heads must activate when tested to be deemed by the Complainant as not presenting any substantial risk of injury to the public and/or substantial product hazard;

If so:

(b) identify and describe any such standard;

(c) identify all documents which describe, evidence, refer, support, or relate to any such a standard;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such standard; and

(e) describe in detail the substance of each such person's knowledge and/or information.

43. (a) State whether Complainant contends that there is a single standard of temperature at which previously installed sprinkler heads must activate when tested to be deemed by the Complainant as not presenting any substantial risk of injury to the public and/or substantial product hazard;

If so:

(b) identify and describe any such standard;

(c) identify all documents which describe, evidence, refer, support, or relate to any such standard;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such standard; and

(e) describe in detail the substance of each such person's knowledge and/or information.

44. (a) Describe the percentage of previously installed sprinkler heads that must activate at the standards described in Interrogatory Nos. 42-43 when tested in order to be deemed by the Complainant as not presenting any substantial risk of injury to public and/or substantial product hazard;

(b) identify all documents which describe, evidence, refer, support, or relate to such a percentage;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of such a percentage; and

(d) describe in detail the substance of each such person's knowledge and/or information.

45. (a) State whether Complainant contends that there is a standard of "failure" that will accurately predict whether a particular Omega will fail to activate in a fire when used in a particular building without regard to the actual hydraulic pressure that exists in the building. If so:

(b) identify and describe any such standard;

(c) identify all documents which describe, evidence, refer, support, or relate to any such standard;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such standard; and

(e) describe in detail the substance of each such person's knowledge and/or information.

46. (a) State whether Complainant contends that if a particular Omega does not activate at a minimum of 7 psi when tested, such an Omega would not activate if a fire occurred in a building where such Omega was installed.

(b) set forth the factual basis for any such contention;

(c) identify all documents which describe, evidence, refer, support, or relate to

any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

47. Describe the average static water pressure (in psi) present in the sprinkler systems of most residential buildings.

48. Describe the average residual water pressure (in psi) present at the most remote sprinkler head in the sprinkler systems of most residential buildings, after the system has been activated.

49. Describe the average static water pressure (in psi) present in the sprinkler systems of most commercial buildings.

50. Describe the average residual water pressure (in psi) present at the most remote sprinkler head in the sprinkler systems of most commercial buildings, after the system has been activated.

51. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas "do not and/or will not function":

(a) separately for each Omega model listed in the Complaint, describe in detail all of the causes and/or reasons that the Omegas "do not and/or will not function";

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

52. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas do not and/or will not function in a "significant percentage" of instances:

(a) expressed in terms of a specific percentage, describe what constitutes "a significant percentage" regarding this allegation;

(b) set forth the factual basis for this allegation;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(e) describe in detail the substance of each such person's knowledge and/or information.

53. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the C-1 model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

54. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the C-1A model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

55. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the C-1A PRO model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

56. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the C-1A PRO ID model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

57. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the EC-20 model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

58. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the EC-20A model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

59. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the EC-20 AID model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

60. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC-12 model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

61. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC-12 ID model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

62. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC-12 PRO model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

63. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC-12A PRO model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

64. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC-12 RES model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

65. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC-20 model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

66. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC-20 ID model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

67. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the R-1 model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

68. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the R-1A model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

69. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the R-1M model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

70. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the AC model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

71. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the M model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

72. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the Flow Control model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

73. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to

have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

74. State whether the failure of any Omega to function has resulted in any bodily injury or injuries.

75. State whether the failure of any Omega to function has resulted in any death or deaths.

76. With respect to the allegation of Paragraph 13 of the Complaint that "failure of the Omegas to function exposes the public to bodily injury and/or death":

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

77. With respect to the allegation of Paragraph 15 of the Complaint that the defect or the defects in the Omegas create a "substantial risk of injury to the public":

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or

information.

78. (a) State whether the Complainant contends that any Omegas used with plastic piping systems installed after 1990 have ever failed to activate in a fire.

If so:

(b) identify and describe any such failures;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

79. (a) State whether the Complainant contends that any Omegas used with plastic piping systems installed after 1990 have ever failed to activate under any type of testing.

If so:

(b) identify and describe any such a contention;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

80. (a) State whether the Complainant contends that any Omegas used with copper piping systems installed after 1990 have ever failed to activate in a fire.

If so:

(b) identify and describe any such failures;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

81. (a) State whether the Complainant contends that any Omegas used with copper piping systems installed after 1990 have ever failed to activate under any type of testing.
If so:

(b) identify and describe any such testing;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

82. (a) State whether the Complainant contends that any Omegas manufactured from 1996 through the present and using silicone o-rings have ever failed to activate in a fire.
If so:

(b) identify and describe any such failures;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

83. (a) State whether the Complainant contends that any Omegas manufactured from 1996 through the present and using silicone o-rings have ever failed to activate in any type of testing.

If so:

(b) identify and describe any such testing;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

84. (a) State whether the Complainant contends that any Omegas used with plastic piping systems installed after 1990 constitute a "substantial product hazard" pursuant to 15 U.S.C. § 2064(a).

If so:

(b) identify and describe any such hazards;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

85. (a) State whether the Complainant contends that any Omegas used with copper piping systems installed after 1990 constitute a "substantial product hazard" pursuant to 15 U.S.C. § 2064(a).

If so:

(b) identify and describe any such hazards;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

86. (a) State whether Complainant contends that any Omegas manufactured using silicone o-rings constitute a "substantial product hazard" pursuant to 15 U.S.C. § 2064(a).

If so:

(b) identify and describe any such hazards;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

87. (a) State whether the Complainant contends that the performance of Omegas declines or deteriorates over time.

If so:

(b) identify and describe any such performance decline or deterioration;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or

information.

88. With respect to the allegation of Paragraph 16 of the Complaint that the Omegas present a "substantial product hazard":

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

89. With respect to the allegation of Paragraph 16 of the Complaint that "action under these provisions is in the public interest":

(a) identify and describe all of the public interest factors which Complainant believes favor "action under these provisions";

(b) set forth the factual basis for such an allegation;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(e) describe in detail the substance of each such person's knowledge and/or information.

90. With respect to the allegation of Paragraph B(1) of the Complaint that Respondent give prompt "public notice of the defect in the Omegas," identify and describe the "public notice" that the Complainant seeks to impose.

91. With respect to the allegation of Paragraph C(3) of the Complaint regarding repair of all Omegas so they will "perform properly," identify and describe what would constitute "performs properly" for purposes of the Complainant.

92. With respect to the allegation of Paragraph C(3) of the Complaint regarding the replacement of all Omegas "with a like or equivalent product which performs properly":

(a) identify and describe any and all "like or equivalent product which performs properly";

(b) state whether Complainant believes that Omegas with a silicone o-ring qualify as a "like or equivalent product which performs properly"; and

(c) state whether Complainant believes that Omegas with a spring collar qualify as a "like or equivalent product which performs properly."

93. With respect to the allegation of Paragraph C(3) of the Complaint regarding a "refund to consumers [of] the purchase price of the Omegas," identify and describe how Complainant would calculate or determine a "refund to consumers [of] of the purchase price of the Omegas."

94. (a) If the Commission orders Respondents to repair some or all of the Omegas pursuant to 15 U.S.C. § 2064(d)(1), identify and describe the nature and amount of the "reasonable and foreseeable expenses" under 15 U.S.C. § 2064(e)(1) that Complainant contends should be reimbursed to persons by Respondents.

(b) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(d) describe in detail the substance of each such person's knowledge and/or information about any such contention.

95. (a) If the Commission orders Respondents to replace some or all of the Omegas pursuant to 15 U.S.C. § 2064(d)(2), identify and describe the nature and amount of the "reasonable and foreseeable expenses" under 15 U.S.C. § 2064(e)(1) that Complainant contends should be reimbursed to persons by Respondents.

(b) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(d) describe in detail the substance of each such person's knowledge and/or information about any such contention.

96. (a) If the Commission orders Respondents to refund some or all of the Omegas pursuant to 15 U.S.C. § 2064(d)(3), identify and describe the nature and amount of the "reasonable and foreseeable expenses" under 15 U.S.C. § 2064(e)(1) that Complainant contends should be reimbursed to persons by Respondents.

(b) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(d) describe in detail the substance of each such person's knowledge and/or information about any such contention.

97. (a) If the Commission orders Respondents to repair some or all of the Omegas pursuant to U.S.C. § 2064(d)(1), identify and describe the nature and amount of the reimbursement to "any other person who is a manufacturer, distributor, or retailer of such product for such other person's expenses in connection with carrying out the order" that Complainant contends should be made by Respondents.

(b) identify all documents which describe, evidence, refer, support, or relate to

any such contention;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(d) describe in detail the substance of each such person's knowledge and/or information about any such contention.

98. (a) If the Commission orders Respondents to replace some or all of the Omegas pursuant to U.S.C. § 2064(d)(2), identify and describe the nature and amount of the reimbursement to "any other person who is a manufacturer, distributor, or retailer of such product for such other person's expenses in connection with carrying out the order" that Complainant contends should be made by Respondents.

(b) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(d) describe in detail the substance of each such person's knowledge and/or information about any such contention.

99. (a) If the Commission orders Respondents to refund the purchase price to some or all of the Omegas pursuant to U.S.C. § 2064(d)(3), identify and describe the nature and amount of the reimbursement to "any other person who is a manufacturer, distributor, or retailer of such product for such other person's expenses in connection with carrying out the order" that Complainant contends should be made by Respondents.

(b) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or

information about any such contention.

B. Potential Witnesses

100. Identify all former and/or current employees of Respondents with whom Complainant has had any contact regarding the Omegas. For each such person, identify and describe:

(a) the person's name;

(b) the person's last known home and business address;

(c) the person's last known telephone number;

(d) the person's last known position with Respondents;

(e) the date of any such contacts;

(f) the nature of any such contacts (e.g., letter, telephone conversation, in-person interview);

(f) a detailed description of the subject matter of such communication; and

(g) the identity of any other persons who were present during such contacts.

101. For each and every contact describe an response to Interrogatory No. 100, identify each and every document that describes, evidences, refers, or relates to such contacts, including without limitation any notes of such contacts, documents shown during the course of such contacts, lists of questions or answers given, or any reports of such communications.

102. Identify each and every person whom Complainant knows and/or believes to have knowledge or information concerning or related to the subject matter of the Complaint or other discoverable information. For each such person, describe:

(a) the person's name;

(b) the person's last known home and business address;

(c) the person's last known telephone number;

(d) the corporate or government affiliation of the person;

(e) whether the Complainant has contacted such person; and

(e) the specific subject matter of the person's knowledge.

103. Identify each and every fact witness that Complainant expects to testify on its behalf at the hearing in this matter. For each such fact witness, identify and describe:

(a) the name, title, business address, and home address for each such witness; and

(b) the subject matter about which each witness is expected to testify.

104. Identify each and every expert witness whom the Complainant expects to testify on its behalf at the hearing in this matter. For each such expert, identify and describe:

(a) the expert's name, title, home address, business address, education, employment since graduation from high school, and all publications authored or edited by the expert;

(b) the subject matter on which each expert is expected to testify;

(c) the substance and facts upon which the expert relies in forming his or her opinion;

(d) the opinions to which the expert is expected to testify;

(e) a summary of the grounds for each such opinion; and

(f) a statement and description of all information and documents upon which the expert relies or expects to rely.

105. Identify and describe any and all oral or written statements made by Respondents that the Complainant contends constitute an admission with reference to any of the issues raised in the Complaint. For each such statement, identify and describe:

(a) the person making the alleged statement;

(b) that person's relationship to Respondents;

(c) the content of the statement;

(d) the date, time, and place of the statement;

(e) the nature of the alleged statement (e.g., written or oral); and

(f) the identity of each person who heard the statement or otherwise has personal knowledge of the statement.

C. Other Allegations Made By the CPSC

106. In a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo, Singer states, "based on multiple random inquiries of sprinkler contractors across the nation in the recent past, we believe that Central's proposed labor payment falls considerably short of what has been, and remains, customarily required to remove and install sprinklers . . . ." With respect to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to the "multiple random inquiries of sprinkler contractors";

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such "multiple random inquires of sprinkler contractors";

(e) describe in detail the substance of each such person's knowledge and/or information of such "multiple random inquiries of sprinkler contractors";

(f) identify and describe in terms of a specific monetary amount "what has been, and remains, customarily required to remove and install sprinklers";

(g) identify each and every document that constitutes, evidences, refers, or relates in any way to "what has been, and remains, customarily required to remove and install sprinklers";

(h) identify each and every person whom Complainant knows and/or believes to have knowledge of "what has been, and remains, customarily required to remove and install sprinklers"; and

(i) describe in detail the substance of each such person's knowledge and/or

information of "what has been, and remains, customarily required to remove and install sprinklers."

107. In a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo, Singer states, "the evidence we have gathered does not support the view that dezincification alone is the cause of above-required operating pressures in Omegas from plastic pipe . . . ." With regard to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify and describe all of the "evidence we have gathered";

(d) identify each and every document that constitutes, evidences, refers, or relates in any way to this statement;

(e) identify each and every person whom Complainant knows and/or believes to have knowledge of this statement; and

(f) describe in detail the substance of each such person's knowledge and/or information.

108. In a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo, Singer states, "the evidence we have gathered does not support the view . . . that swollen o-rings due to cutting oil exposure are the exclusive cause of non-activation in Omegas manufactured before 1996." With regard to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify and describe all of the "evidence we have gathered";

(d) identify each and every document that constitutes, evidences, refers, or relates in any way to this statement;

(e) identify each and every person whom Complainant knows and/or believes to

have knowledge of this statement; and

(f) describe in detail the substance of each such person's knowledge and/or information.

109. In a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo, Singer states, "rather, primarily, the data points to multiple failure modes rooted in the design and construction of these sprinklers." With regard to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify and describe the "multiple failure modes rooted in the design and construction of these sprinklers";

(d) identify and describe "the data" referenced in the statement;

(e) identify and describe each and every document that constitutes, evidences, refers, or relates in any way to this statement;

(f) identify each and every person whom Complainant knows and/or believes to have knowledge of this statement; and

(g) describe in detail the substance of each such person's knowledge and/or information.

110. In a February 19, 1998 letter from Eric Stone of the CPSC to Kathleen Sanzo, the CPSC refuses to accept a "testing based corrective action proposal" from Respondents. With regard to this rejection:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for rejecting a "testing based corrective action proposal";

(c) identify and describe any and all reasons that the CPSC believes are correct in

rejecting such a proposal;

(d) identify each and every document that constitutes, evidences, refers, or relates in any way to the rejection of this proposal;

(e) identify each and every person whom Complainant knows and/or believes to have knowledge of the rejection of this proposal; and

(f) describe in detail the substance of each such person's knowledge and/or information.

111. In a February 19, 1998 letter from Eric Stone of the CPSC to Kathleen Sanzo, the CPSC states that "Central continues to insist on selling Omega sprinklers with silicone o-rings despite serious concerns about whether they will function in the long term." With regard to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify and describe all "serious concerns" that the CPSC has regarding the functioning of Omega sprinklers with silicone o-rings;

(d) identify each and every document that constitutes, evidences, refers, or relates in any way to such "serious concerns"; and

(e) identify each and every person whom Complainant knows and/or believes to have knowledge of such "serious concerns."

112. In a February 24, 1998 letter from Eric Stone of the CPSC to Kathleen Sanzo, Stone states, "x-ray examination of the unit showed that the internal shaft was cocked or tipped slightly and jammed in that position" and that the CPSC "plans to conduct non-destructive analysis of the unit . . . ." With regard to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify and describe any evidence that Omegas may be "cocked or tipped slightly and jammed in that position";

(d) identify each and every document that constitutes, evidences, refers, or relates in any way to the statement that Omegas are "cocked or tipped slightly and jammed in that position";

(e) identify each and every person whom Complainant knows and/or believes to have knowledge of any such problems;

(f) describe in detail the substance of each such person's knowledge and/or information; and

(g) describe any "non-destructive analysis of the unit" performed by or on behalf of the CPSC.

113. In a January 6, 1998 letter from Eric Singer of the CPSC to the state attorneys general, Singer states, "this contrasts with automatic fire sprinklers' historical rate of proving 99.5 percent effective." With regard to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify and describe all evidence that automatic fire sprinklers have an "historical rate of proving 99.5 percent effective";

(d) identify each and every document that constitutes, evidences, refers, or relates in any way to such historical rate of effectiveness;

(e) identify each and every person whom Complainant knows and/or believes to have knowledge of such historical rate of effectiveness; and

(f) describe in detail the substance of each such person's knowledge and/or information.

114. (a) State whether Complainant deems any corrective action proposal to be acceptable that is based in part on testing of a sample of sprinkler heads from a building and comparing the results of the sample to the hydraulically calculated operating pressure of that building.

If so:

(b) identify and describe such an acceptable corrective action proposal;

If not:

(c) identify and describe all reasons for such unacceptability;

(e) identify each and every document that constitutes, evidences, refers, or relates in any way to such unacceptability;

(f) identify each and every person whom Complainant knows and/or believes to have knowledge of such unacceptability; and

(g) describe in detail the substance of each such person's knowledge and/or information.

D. <u>CPSC Investigation</u>

115. Identify all persons employed or otherwise retained by the CPSC who in any way participated in the CPSC's investigation of the Omegas. For each person identified, describe his or her role in the investigation.

116. Describe the circumstances surrounding, and the reasons giving rise to the CPSC's decision to investigate alleged risks associated with the Omegas. Your response should include, without limitation, the following:

(a) the date that the CPSC decided to investigate the Omegas;

(b) the identity of all persons at the CPSC involved in the decision to investigate the Omegas; and

(c) the identity of all information (including, but not limited to, any consumer complaints) available to or otherwise relied upon by the CPSC in deciding to initiate an

investigation of the Omegas.

117. Describe in detail any investigation by the CPSC relating to consumer complaints and/or consumer reports of personal injury, property damage, non-activation, or any other problems allegedly associated with the Omegas. Your response should include, without limitation, the following:

(a) the identity of any and all persons employed or otherwise retained by the CPSC who participated in this aspect of the investigation;

(b) the identity of all consumers with whom the CPSC communicated in connection with this aspect of the investigation;

(c) the identity of all consumers who complained of or reported an incident relating to the Omegas;

(d) the identification of any consumer questionnaires or other surveys used by the CPSC in conducting this aspect of the investigation; and

(e) the identification of any and all data, reports, survey results, or other information revealing the results of this aspect of the investigation.

118. Identify and describe any and all incidents known to the CPSC in which a consumer or other person has reported a fire in connection with use of the Omegas. For each such incident, state the following:

(a) the name and address of the consumer;

(b) the date of the incident involving the fire;

(c) a description of any and all property damage, if any, caused by or associated with the fire; and

(d) a description of any and all personal injuries, if any, sustained as a result of or associated with the fire.

119. To the extent not already identified in response to Interrogatory Nos. 117-118,

identify and describe any and all incidents known to the CPSC in which a consumer or other person has reported any form of property damage or personal injury in connection with the Omegas. For each such incident, state the following:

(a) the name and address of the consumer;

(b) the date of the incident involving the alleged property damage and/or personal injury;

(c) a description of the type of property damage allegedly sustained; and

(d) a description of any and all personal injury allegedly sustained.

120. Describe in detail any and all communications between the CPSC and any dealer, retailer, or distributor in connection with the Omegas. Your response should include, without limitation, the following:

(a) the identity of any and all persons employed or otherwise retained by the CPSC who participated in this aspect of the investigation;

(b) the identity of any and all dealers, retailers, or distributors with whom the CPSC communicated in connection with this aspect of the investigation of the Omegas;

(c) a description of the content of the CPSC's communications with each such dealer, retailer, or distributor;

(d) the identification of any questionnaires or other surveys used by the CPSC in communicating with each such dealer, retailer, or distributor; and

(e) the identification of any and all data, reports, surveys results, or other information revealing the results of this aspect of the investigation.

121. Describe in detail any and all communications between the CPSC and any Authority Having Jurisdiction ("AHJ") in connection with the Omegas. Your response should include, without limitation, the following:

(a) the identity of any and all persons employed or otherwise retained by the CPSC who participated in this aspect of the investigation;

(b) the identity of any and all AHJ's with whom the CPSC communicated in connection with this aspect of the investigation;

(c) a description of the content of the CPSC's communication with each such AHJ;

(d) the identification of any questionnaires or other surveys used by the CPSC in communicating with each such AHJ; and

(e) the identification of any and all data, reports, surveys results, or other information revealing the results of this aspect of the investigation.

122. Describe in detail any and all communications between the CPSC and any state law enforcement authorities in connection with the Omegas. Your response should include, without limitation, the following:

(a) the identity of any and all persons employed or otherwise retained by the CPSC who participated in this aspect of the investigation;

(b) the identity of any and all state law enforcement authorities with whom the CPSC communicated in connection with this aspect of the investigation of the Omegas;

(c) a description of the content of the CPSC's communications with each such state law enforcement authority;

(d) the identification of any questionnaires or other surveys used by the CPSC in communicating with each such state law enforcement authority; and

(e) the identification of any and all data, reports, surveys results, or other information revealing the results of this aspect of the investigation.

123. Describe in detail any and all communications between the CPSC and any federal law enforcement authorities in connection with the Omegas. Your response should include, without limitation, the following:

(a) the identity of any and all persons employed or otherwise retained by the CPSC who participated in this aspect of the investigation;

(b) the identity of any and all federal law enforcement authorities with whom the CPSC communicated in connection with this aspect of the investigation of the Omegas;

(c) a description of the content of the CPSC's communications with each such federal law enforcement authority;

(d) the identification of any questionnaires or other surveys used by the CPSC in communicating with each such federal law enforcement authority; and

(e) the identification of any and all data, reports, surveys results, or other information revealing the results of this aspect of the investigation.

E. Design and Testing

124. Identify and describe any and all testing of the Omegas conducted by or on behalf of the CPSC. Your response should include, without limitation, the following:

(a) a description of any testing protocols used by the CPSC in testing the Omegas;

(b) the identity of the person(s) who created or established any such testing protocols for the Omegas;

(c) a description of the methodology employed during each and every test of the Omegas;

(d) the date of each and every test of the Omegas;

(e) an identification of the person(s) who conducted, participated in, or were otherwise present during each test of the Omegas;

(f) a description of the results of each and every test of the Omegas; and

(g) the identification of any and all documents (including videotapes and audiotapes) relating to any testing of the Omegas.

125. Identify any and all outside consultants, experts, or other persons who assisted, advised, or otherwise communicated with the CPSC with respect to any testing of the Omegas. For each such person, describe his or her role in the testing, and the communications between that

person and the CPSC.

126. For each test of the Omegas conducted by the CPSC, describe in detail the condition and age of the specific Omegas used in the test. Your response should include, without limitation, the following:

(a) an identification of each specific Omega by model number;

(b) a description of how and when the CPSC obtained each specific Omega used in the testing;

(c) a description of the condition of each specific Omega used in the testing (e.g., new, used, damaged, dented, etc. . .);

(d) a statement of the age of each specific Omega used in the testing;

(e) a statement of whether the CPSC has retained and the current location of each specific Omega used in the testing; and

(f) if the CPSC has since destroyed or discarded any Omegas used in its testing, a statement of the reasons for that action.

127. For each test of the Omegas conducted by the CPSC, describe in detail the piping used in the sprinkler system from which the Omegas were removed. Your response should include, without limitation, the following:

(a) the material constituting the piping;

(b) the presence of any treatments or substances applied to the piping;

(c) the contents of any and all materials or substances inside the piping; and

(d) a description of the overall condition of the piping.

128. For the time period 1990 through the present, identify and describe any and all testing of any non-Omega sprinkler heads conducted by or on behalf of the CPSC. Your response should include, without limitation, the following:

(a) a description of any testing protocols used by the CPSC in testing the non-

Omega sprinkler heads;

(b) the identity of the person(s) who created or established any such testing protocols for the non-Omega sprinkler heads;

(c) a description of the methodology employed during each and every test of the non-Omega sprinkler heads;

(d) the dates of each and every test of the non-Omega sprinkler heads;

(e) an identification of the person(s) who conducted, participated in, or were otherwise present during each test of the non-Omega sprinkler heads;

(f) a description of the results of each and every test of the non-Omega sprinkler heads; and

(g) the identification of any and all documents (including videotapes and audiotapes) relating to any testing of the non-Omega sprinkler heads.

129. To the extent that you contend, or otherwise intend to present at the hearing in this matter, the feasibility and/or propriety of any alternative design features for the Omegas, identify and describe any such proposed alternative design features. Your response should include, without limitation, a description of all data, testing, reports, or other information supporting this contention.

F. Risk Assessment

130. Set forth the factual basis of your contention in Paragraph 15 of the Complaint that the Omegas "create a substantial risk of injury to the public within the meaning of Section 15(a)(2) of the CPSA, 15 U.S.C. § 2064(a)(2)." Your response should include, without limitation, the following:

(a) a description of the specific risks of injury that you contend are presented by the Omegas;

(b) a description of the criteria or factors used by the CPSC in determining that each risk allegedly associated with the Omegas constitutes a "substantial risk" within the meaning of 15 U.S.C. § 2064(a)(2); and

(c) an identification of any and all data, survey information, or testing relating to the alleged risks associated with the Omegas.

131. Describe in detail any and all measures taken by the CPSC to determine the severity of the risk allegedly associated with the Omegas, including, without limitation:

(a) a description of how the CPSC measures the severity of the risk allegedly associated with the Omegas;

(b) a statement of whether the measurement employed by the CPSC incorporates, considers, or is in any way adjusted to reflect the number of products in use and the frequency of use of the Omegas;

(c) a description of all efforts taken by the CPSC to measure the severity of the risk or probability of injury allegedly associated with the Omegas; and

(d) an identification of all data, studies, and reports that quantify or otherwise provide an assessment of the risk or probability of injury allegedly associated with the Omegas.

132. Describe the CPSC's preliminary determination of the alleged risks associated with the Omegas. Your response should include, without limitation, the following:

(a) the date the CPSC Staff issued its preliminary determination of the alleged risks associated with the Omegas;

(b) the identity of all persons involved in the Staff's preliminary determination;

(c) the level of hazard assigned to the Omegas in accordance with the applicable provisions of the CPSC Recall Handbook; and

(d) an identification of all data, studies, reports, and/or testing upon which CPSC relied in making its preliminary determination.

133. Explain the factual basis underlying the level of hazard assigned to the Omegas in the CPSC Staff's preliminary determination of the alleged risks associated with the Omegas. Your response should include a statement of the specific factors considered, and the data or information

relied upon, by the CPSC Staff in determining the level of hazard assigned to the Omegas.

134. State whether CPSC's preliminary determination and/or initial assignment of the level of hazard allegedly presented by the Omegas has changed over time. If so, describe any such change and the information or testing giving rise to the change.

135. For the period from 1990 through the present, identify all consumer products classified by the CPSC as presenting a hazard level equal to, or greater than, the hazard level assigned to the Omegas. For example, if the Omegas have been classified as a "Class B" hazard, identify all other consumer products that have been classified as "Class B" hazards and all consumer products identified as "Class A" hazards. For each consumer product identified in your response, you should provide the following:

(a) the identity of the consumer product by brand name or other description;

(b) the identification of the manufacturer of each such consumer product;

(c) the date of the CPSC's classification of the consumer product as presenting a hazard;

(d) the hazard level assigned each such consumer product;

(e) a description of the hazard presented by each such consumer product;

(f) for each such consumer product, the estimated total number of units manufactured as of the date the CPSC made its determination of the hazard level;

(g) for each such consumer product, the estimated total number of units in the hands of the consumers as of the date the CPSC made its determination of the hazard level;

(h) the number and severity of any and all personal injuries associated with each such consumer product;

(i) the number of deaths associated with each such consumer product; and

(j) the nature and number of property damage reports associated with each such consumer product.

G. Sufficiency of Corrective Action

136. For each consumer product identified in your response to Interrogatory No. 135, describe any and all corrective action taken with respect to that product. Your response should include, without limitation, the following:

(a) a statement of the CPSC's role in effecting the corrective action;

(b) a statement of whether the corrective action that was taken was completely voluntary on the part of the manufacturer, retailer, or distributor, was the result of a negotiated corrective action plan with the CPSC, or otherwise was compelled by the CPSC through the initiation of an adjudicative proceeding pursuant to 15 U.S.C. § 2064; and

(c) the identification of all documents evidencing the corrective action taken with respect to each such consumer product.

137. For each consumer product identified in your response to Interrogatory No. 135, describe the nature and extent of the public notice provided as part of the corrective action taken. Your response should include, without limitation, the following:

(a) the specific nature of the notice given (e.g., written notice to consumers and retailers, press releases, bill-boards, posters, etc. . .);

(b) a description of the media coverage associated with the corrective action (e.g., newspaper ads and reports, magazine ads and reports, wire services, other print media, television coverage, radio coverage, and/or internet exposure);

(c) a description of the extent of media coverage and exposure of the corrective action (e.g., a list of all newspapers, magazines, wire services, television stations, radio stations, and internet services that provided notice or otherwise covered the corrective action);

(d) a description of the frequency and amount of media coverage associated with the corrective action (e.g., the number of days newspapers carried a written notice, or the number of days the notice appeared on television); and

(e) a description of any and all point of purchase notification to consumers associated with the corrective action (e.g., posters and notices provided to retailers to display at

stores).

138. For each consumer product identified in your response to Interrogatory No. 135, describe the nature of the recall component, if any, of the corrective action taken. Your response should include, without limitation, the following:

(a) the number of individual units recalled;

(b) the remedy options offered to consumers (e.g., replacement, refund, substitute products);

(c) an assessment of consumer participation in the recall (e.g., percentage of units in the hands of consumers that were actually received by the recall);

(d) identification of any and all documents revealing the level of consumer participation in the recall; and

(e) a description of any studies conducted by the manufacturer, distributor, or retailer of the consumer product, or by the CPSC, or by both, or by any other person or entity, assessing the effectiveness of the recall program.

139. Explain the factual basis of your contention, if any, that the corrective action proposal of Respondents in connection with the Omegas is insufficient to protect the public or otherwise fails to provide adequate remedial measures under 15 U.S.C. § 2064.

140. Describe in detail the public notice, recall, and/or other remedial measures that you contend are necessary with respect to the Omegas to constitute a sufficient remedy and/or corrective action proposal under 15 U.S.C. § 2064.

141. Identify and describe all efforts taken by the CPSC (including, without limitation, consumer surveys, press surveys, and public opinion polls) to evaluate, test, or otherwise determine the sufficiency of the corrective action proposal of Respondents with respect to the Omegas.

142. Identify and describe all criteria and factors considered by the CPSC in measuring the sufficiency of the corrective action proposal of Respondents with respect to the Omegas.

143. Identify all public statements, press releases, or other information released to the public by the CPSC that in any way relates to or otherwise refers to the Omegas and/or Respondents.

H. Initiation of Adjudicative Proceedings

144. For the time period beginning January 1, 1982 to the present, identify all incidents in which the CPSC has filed an administrative complaint pursuant to Section 15 of the Consumer Product Safety Act (CPSA), 15 U.S.C. § 2064. Your response should include, without limitation, the following:

(a) the date the administrative action was filed;

(b) the identity of the manufacturers, distributors, or retailers of the consumer product named as respondents in the administrative action;

(c) the identity of the consumer product at issue;

(d) a description of the alleged "substantial product hazard" at issue in each case; and

(e) a description of the outcome of the administrative action and the nature of the remedy awarded.

145. Identify all persons employed or otherwise retained by the CPSC who in any way participated in the CPSC's decision to initiate the instant adjudicative proceeding against the Respondents.

146. State the date on which the CPSC authorized Complaint Counsel to initiate the instant adjudicative proceeding against the Respondents.

147. Identify all communications and documents (including internal memoranda and correspondence) relating to the CPSC's decision to initiate the instant adjudicative proceeding against the Respondents.

148. State the reasons for the CPSC's authorization of, and decision to initiate, the instant adjudicative proceeding against the Respondents.

DATED: March 26, 1998

J. Gordon Cooney, Jr. (MFH)

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CENTRAL SPRINKLER CORP. and
CENTRAL SPRINKLER CO.

CERTIFICATE OF SERVICE

I, Michael F. Healy, hereby certify that on this date a true and correct copy of the foregoing Respondents' First Set of Interrogatories was served by hand upon the following:

Eric L. Stone
Director
Division of Administrative Litigation
U. S. Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

Alan H. Schoem
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Date: March 26, 1998

Michael F. Healy

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION
1998 APR -6 P 3:48

In the Matter of	
CENTRAL SPRINKLER CORP.,	
and	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	
Respondents	

COMPLAINT COUNSEL'S OPPOSITION
TO RESPONDENTS' MOTION TO DISMISS

COMES NOW the staff of the Consumer Product Safety Commission and respectfully submits its opposition to Respondents Central Sprinkler Corporation and Central Sprinkler Company's Motion to Dismiss the staff's Complaint in the above-captioned matter.

I. INTRODUCTION

On March 3, 1998, the staff of the Consumer Product Safety Commission filed an Administrative Complaint against Respondents Central Sprinkler Corp. and Central Sprinkler Co. of Lansdale, Pa., the manufacturers of "Omega" automatic fire sprinklers. The Complaint seeks a nationwide recall of the approximately 10 million Omega fire sprinklers manufactured by Respondents since 1982.

The staff filed its Complaint after extensive investigation revealed that Omega sprinklers have a high failure rate, and may not properly activate to release water in the event of a fire. The significant chance of failure of the Omega is a defect that creates a substantial risk of injury to the public pursuant to 15 U.S.C. § 2064. Complaint Counsel has

evidence, which it intends to produce at trial, of thousands of failures of Omega sprinklers. Complaint Counsel is aware of at least six fires in which Omega fire sprinklers have reportedly failed to operate; one of which caused over $3 million in property damage. In their brief, Respondents have indicated that there may be at least two additional fires in which Omega sprinklers reportedly failed to open (although claiming that in one of these, the sprinklers failed to open because of inadequate water supply). Respondents' Memorandum at 5, n. 2.

On March 26, 1998, Respondents filed a Motion to Dismiss and supporting Memorandum, claiming that CPSC lacks jurisdiction over Omega fire sprinklers, and that the staff's Complaint and List and Summary of Documentary Evidence are deficient. As explained more fully below, Respondents' arguments are without merit. CPSC clearly has jurisdiction over the Omega, and its Complaint and List and Summary of Documentary Evidence meet all applicable requirements.

II. SUMMARY OF THE ARGUMENT

Central's Omega sprinklers are consumer products within the jurisdiction of the Consumer Product Safety Commission. Therefore, there is no basis upon which to dismiss the Complaint for lack of jurisdiction.

The Consumer Product Safety Act, 15 U.S.C. § 2051 *et seq.,* imposes three basic requirements in order for an item to be a "consumer product" within the Commission's jurisdiction. *See* 15 U.S.C. § 2052 (1997). First, the item must be an "article" (or a component part of such "article") -- a final manufactured product, rather than anything at an intermediate stage of production. *See id.; Consumer Prod. Safety Comm'n v. The*

Anaconda Co., 593 F.2d 1314, 1319 (D.C. Cir. 1979). Second, the article must be customarily produced or distributed for sale to, or for the personal "use, consumption, or enjoyment of a consumer." *Id.* Lastly, the use, consumption or enjoyment of the article must be "in or around a permanent or temporary household or residence, a school, in recreation, or otherwise." *Id.*

As the following discussion demonstrates, Omega sprinklers are "articles" that are "used or enjoyed by consumers in or around a permanent or temporary household or residence, a school, in recreation, or otherwise." Omega sprinklers are a final manufactured product. They are installed in a "wide range of residential, commercial and industrial structures." Respondents' Memorandum at 3. Consumers use or enjoy Omegas in their homes, schools, hospitals, recreational facilities and many other places, and are exposed to the risk they create. Omega sprinklers are without question "consumer products" subject to the Commission's jurisdiction.

Furthermore, contrary to Respondents' claim, the staff's Complaint and List and Summary of Documentary Evidence fulfill all applicable pleading requirements.

As the moving party seeking an Order of Dismissal, Respondents bear the heavy burden of proving that the Agency lacks jurisdiction over Omega sprinklers, and that the staff's Complaint and List and Summary of Documentary Evidence are insufficient. *See Department of Labor v. Greenwich Collieries*, 114 S.Ct. 2251, 2259 (1994) (holding that under section 7(d) of the APA, 5 U.S.C. 556(d), the proponent of an order bears both the burden of production and the burden of persuasion). Respondents' unsupported and

untenable arguments fall far short of meeting this burden, and their Motion to Dismiss should therefore be denied.

III. FIRE SPRINKLERS ARE "CONSUMER PRODUCTS" WITHIN THE CPSC'S JURISDICTION

To fall within the Commission's jurisdiction, an article must be a "consumer product." *United States v. One Hazardous Product Consisting of a Refuse Bin*, 487 F. Supp. 581, 584 (D.N.J. 1980). Section 3 of the Consumer Product Safety Act, 15 U.S.C. §§ 2051 et seq. ("the Act"), clearly and unambiguously defines "consumer product" as:

> any article, or component part thereof, produced or distributed
>
> i) for sale to a consumer for use in or around a permanent or temporary household or residence, a school, in recreation or otherwise, **or**
>
> ii) **for the personal use, consumption or enjoyment of a consumer in or around a permanent or temporary household or residence, a school, in recreation, or otherwise; but such term does not include--**
>
> (A) any article which is not customarily produced or distributed for sale to, **or** use or consumption by, **or** enjoyment of, a consumer.

15 U.S.C. § 2052 (1997) (emphasis added).[1]

The Act's definition of "consumer product" is to be "liberally construed in accordance with the stated purposes of this legislation, i.e., the protection of consumers from injury due to unsafe products." *One Hazardous Product*, 487 F. Supp. at 584; *see also* Annotation, *What is "Consumer Product" for Purposes of Consumer Product Safety Act (15 USCS §§ 2051 et seq.),* 43 A.L.R. Fed. 827. As explained by one court,

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[1] The statute further excepts tobacco products, motor vehicles, pesticides, aircraft, boats, food, drugs, devices and cosmetics, and articles which, if sold, would be subject to taxation under the Internal Revenue Code section 4181. *See* 15 U.S.C. § 2052(a)(1)(B) - (I) (1997).

> The most unequivocal expression of congressional intent to be gleaned from the legislative history of the Act is that the definition of "consumer product" be construed broadly to advance the Act's articulated purpose of protecting consumers from hazardous products . . . An additional factor in favor of an expansive interpretation of the Act generally is the Act's character as remedial legislation directed at a widespread, specifically identified threat to the public safety.

Consumer Prod. Safety Comm'n v. Chance Mfg. Co., 441 F. Supp. 228, 231 (D.D.C. 1977); *see also Butcher v. Robertshaw Controls Co.*, 550 F. Supp. 692 (1981) ("[t]he Act is intended for the protection of the public against unreasonable risks of injury associated with "consumer products," a term which is to be liberally construed in accordance with the statutes's patently remedial purpose").

Since the Commission was established, courts and the Agency have upheld an expansive definition of "consumer product," finding that, among many other things, the Act applies to architectural glazing materials *(ASG Indus. v. Consumer Product Safety Comm'n*, 593 F.2d 1323, 1328 (D.C. Cir.), *cert. denied*, 444 U.S. 864 (1979)); fire extinguishers (CPSC Advisory Op. No. 154 (1974)); aluminum wiring (*Kaiser Alum. & Chem. Corp. v. Consumer Prod. Safety Comm'n*, 574 F.2d 178 (3d Cir.), *cert. denied*, 439 U.S. 881 (1978)); elevators (CPSC Advisory Op. No. 182 (1973)); portable gas heaters (CPSC Advisory Op. No. 286 (1982)); and fire alarm equipment (CPSC Advisory Op. No. 181 (1975)).

A. Omega Sprinklers Are "Articles"

To qualify as a "consumer product" under the Act, a product must be produced or distributed as a distinct article of commerce, or as a component part of such distinct article, rather than any physical entity that might exist only at an intermediate stage of production.

Consumer Product Safety Comm'n v. The Anaconda Co., 593 F.2d 1314, 1319 (D.C. Cir. 1979) (emphasis added); *ASG Indus. v. Consumer Prod. Safety Comm'n*, 593 F.2d 1323, 1327 (D.C. Cir.), *cert. denied*, 444 U.S. 964 (1979). Respondents do not dispute that the Omega sprinklers in the instant case are distinct "articles" of commerce -- they are the final manufactured product, and not any intermediate stage of production.

However, Respondents do confuse which articles are the subject of this jurisdictional inquiry. Respondents attempt to back into a jurisdictional argument by claiming that sprinkler systems are not consumer products, and then urging the Commission to conclude that the sprinklers within those systems are not consumer products.[2,3] Sprinklers systems,

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[2] *See, e.g.,* Respondents' Memorandum at 1 (sprinkler systems are an integral part of a building, and therefore disqualified as consumer products; sprinkler systems are not customarily marketed, sold or distributed to consumers); Respondents' Memorandum at 3 (discussing the makeup and construction of, and permit requirements associated with, sprinkler systems), Respondents' Memorandum at 4, 6, 15-16, 18 (discussing state and local regulation of sprinkler systems); Respondents' Memorandum at 11 (claiming that active consumer interaction with the product is required for the product to be a "consumer product," and arguing that the sprinkler system remains passive until automatically activated by fire); Respondents' Memorandum at 14-15 (arguing that a fire suppression system is a building component and, therefore, not a consumer product); Respondents' Memorandum at 21 (arguing that sprinklers in commercial and industrial settings are not consumer products because OSHA standards address automatic sprinkler systems).

[3] Respondents argue that the National Commission on Product Safety did not include "sprinkler systems" in its list of consumer products in 1973, nearly 10 years before Omega fire sprinklers were ever manufactured. Because the staff does not claim that sprinkler **systems** are defective, the absence of those systems from the National Commission's list is irrelevant. Moreover, the list contained in the National Commission's Final Report on Product Safety explicitly states, in bold and capital letters, that the home alarm, escape, and protection devices **INCLUDE BUT ARE NOT LIMITED TO** the few items listed therein. National Commission on Product Safety Final Report to the President and Congress, Table 11, p. 90 (June, 1970) (attached hereto as Exhibit B). What is included in the list is very instructive -- fire extinguishers, fire alarms, smoke alarms and burglar alarms, all of which, like fire sprinklers, are designed to operate in the event of an emergency. *See id.* Respondents ignore this inclusive language and the clear intent of the National Commission

however, are not at issue in this case. Complaint Counsel does not allege that sprinkler systems are consumer products, nor that they create a substantial product hazard. Instead, Complaint Counsel alleges that Omega sprinklers themselves are defective, and that the defect in those sprinklers creates a substantial product hazard.

As indicated by Respondents, sprinkler systems include piping, valves, hydraulic devices, and the sprinklers themselves, installed in a pressurized water delivery system. *See* Respondents' Memorandum at 3. Sprinklers are distinct from the sprinkler systems that contain them. This distinction is crucial to the jurisdictional inquiry.

In *Kaiser Alum. and Chem. Corp. v. Consumer Prod. Safety Comm'n*, 574 F.2d 178 (3d Cir.), *cert. denied*, 439 U.S. 881 (1978), the United States Court of Appeals for the Third Circuit held that aluminum branch wiring is a consumer product within CPSC jurisdiction. Less than a year later, in *Consumer Prod. Safety Comm'n v. The Anaconda Co.*, 593 F.2d at 1319, the United States Court of Appeals for the District of Columbia Circuit held that aluminum branch wiring systems will not fall under the Commission's jurisdiction unless the Commission can show that the systems are distinct articles in commerce. Stressing that it was only considering aluminum branch circuit wiring systems, and recognizing the difference, for purposes of CPSC jurisdiction, between a system and its components, the *Anaconda* Court refused to give collateral estoppel effect to *Kaiser*:

> A ruling for which collateral estoppel effect is sought must have been essential to the judgment in a prior proceeding . . . The jurisdictional question in this case is whether aluminum branch circuit wiring systems are "consumer products." This was not the issue before the Delaware district court. A fair reading of Judge Stapleton's decision makes clear that **the only issue actually**

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to include more than the listed products.

> **litigated in Delaware related to aluminum wiring, a distinct product from the one involved in this case** . . . For the same reason, the Third Circuit's ruling on appeal, *Kaiser Aluminum & Chemical Corp. v. CPSC* , 574 F.2d 178 (3d Cir.), Cert. denied, 439 U.S. 881, 99 S. Ct. 218, 58 L. Ed. 2d 193 (1978), is not entitled to effect on the basis of collateral estoppel in this case.

Anaconda, 593 F.2d at 1322 (emphasis added).[4]

By its own reasoning, the holding of *Anaconda* is inapplicable to the instant case, and *Kaiser* is controlling. Like the aluminum wiring in *Kaiser*, sprinklers are articles customarily produced or distributed for the personal use, consumption or enjoyment of consumers, and are, therefore, consumer products. *See Kaiser*, 574 F.2d at 181.

B. Omega Sprinklers are Customarily Produced or Distributed for the Personal Use, Consumption or Enjoyment of Consumers

To qualify as a "consumer product" under the Act, an article must be produced or distributed "for sale to a consumer for use in or around a permanent or temporary household or residence, a school, in recreation or otherwise, **or** for the personal use, consumption or enjoyment of a consumer in or around a permanent or temporary household or residence, a school, in recreation, or otherwise." 15 U.S.C. § 2052 (1997) (emphasis added). Articles which are not customarily produced or distributed for sale to, **or** use or consumption by, **or** enjoyment of, a consumer, are explicitly excluded from coverage under the Act. *Id.* Because Omegas are customarily produced or distributed for use by, consumption by, or

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[4] In *Anaconda*, the Court pointed out that the defect at issue was in the wiring systems, and not in the components of that system (the wires themselves). *Id.* In fact, the fire hazard was due to faulty connections in the system, and was a problem of "improper design or installation of the wiring system as a whole." *Id.* In the instant case, the defect in Central's Omega sprinklers is in the sprinklers themselves, not in the sprinkler system. It is not a question of faulty connections between components of a sprinkler system (between pipes, valves and pipes, sprinklers and pipes, etc.), or of improper design or installation of the sprinkler systems in which the defective sprinklers are installed.

enjoyment of consumers, and because consumers are exposed to the hazards associated therewith, Omegas are consumer products.

1. An Article Need Not be Sold or Marketed Directly to Consumers to be a "Consumer Product"

Respondents claim that the Act absolutely requires that to be a "consumer product," a product must be produced or distributed for sale to consumers. *See* Respondents' Memorandum at 7 (emphasis added). By its clear and unambiguous language, however, the Act requires that the article be produced or distributed either for sale to or for use, consumption, or enjoyment of a consumer. 15 U.S.C. § 2052(a)(1) (1997). In *Consumer Prod. Safety Comm'n v. Chance Mfg. Co.*, 441 F. Supp. 228, 232 (D.D.C. 1977) (emphasis added), the Court held that:

> [i]n light of the House Committee's additional statement that "[it] is not necessary that a product be actually sold to a consumer, but only that it be produced or distributed for his use," it seems beyond dispute that Congress intended the Act's application to a given product to depend, less on how the product changes hands than on the degree to which it affects or endangers the safety of individuals in their capacity as consumers. This guiding principle forms the first of the two prerequisites to CPSC jurisdiction: That the product in question be **either** directly sold to the consumer **or** "produced or distributed . . . for the personal use, consumption or enjoyment of a consumer . . .

Likewise, in *Anaconda*, 593 F.2d at 1320 (citing H.R. 92-1153, 92d Cong., 2d Sess. (1972) (emphasis added), the Court emphasized that "[i]t is **not necessary that a product be actually sold to a consumer**, but only that it be produced or distributed for his use." That Omega sprinklers are not available in retail stores, that the general public cannot directly purchase sprinklers, and that sprinklers are sold only to professional contractors through Central's distribution outlets, are all irrelevant for purposes of jurisdiction. *See*

Respondents' Memorandum at 8-9. Because Omegas are customarily produced or distributed for use, consumption or enjoyment of a consumer, they are consumer products.

Respondents ignore the plain language and judicial interpretation of clause (ii) of the definition of consumer product, which extends coverage to articles produced or distributed "for the personal use, consumption or enjoyment of a consumer." *See* 15 U.S.C. § 2052(a)(ii) (1997). Respondents claim that clause (ii) was merely intended to encompass free samples and promotional items. *See* Respondents' Memorandum at 7. In *Anaconda*, 593 F.2d at 1320 (emphasis added), however, the Court emphasized that clause (ii) is not a limitation on jurisdiction, but instead an effort to ensure its comprehensiveness:

> A consumer product must be produced or distributed either "(i) for sale to a consumer . . .," or "(ii) for the personal use, consumption or enjoyment of a consumer . . . **Together, clauses (i) and (ii) were designed to ensure that the definition of consumer product would encompass the various modes of distribution through which consumers acquire products and are exposed to the risks of injury associated with those products.**

Respondents also argue that because they do not market sprinklers directly to consumers, Omegas are not consumer products. *See* Respondents' Memorandum at 9 (citing *ASG Indus., Inc. v. Consumer Prod. Safety Comm'n*, 593 F.2d 1323, 1328 (D.C. Cir.), *cert. denied*, 444 U.S. 864 (1979)). Once again, Respondents attempt to insert a requirement into the CPSA that is simply not there -- neither the statute, nor the case Respondents cite, *ASG*, require marketing to consumers. In fact, the Court in *ASG* pointed out that:

> Jurisdiction does not require a showing that a majority of product-sales are to consumers, but there must be a significant marketing of the product as a distinct article of commerce for sale to consumers **or for the use of consumers** before the product may be considered as "customarily" produced or distributed in that manner.

ASG, 593 F.2d at 1328 (emphasis added) (citing *Anaconda*, 593 F.2d at 1314-1322, and holding that architectural glazing materials are consumer products,). Likewise, in *Anaconda*, 593 F.2d at 1320 (emphasis added), the Court noted that "products which are primarily or exclusively sold to industrial or institutional buyers would be included within the definition of consumer product so long as they were produced or distributed **for use of consumers**."

In *Kaiser*, 574 F.2d at 181, the Court held that aluminum branch circuit wiring is a consumer product regardless of the fact that it is sold primarily to electrical wholesalers who sell it directly to electrical contractors. The *Kaiser* Court rejected an argument identical to Respondents', explaining that:

> The method of distribution chosen by a manufacturer for its product cannot, however, determine whether the product falls within the definition . . . Since both (copper and aluminum branch wiring) are articles used or enjoyed by consumers in or around households, both are, according to the plain language of the Act, consumer products.

Id. at 181.

The true test of the jurisdictional inquiry is not to whom Omegas are marketed or sold, but whether consumers are exposed to the hazards associated with them. *United States v. One Hazardous Product Consisting of a Refuse Bin*, 487 F. Supp. 581, 584-85 (D.N.J. 1980) (citing *Kaiser* and *Anaconda*, and holding that refuse bins at a drive-in restaurant, supermarket, and apartment complex are consumer products because their distribution results in a significant number of consumers being exposed to the hazard associated with them); *Chance,* 441 F. Supp. at 231 (D.D.C. 1977) (holding that "[t]o insure that the Commission remained fully capable of acting against evolving and unforeseen risks associated with consumer products, Congress provided that the Commission's jurisdiction as to a particular

product would depend directly on the extent to which consumers were exposed to the risks associated with the product").

According to Respondents, Omega sprinklers are marketed and sold to professional contractors. Respondents' Memorandum at 9. Those contractors, in turn, sell and install Omegas into "a wide range of residential, commercial and industrial structures." *See* Respondents' Memorandum at 3 (citing 'affidavits' of Carmine Schiavone and Frank Hill).[5] These structures include homes, apartments, nursing homes, hospitals, schools and recreational facilities. Affidavit of Francis J. Teevan, attached hereto as Exhibit A. The ten million Omegas produced by Respondents expose the public to one of the most significant hazards imaginable -- uncontained fire. *Id.* Because Omegas are widely used or enjoyed by consumers, and because consumers are exposed to the hazards associated with them, Omegas are consumer products.

2. The Statute Does not Require that Consumers "Actively Interact" With or "Manipulate" a Product

Respondents argue that consumers do not "use" Omega sprinklers because they do not "actively interact" with or "manipulate" them. *See* Respondents' Memorandum at 10, 11. Respondents cite no authority to support this alleged "active interaction" or "manipulation" requirement. Once again, Respondents attempt to inject a requirement into the statute that is simply not there.

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[5] Neither of Respondents' supporting affidavits are properly sworn. For this reason, and because they contain inaccurate information *(see Affidavit of Francis J. Teevan*, attached hereto as Exhibit A), they should be excluded.

As Respondents admit, smoke detectors, fire alarms and burglar alarms are consumer products. Respondents' Memorandum at 6. Yet, like Omega sprinklers, these consumer products are designed and intended only to activate in the event of an emergency; they are "passive systems" that consumers do not "actively interact" with or "manipulate." CPSC has jurisdiction over "consumer products," regardless of any "active interaction" or "manipulation" of the product by consumers. *See Kaiser*, 574 F.2d at 181 (aluminum wiring is a consumer product); *Chance,* 441 F. Supp. at 233 ("[t]he legislative history of the Act nowhere suggests that Congress intended to import a "control" requirement into the definition of the term "consumer product"). For Omegas to be consumer products, it is sufficient that consumers "use" or "enjoy" the Omega sprinklers by relying on them to function in a fire, and that consumers are exposed to the risk caused by their failure to function. The statute does not require consumers to actively manipulate them.

C. Omega Sprinklers are Used, Consumed or Enjoyed by Consumers "In or Around a Permanent or Temporary Household or Residence, a School, in Recreation, or Otherwise"

To qualify as a consumer product, an article must be produced or distributed for sale to or use, consumption or enjoyment of consumers "in or around a permanent or temporary household or residence, a school, in recreation, or otherwise . . ." 15 U.S.C. § 2052 (1997). Courts have interpreted the statutory enumeration of locations and activities in which a consumer product may be used as "an assurance of comprehensiveness rather than a limitation on jurisdiction." *ASG*, 593 F.2d at 1328; *One Hazardous Product*, 487 F. Supp. at 584. As noted above, Respondents admit that Omegas are installed in "a wide range of residential, commercial and industrial structures." *See* Respondents' Memorandum at 3. By

virtue of the fact that they are found in and around permanent and temporary households, residences, schools, recreational facilities and other locations, Omegas are clearly consumer products.

1. Omegas Do Not Lose their Status as "Consumer Products" Because They are "Installed" in a Building

Respondents argue that Omega sprinklers are not used in or around a household, residence or school, in recreation or otherwise, because they are "incorporat[ed] into the fundamental structure of a building as part of a complex system." Respondents' Memorandum at 12. Respondents claim that because "housing" is not within the Commission's jurisdiction, anything "incorporated" therein is also outside the Commission's reach. *See id.*

In *Kaiser*, 574 F.2d at 180, the United States Court of Appeals for the Third Circuit rejected the very argument Respondents make here, albeit in the context of an argument by the manufacturer that the products were not "articles." Like Respondents herein, the manufacturer in *Kaiser* maintained that to qualify as a "consumer product," a product cannot be permanently affixed to or in the home. The Court criticized Kaiser's attempt to artificially inject a new requirement into the statute:

> It does not follow . . . that the Act incorporates all the arcane knowledge about when personal property becomes a fixture and thus part of a building. If Kaiser's interpretation were correct, then many consumer products in common use -- such as furnaces, water heaters, dishwashers, and lighting fixtures -- would be excluded from coverage. We see nothing in the plain language of the Act suggesting that the word "article," a noun denoting any material thing, excludes components incorporated in a residence if they otherwise fit within the definition.

Id. The Kaiser Court ultimately concluded that because aluminum branch circuit wiring is an article used or enjoyed by consumers in or around households, it is, according to the plain language of the Act, a consumer product. *Id. at 181.*

Like aluminum wiring, furnaces and lighting fixtures, automatic fire sprinklers such as the Omega are consumer products, regardless of whether they are installed in a residence.

2. CPSC has Jurisdiction Over Omegas Even if Some of the Sprinklers Are Installed in Industrial and Commercial Buildings

Respondents claim that "even if certain Omegas are consumer products, they do not remain subject to the act when installed in commercial and industrial settings." Respondents' Memorandum at 19. Respondents claim that although "some" Omega models are designated for incorporation into residential structures, "most" are designed for commercial and industrial use. *Id.* Respondents' only support for this proposition is the unsworn statements of Carmine Schiavone and Frank Hill, which contain inaccurate information. Respondents point to the Flow Control and Model "M" Omegas as two models that are in distinctly "non-consumer locations." Respondents' Memorandum at 9, n. 3.

As indicated in the Affidavit of Francis J. Teevan, the Flow Control and Model "M" Omegas that Respondents claim are not in 'consumer locations' are actually installed in hospitals, schools, homeless shelters, nursing homes, and libraries. Affidavit of Francis J. Teevan, attached hereto as Exhibit A. While hospitals, schools, shelters and libraries may all be considered "commercial" facilities, they are 'permanent or temporary household(s) or residence(s), schools, recreational facilities and other' places where consumers may be exposed to the hazards of Omega sprinklers. *See One Hazardous Product*, 487 F. Supp. 581 (finding that refuse bins were located in facilities whose use by consumers was actively

facilitated and encouraged, that access to the bins was unrestricted, and that refuse bins were typically located in the parking areas of apartment complexes, retail businesses, restaurants, and supermarkets, and holding that the refuse bins are "consumer products" within the meaning of the statute); *Kaiser*, 574 F.2d at 181; *Chance*, 441 F. Supp. at 231-32. That certain Omega models "contemplate" certain construction or installations is irrelevant. Because consumers use or enjoy Omegas in or around households, residences, schools, recreational facilities and other locations, and because consumers are exposed to the risk of injury associated with Omegas, Omegas are consumer products.

IV. CPSC HAS JURISDICTION OVER OMEGAS REGARDLESS OF OSHA

Respondents argue that the Commission lacks jurisdiction over Omegas because the risk of injury associated with them falls under OSHA pursuant to Section 31(a) of the Act. *See* Respondents' Memorandum at 20. Section 31(a), codified at 15 U.S.C. § 2080, provides that:

> The Commission shall have no authority under this Act to regulate any risk of injury associated with a consumer product if such risk could be eliminated or reduced to a sufficient extent by actions taken under the Occupational Safety and Health Act of 1970.

15 U.S.C. § 2080(a) (1997).

The Commission has jurisdiction over Omegas despite the provision contained in Section 31(a). In *ASG,* 593 F.2d at 1328-1330, petitioners argued that the Commission is deprived of authority over architectural glazing materials used in most non-residential buildings pursuant to Section 31(a). After carefully considering the legislative history of the statute, the *ASG* Court rejected this argument, holding that the Section:

> [w]as not intended to preclude the exercise of jurisdiction by CPSC whenever a product-hazard either potentially could be or was in part being regulated under OSHA. Congress required CPSC to make a judgment . . . [E]ven if the product is being regulated under OSHA, the Commission has the authority if there has not been sufficient reduction or elimination of the risk of injury . . . We need not consider whether the Commission's authority may be negatived if there exists potential but unexercised authority under OSHA to sufficiently reduce a risk of injury within the Secretary's jurisdiction.

Id. at 1328-29 (holding that Section 31(a) does not preclude Commission's jurisdiction over architectural glazing materials).

The relevant test, as the statute and *ASG* suggest, is whether OSHA has sufficiently reduced or eliminated the risk of injury associated with a particular product. *Id.* at 1329. In the instant case, the risks associated with Omegas have not and cannot be sufficiently reduced or eliminated by OSHA. First and foremost, OSHA only extends to safety issues in the workplace. Omegas, as discussed above, are widely installed in residences and other facilities, not just workplaces. *See Chance*, 441 F. Supp. at 233 (emphasis added) (suggesting that the Court's holding that the Commission has jurisdiction over an amusement park ride would have been different if the risks associated with the ride threatened **only** employees).

Second, even though OSHA may have the power to regulate safety issues in the workplace, it does not remedy the risk that Omega sprinklers pose to employees and the American public. In a sweeping and unsubstantiated generalization that, once again, confuses sprinklers with sprinkler systems, Respondents maintain that since OSHA standards "thoroughly address . . . sprinkler systems . . ., sprinkler heads in the workplace are not within the Act's purview." Respondents' Memorandum at 21 (emphasis added). Although Respondents cite numerous OSHA fire protection and prevention requirements, these OSHA

regulations say little about sprinklers themselves -- the distinct article of commerce at issue in this adjudication -- and less about their integrity and safety, the central issues in this case. *See* 16 C.F.R. §§ 1910.155-1910.165 and Pt. 1910, Subpt. L., App. A. The only potentially relevant provision that Respondents cite is 16 C.F.R. § 1910.159(8), which provides that:

> (i) The employer shall assure that only approved sprinklers are used on systems.[6]
>
> (ii) The employer may not use older style sprinklers to replace standard sprinklers without a complete engineering review of the altered part of the of the system.
>
> (iii) The employer shall assure that sprinklers are protected from mechanical damage.

16 C.F.R. § 1910.159(8) (1997) (emphasis added).[7] Even if all employers protect their Omegas from mechanical damage, refrain from using older style replacement sprinklers without an engineering review, and use only listed Omegas,[8] the Omegas in United States workplaces will remain defective, and will continue to create a substantial risk of injury to the public. Because OSHA fails to sufficiently reduce or eliminate the risk of injury, Section 31(a) does not limit CPSC jurisdiction over Omegas.

---

[6] Even OSHA distinguishes between sprinklers and sprinkler systems by allowing only approved sprinklers to be used in sprinkler systems.

[7] The regulations define "approved" as "accepted, or certified, or listed, or labeled, or otherwise determined to be safe by a nationally recognized testing laboratory." 16 C.F.R. § 1910.155(c)(3)(i).

[8] Because Omegas remain listed by Underwriters Laboratories (UL), employers using the Omega in their facilities remain in technical compliance with OSHA regulations for fire sprinklers in the workplace.

V. CPSC HAS JURISDICTION OF OMEGAS REGARDLESS OF STATE AND LOCAL BUILDING AND FIRE CODES

Claiming that "fire sprinkler systems are already the subject of extensive state and local control," Respondents argue that CPSC lacks jurisdiction over Omegas because Congress did not intend for CPSC regulation to "supplant state and local regulations regarding building construction." *See* Respondents' Memorandum at 8. Respondents argue that if the Agency is given jurisdiction over defective automatic fire sprinklers, it will inexorably open the door to agency rule-making on the installation and design of fire sprinkler systems.[9] *See* Respondents' Memorandum at 17.

Respondents' argument is flawed. First, no matter how Respondents twist and contort, this case is about Omega sprinklers, not sprinkler systems. The question of whether and to what extent state and local governments regulate sprinkler systems is simply not relevant herein.

Like the OSHA standards discussed above, the building codes Respondents reference require only that sprinklers be "approved." *See* BOCA Code, Respondents' Memorandum, Exhibit C.[10] Respondents provide no evidence that the safety or efficacy of the sprinklers

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[9] That Agencies do not regulate sprinkler systems is simply inaccurate. Concurrent with local Authorities Having Jurisdiction, the federal government exercises considerable authority over sprinkler system installation, design, and maintenance requirements. OSHA, the Joint Commission on Accreditation of Hospitals, and the Health Care Financing Administration, all prescribe standards regarding sprinkler systems. See, e.g., 16 C.F.R. § 1910.106(h)(6)(d) (OSHA requirement that processing plants have automatic sprinkler systems); 42 U.S.C. § 1395bb (JCAHO authority generally).

[10] Similar requirements apply to a wide range of consumer products, including furnaces, electrical products, and smoke and carbon monoxide detectors. *See id.*

themselves, which are the subject of this litigation, are regulated by state or local authorities, or that state and local authorities have the power to demand a recall or corrective action relating to defective fire sprinklers.

Second, even if state and local governments were to exercise authority over the safety and efficacy of Omegas, the Commission's authority would control. The House Budget Committee Report that Respondents cite for the proposition that CPSC is barred from "establishing standards that conflict[] with or displace[] state and local regulations," does not stand for this proposition. *See* H. R. 158, 97th Cong., 1st Sess., 390 (1981). In fact, contrary to Respondents' suggestion, the House Report actually states the opposite ("subsection (a) amends section 26 of the CPSA to provide that voluntary standards, which the agency has stated in the Federal Register that it will rely upon to address risks of injury, **preempt all inconsistent state and local laws**"), and reiterates one of Congress' primary goals in establishing the Agency -- "to develop uniform safety standards for consumer products and to minimize conflicting State and local regulations. *Id. at 423, 390*; *see also* 15 U.S.C. § 2051(b)(3) (1997). The Consumer Product Safety Act itself provides that;

> Whenever a consumer product safety standard under this Act is in effect and applies to a risk of injury associated with a consumer product, no State or political subdivision of a State shall have any authority either to establish or to continue in effect any provision of a safety standard or regulation which prescribes any requirements as to the performance, composition, contents design, finish, construction, packaging, or labeling of such product which are designed to deal with the same risk of injury associated with such consumer product, unless such requirements are identical to the requirements of the Federal standard.

15 U.S.C. § 2075(a) (1997).[11]

Respondents' claims are also contrary to established case law. In *Butcher v. Robertshaw Controls Co.*, 550 F. Supp. 692, 700 (D. Md. 1981) (citations omitted), the Court rejected similar "floodgates" and "federalism" arguments. The Court pointed out that:

> The Congress made express finding that "control by State and local governments of unreasonable risks of injury associated with consumer products is inadequate and may be burdensome to manufacturers . . ." and that "regulation of consumer products . . . is necessary to carry out [the protection of the public against said unreasonable risks of injury]." In view of these findings and the declarations of purpose that follow them, defendants' "floodgates" argument is entirely unconvincing.

Likewise, in *Kaiser*, 574 F.2d at 181, the Court rejected the manufacturer's argument that matters of specification, composition, and design of branch circuit wiring were intended by Congress to be left entirely to local building codes. The Court doubted that it "should even consider the argument in view of the explicit preemption in section 26(a) of the Act, 15 U.S.C. § 2075(a)," and ultimately held that "although local building codes continue to play a role in regulating the installation and use of consumer products, such as electric, gas, or plumbing appliances, design and performance standards for components are now a matter of national concern." *Id.* (citing Bureau of Nat'l Affairs, The Consumer Product Safety Act: Text, Analysis, Legislative History 81 (1973)). Thus, even if local and state governments were to regulate the safety and efficacy of sprinklers, and even if such authority were to somehow conflict with Commission action, the Commission's authority would control.

---

[11] Although the CPSC has issued no safety standard for sprinklers, it clearly has the jurisdiction to do so.

Based on the foregoing, it is clear that the Commission has jurisdiction under the Act over Omega sprinklers. Omegas are articles customarily produced or distributed for use or consumption by, or enjoyment of, consumers in or around households, residences, schools, recreational facilities or otherwise. Neither OSHA standards, nor any state or local regulations, negate the Commission's jurisdiction over Omega sprinklers.

VI. THE COMPLAINT AND LIST AND SUMMARY OF DOCUMENTARY EVIDENCE COMPLY WITH ALL APPLICABLE REQUIREMENTS

Respondents further request dismissal of the staff's Complaint by claiming that it fails to inform them with reasonable definiteness of the factual basis of the defect and hazard posed by their sprinklers. Respondents also allege that the List and Summary of Documentary Evidence that supports the staff's allegations is insufficient. As explained below, both the Complaint and the List and Summary of Documentary Evidence meet all applicable requirements.

A. The Complaint Contains a Clear and Concise Statement of the Charges, Sufficient to Inform Respondents with Reasonable Definiteness of the Factual Bases of the Allegations of Hazard

Under the Commission's Rules of Practice for Adjudicative Proceedings, an administrative complaint issued under Section 15 of the CPSA must contain "a clear and concise statement of the charges, sufficient to inform each respondent with reasonable definiteness of the factual basis or bases of the allegations of violation or hazard." 16 C.F.R. § 1025.11(b)(3) (1997). Respondents claim that the Administrative Complaint in this matter does not comply with this rule because it fails to contain "factual specificity." Respondents' Memorandum at 22. Based on this allegation, Respondents seek dismissal of the Complaint or, in the alternative, amendment of the Complaint to somehow inform

Central with more 'reasonable definiteness" of the factual basis for the staff's Complaint. *See id.*

An administrative complaint must provide the adverse party with sufficient notice of the charges. Koch, *Administrative Law and Practice*, § 5.33 (2d ed. 1997). The complaint is not required to set forth evidentiary facts, but must simply advise parties of the legal and factual issues involved. *Id.* (*citing* Att'y Gen. Manual on Admin. Proc. Act, U.S. Dep't of Justice, 47 (1947)).

Because the Commission's Rules of Practice are patterned on the Federal Rules of Civil Procedure, a review of Federal Rule of Civil Procedure 8 on the requirements of pleading is instructive. *See* Supplementary Info., Consumer Prod. Safety Comm'n Rules of Practice for Adjudicative Proceedings, 45 Fed. Reg. 29,206, 29,207 (May 1, 1980); *Consolidated Gas Supply Corp. v. Fed. Energy Reg. Comm'n*, 611 F.2d 951, 959, n.7 (4th Cir. 1979) (administrative pleadings are no stricter than the requirements for court pleadings). Federal Rule of Civil Procedure 8 requires only that a complaint provide "a short and plain statement of the claim" sufficient to give the defendant fair notice of what the plaintiff's claim is, and the grounds upon which it rests. Fed. R. Civ. P. 8. As the United States Supreme Court explained in *Conley v. Gibson*, 355 U.S. 41, 47-48 (1951):

> The Federal Rules of Civil Procedure do not require a claimant to set out in detail the facts upon which he bases his claim. To the contrary, all the Rules requires is a "short and plain statement of the claim" that will give the defendant fair notice of what the plaintiff's claim is and the grounds upon which it rests. . . . Such simplified "notice pleading" is made possible by the liberal opportunity for discovery and other pretrial procedures established by the Rules to disclose more precisely the basis of both claim and defense and to define more narrowly the disputed facts and issues.

See also Mitchell v. E-Z Way Towers, Inc. 269 F.2d 126,129-130 (5th Cir. 1959) (possible vagueness of complaint no grounds for granting dismissal).

In the instant case, Complaint Counsel has more than met its pleading burden under 16 C.F.R. § 1025.11(b)(3). The Complaint provides Respondents with "a clear and concise statement of the charges" by stating that "Omegas are defective pursuant to 15 U.S.C. § 2064(a)(2) and 16 C.F.R. § 1115.4", Compl. ¶ 10, that "Omegas do not and will not function in a significant percentage of instances," *id.*, by referencing data compilations depicting 40% failure rates in testing of Respondents' Omega brand fire sprinklers (List and Sum. of Doc. Ev. ¶ 1), and by referencing documents evidencing failure of Respondents' Omega fire sprinklers in actual fire situations (List and Sum. of Doc. Ev. ¶ 2). These enumerated allegations of malfunction are more than a sufficient factual predicate for the charges of defect and substantial product hazard stated in the Complaint. To the extent Respondents seek to argue that the Complaint is deficient because a specific failure mechansim is not enumerated, such pleading is not required either by the Act or under analogous tort principles. *See* 16 C.F.R. § 1115.4(e) (exhaust fan, which is intended to activate to remove carbon monoxide fans but consistently does not, is defective although cause of malfunction not positively identified); *see also* Restatement (Third) of Torts: Products Liability § 3 (1998) (discussing well-settled "malfunction" theory of defect). The Complaint need not be rewritten, and should not be dismissed, for an alleged lack of definiteness.

B. The List and Summary of Documentary Evidence Complies with the Commission's Rules of Practice for Adjudicatory Proceedings

Respondents also ask the Court to dismiss the Complaint because it "identifies" none of the documents that support the Complaint. Respondents' Memorandum, at 22.

The Commission's Rules of Practice for Adjudicative Proceedings at 16 C.F.R. § 1025.11(b)(3) requires that a "list and summary of documentary evidence supporting the charges" be attached to the Complaint. The rule does not call for the "comprehensive" summary Respondents desire, nor does it require Complaint Counsel to specifically "identify" documents, as Respondents demand. *See* Respondents' Memorandum at 25. It simply requires "a list and summary of documentary evidence." This is precisely what Complaint Counsel has provided. *See* List and Summary of Documentary Evidence.

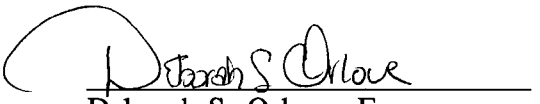
Respondents' attempt to add to the regulations is unfounded, and their tactics can only be seen as an effort to delay this case. Respondents admit that they are aware of fires in which Omegas have reportedly failed to activate. Respondents have also tested thousands of Omega sprinklers, and found a significant number of failures. Respondents can, and already have, requested in discovery all of the documentary evidence supporting the staff's claims. Respondents' claims are unpersuasive, and do not remotely support a dismissal.

VII. CONCLUSION

Based on the foregoing, the Commission has jurisdiction under the Act over Omega fire sprinklers, and the Complaint and List and Summary of Documentary Evidence meet all applicable requirements. Complaint Counsel respectfully requests that Respondents' Motion to Dimiss be denied.

Dated: April 6, 1998

Respectfully submitted,



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UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents	)	

ORDER

AND NOW, this _____ day of _____, 1998, it is hereby ORDERED that the Motion to Dismiss of Respondents Central Sprinkler Corporation and Central Sprinkler Company is DENIED.

_____
The Hon. William P. Moran
Administrative Law Judge

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, Complaint Counsel's **Opposition to Respondents' Motion to Dismiss** was deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

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Dated: 4/6/98

central.cer

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents	)	

AFFIDAVIT OF FRANCIS J. TEEVAN

I, FRANCIS J. TEEVAN, hereby declare, under penalty of perjury, that the following is true and correct:

1. I am employed by the County of Fairfax, Virginia. My title is Captain II (Assistant Fire Marshal), Fire Prevention Division, Fire and Rescue Department. I have held this position for six and one-half years. My business address is: 4100 Chain Bridge Road, Fairfax, Virginia 22030.

2. In my capacity as Captain II (Assistant Fire Marshal), Fire Prevention Division, Fire and Rescue Department, Fairfax County, Virginia, I have personally seen installed Central Omega Flow Control sprinklers in several Fairfax County Public Schools and a Fairfax County Public Library. Based on inspection reports produced by Fire Inspectors under my command, I am also aware of Central Omega Flow Control sprinklers installed in homeless shelters in Fairfax County.

3. In my capacity as Captain II (Assistant Fire Marshal), Fire Prevention Division, Fire and Rescue Department, Fairfax County, Virginia, I have also personally seen installed Central Omega Model "M" sprinklers in a nursing home and in the INOVA/Fairfax Hospital. The Model "M" sprinklers were not used with exposed piping in either of these locations.

4. In my capacity as Captain II (Assistant Fire Marshal), Fire Prevention Division, Fire and Rescue Department, Fairfax County, Virginia, I have also personally seen installed Central Omega sprinklers in numerous residential occupancies and in facilities open to and used by the public.

5. Properly operating fire sprinklers are an integral part of a building's fire protection package. In a fire situation, the failure of a sprinkler to operate properly will allow the spread of fire. The occurrence of a fire is one of the most devastating phenomena known to mankind. Each year lives and property are lost due to fire. In Fairfax County, Virginia in 1997 there were 7 lives lost, 32 burn cases and $14,042,972 worth of property damage due to fire.

Date: April 3, 1998

Signed: _____
Captain II Francis J. Teevan
Assistant Fire Marshal

COMMONWEALTH OF VIRGINIA

COUNTY OF Fairfax

Sworn to before me this 3rd
day of April, 1998.

_____
Notary Public

Table 11

NATIONAL COMMISSION ON PRODUCT SAFETY REVISED PRODUCT LIST[1]

I. GENERAL HOUSEHOLD APPLIANCES INCLUDING BUT NOT LIMITED TO

Clothes washers without wringers or other dryers
Washing machines with wringers
Washing machines with spin dryers without thermal dryers
Washing machines with electric dryers
Washing machines with gas dryers
Electric dryers without washing machines attached
Ironers
Electric blankets and electric sheets
Electric heating pads
Electric fans
Sewing machines
Floor buffers and waxers
Electric rug cleaners
Vacuum cleaners
Electric sweepers
Automatic door openers and closers
Gas water heaters
Electric water heaters
Oil water heaters
Incinerators without gas or electric heat supply
Electric incinerators
Gas incinerators
Water fountains, with or without cooling or heating units
Water softeners and conditioners
Washing machines not otherwise specified
Clothes dryers, not otherwise specified
Water heaters, not otherwise specified
Incinerators, not otherwise specified

II. KITCHEN APPLIANCES INCLUDING BUT NOT LIMITED TO

Electric ranges with ovens, except self-cleaning ovens
Electric ranges without ovens
Gas ranges with ovens, except self-cleaning ovens
Gas ranges without ovens
Electric ovens separate from ranges
Gas ovens separate from ranges
Electric refrigerators
Gas refrigerators
Electric freezers
Gas freezers
Automatic corn poppers
Can openers, powered
Dishwashers
Electric blenders
Electric broilers
Electric coffeemakers and teapots
Cutlery, powered
Electric deep fryers
Electric defroster devices
Electric food warmers and hot trays
Electric fry pans and skillets
Electric griddles
Electric hot plates and grills
Electric ice-cream makers
Electric ice crushers
Electric ice makers, separate from refrigerators
Electric juicers
Electric kettles
Electric meat grinders
Electric mixers
Electric scissors
Electric slicers
Toasters
Electric waffle irons
Faucet water heaters
Garbage disposers
Irons with dry heat
Steam irons
Knife sharpeners
Rotisseries
Electric immersion heaters
Ranges, not otherwise specified
Ovens, not otherwise specified
Refrigerators, not otherwise specified
Freezers, not otherwise specified
Irons, not otherwise specified
Electric ovens, self-cleaning
Gas ovens, self-cleaning
Range and oven accessories (including racks, broiler pans, etc.)

III. SPACE HEATING, COOLING, AND VENTILATING APPLIANCES INCLUDING BUT NOT LIMITED TO

Electric air conditioners
Gas air conditioners
Fans, water cooled
Humidifiers
Vaporizers
Dehumidifiers
Ionizers
Broilers
Coal furnaces, including floor furnaces
Gas furnaces, including floor furnaces
Oil furnaces, including floor furnaces
Panel and cable electric radiant heat units
Electric space heaters
Gas space heaters and gas heating stoves, attached.
Note: For portable heaters see category XII, sports and recreation equipment
Kerosene space heaters and kerosene heating stoves, attached.
Fireplaces and wood or coal stoves, factory built
Chimneys, factory built
Electric furnaces, including floor furnaces
Other heating systems, including heat pumps
Radiators and hot water or steam pipes
Air conditioners, not otherwise specified
Furnaces, not otherwise specified
Space heaters, not otherwise specified
Heating stoves, not otherwise specified
Water heaters, not otherwise specified
Floor furnaces, not otherwise specified

IV. HOUSEWARES INCLUDING BUT NOT LIMITED TO

Can openers, unpowered
Chafing dish with open flame heaters
Table stoves - open flame
Non-electric coffee grinders
Coffee makers and teapots, unpowered
Cooking utensils and ovenware including glass
Cutlery, unpowered
Ironing boards and covers
Manual ice crusher
Manual juicers
Manual heat grinders
Pressure cookers and canners
Waste containers
Cutting and chopping devices including scissors
Candles and candleholders, including butane candles
Corkscrews and other opening devices
Flatware, except cutlery
Tableware, including insulated design

V. HOME COMMUNICATIONS AND ENTERTAINMENT APPLIANCES AND EQUIPMENT INCLUDING BUT NOT LIMITED TO

Television sets
Radios, and record players, including Hi-Fi and Stereo equipment
Sound and video recording and reproducing equipment (tape recorders and players)
Musical instruments including electric musical instruments
Motion picture and still cameras
Other photographic equipment and accessories
Movie projectors
Slide projectors
Intercommunication devices
Telephone and telephone accessories
Typewriters, electric and manual
TV and radio antennas
Art supplies and equipment
Clay, pottery and ceramic supplies and equipment
Printing presses

VI. HOME FURNISHING AND FIXTURES INCLUDING BUT NOT LIMITED TO

Beds, springs, mattresses, covers and pads
Chairs
Tables
Other furniture including multiple use and lawn furniture
Electrical outlets, built-in wiring devices, and distribution systems for use in or around the household
Electric power plants
Gas pipes, fittings and distribution systems
Plumbing fixtures and pipes, including sinks and toilets
Structural glass and glass doors, including bathtub and shower enclosures
Bathtub and shower enclosures of materials other than glass
Bathtub and shower structures other than doors and panels, including the tub, walls, handgrips, etc.
Runners and throw rugs
Carpeting including outdoor carpeting but excluding runners
Sheets and pillow cases
Pillows
Blankets, except electric and baby blankets
Drapes, curtains including plastic curtains and shower curtains
Step ladders
Straight ladders
Stepstools
Appliance cords, extension cords and replacement wire
Gas meters

1/In the case of certain product categories (primarily IX and XVI), some products may be subject to limited Federal regulations under existing laws. In each case, such products are listed here because all potential hazards are not subject to regulation or because some remedial means (such as labeling) are covered, while others (such as performance standards) are not.

Table 11 (continued)

Meters for LP gas
Electric meters
Gas lamps
Electric table lamps and floor lamps
Light bulbs
Electric light fixtures, attached
Electric clocks
Medicine cabinets
Gun cabinets, ammunition cabinets and racks
Other cabinets, shelves and storage areas
Sump pumps
Furniture, not otherwise specified
Fabrics not otherwise specified
Ladders or stepstools, not otherwise specified
Meters, not otherwise specified
Window shades and venetian blinds
Flashlights and electric lanterns
Mirrors and mirror glass
Glass - unknown origin

VII. HOME ALARM, ESCAPE, AND PROTECTION DEVICES INCLUDING BUT NOT LIMITED TO

Fire extinguishers
Fire and smoke alarms
Fire excape devices, including chain ladders
Burglar alarms
Ground fault circuit interrupters
Lighting arrestors, rods and grounding devices
Locks and padlocks

VIII. HOME WORKSHOR APPARATUS, TOOLS, AND ATTACHMENTS INCLUDING BUT NOT LIMITED TO

Power saws
Power drills
Power sanders
Power routers
Power lathes
Power grinders
Power jointers
Power shapers
Other portable and stationary power tools
Workshop manual tools and accessories
Torches
Welding equipment
Soldering guns and irons
Hoists, lifts, jacks and chains
Test equipment
Battery chargers
Batteries
Extension work lights and continuous use flood lights
Separate electric motors
Internal combustion engines, for use in or around the household
Automotive tools and accessories
Paint sprayers
Air compressors, separate

IX. HOME AND FAMILY MAINTENANCE PRODUCTS, INCLUDING BUT NOT LIMITED TO

Cleaning agents and compounds
Bleaches and dyes
Solvent based cleaning and sanitizing compounds
Waxes
Polishes
Fumigants
Paints, paint removers, brushes and rollers
Thinners
Adhesives and adhesive products including glues and tapes
Gasoline
Kerosene
Anti freeze
Lubricants
Alcohol
Caustics
Charcoal
Caulking compounds
Other chemicals, including photographic chemicals
Wallpaper cleaners and removers, including steamers
Other cleaning equipment

X. FARM EQUIPMENT INCLUDING BUT NOT LIMITED TO

Electric fences
Home pasteurizers
Cream Separaters

XI. PACKAGING AND CONTAINERS FOR HOUSEHOLD PRODUCTS INCLUDING BUT NOT LIMITED TO

Pressurized containers
Vacuum containers
Self-contained openers
Resealable closures
Child resistant closures
Glass bottles and containers
Containers made of materials other than glass, except vacuum or pressure containers
Plastic wrapping products, including plastic trash and garden bags
Paper and cardboard products, and other paper objects, including magazines, newspapers, books, etc.

XII. SPORTS AND RECREATIONAL EQUIPMENT INCLUDING BUT NOT LIMITED TO

Playground equipment, swings, slides and associated hardware.
Bicycles and bicycle equipment
Boats, motors and accessories for recreational use
Baseball equipment
Basketball and volleyball equipment.
Bowling equipment
Boxing and wrestling equipment
Croquet equipment
Exercise equipment
Fishing equipment
Football equipment
Golf equipment except golf carts
Golf carts
Hockey equipment, including ice skates
Lacrosse equipment
Skiing equipment, including skiis, poles, boots and bindings
Sleds and toboggans
Snowmobiles
Tennis equipment, including badminton and table tennis
Swimming and underwater sports equipment, including scuba accessories and spear guns
Headgear for cycling
Beach equipment
Stationary and portable grills, kerosene, charcoal and gas
Portable gasoline and kerosene stoves
Portable gasoline, alcohol, and gas heating equipment
Note: For attached heating devices see category III.
Gasoline, kerosene and propane lanterns and lamps
Battery powered cooking devices
Picnic equipment including coolers
Camping equipment including tents, cots, and sleeping bags
Camping trailers, other than mobile homes
Swimming and wading pools and associated equipment
Charcoal igniters, electrical or chemical
Rebound tumbling devices
Play houses and tree houses
Archery equipment and darts
Unlicensed motor scooters and go-karts
Gas, air and spring operated guns
Other special sports and camping clothing
Horseback riding equipment
Aquariums, including pumps, heaters and accessories

XIII. TOYS INCLUDING BUT NOT LIMITED TO

Wheeled toys - carrying the child, powered and unpowered including wagons, tricycles, stand-up scooters, pedal cars, sit-in airplanes, sit-in trucks
Non-mechanical dolls and toy animals
Mechanical dolls and toy animals including keywind and battery operated
Other windup and battery operated toys
Wheeled toys not carrying the child, powered and unpowered including toy cars, electric trains, and non-flying airplanes
Gasoline powered toys, including model airplanes
Electric games
Skates and skateboards
Kites and kite string
Pogo sticks and stilts
Toy guns and other toy weapons without projectiles
Toy guns and other toy weapons with projectiles
Fireworks, explosives and caps
Rocketry sets
Chemistry sets
Other science kits and toys
Flying devices, not gasoline or rocket powered
Other models and their construction materials. For glues see category IX.
Metal and plastic molding sets
Games, other than electric
Toy home equipment, including ovens, stoves, sinks, irons, sewing machines, washing machines, etc.
Children play tents, play tunnels and other enclosures
Toy balls and balloons
Inflated toys other than balloons
Blocks, pull toys, and similar items

XIV. YARD AND GARDEN EQUIPMENT INCLUDING BUT NOT LIMITED TO

Power mowers of all types
Hand mowers
Hand garden tools
Power trimmers and edgers
Garden tractors
Snow throwers and snow plows
Garden sprayers
Power tillers and cultivators
Other power garden tools
Outdoor lighting equipment
Chain saws

388-101 O - 70 - 8

Table 11 (continued)

Pumps including electric submersible fountain pumps
Greenhouse equipment
Garden hose, nozzles, and sprinklers
Winter manual yardtools
Insect traps and insecticide vaporizers, electrically operated
Yard decorative equipment including fish ponds, bird baths, planters, bird houses, etc.

XV. CHILD NURSERY EQUIPMENT AND SUPPLIES INCLUDING BUT NOT LIMITED TO

Highchairs
Changing tables
Infant seats
Cribs, including springs and mattresses
Carriages
Gates
Baby blankets, sheets, pads, pillows, etc. and other baby bedding equipment
Walkers
Bottles, nipples and related items
Bottle warmers
Sterilizers
Diapers and diaper pins, including disposable diapers
Playpens
Baby baths
Baby scales
Other nursery furniture and equipment, including baby rattles

XVI. PERSONAL USE ITEMS INCLUDING BUT NOT LIMITED TO

Razors and shavers
Hair dryers
Hair curlers
Cigarette, cigar and pipe lighters, and lighter fluid
Wigs
Eyeglasses, not including contact lenses
Eye protection devices, including light shields, sunglasses
Powered tooth brushes and picks
Sun lamps
Massage devices
Manicure devices
Saunas including facial saunas
Electric shoe polishers
Clothing
Footwear except for sports footwear
Other beauty aids, and jewelry
Ear protection devices, including noise plugs
Respiratory protection devices
Personal protection devices, including tear gas pens and tear gas guns
Hearing aids
Umbrellas
Wrist watches, wrist compasses, pendant watches, pocket watches, etc.
Luggage
Contact lenses

XVII. HOME STRUCTURES, CONSTRUCTION MATERIALS, INCLUDING BUT NOT LIMITED TO

Stairs, ramps and handrails, indoors and outdoord
Fireplaces, individually built
Insulation materials
Siding materials, including aluminum siding
Doors, trap doors, hatches and other ingress-egress devices
Note: Glass doors and automatic door openers are listed elsewhere.
Roofs and roofing materials
Floors and flooring materials, including patios
Awnings and shutters
Patio and porch covers
Outside structures, including retaining walls, fences and separate enclosures
Elevators and other lifts
Windows and window glass
Scaffolding
Landings, porches, balconies, open side floors and floor openings
Cisterns, cesspools, and septic tanks
Nails, carpettacks and construction materials
Hardware including doorknobs, hinges, cabinet pulls, door springs, etc.

XVIII. OTHER PRODUCTS INCLUDING BUT NOT LIMITED TO

Christmas and other seasonal decorations, including trees
Switchblade and gravity knives
Mobile homes and related equipment including campers
Matches
Ash trays
Crutches and canes
Wheelchairs
Special beds
Other special equipment for the injured or aged
Home first-aid and health equipment including hot water bottles, thermometers, etc.

TRIPLICATE

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of CENTRAL SPRINKLER CORP. 451 North Cannon Avenue Lansdale, PA 19446 and CENTRAL SPRINKLER CO. 451 North Cannon Avenue Lansdale, PA 19446 Respondents.	CPSC Docket No. 98-2 Subpoena of a Non-Party: ERE Yarmouth

TO: James Quille, President
ERE Yarmouth
3424 Peachtree Street
Suite 800
Atlanta, GA 30326

SUBPOENA

The staff of the Consumer Product Safety Commission ("staff") is conducting administrative litigation seeking an order determining that "Omega" series fire sprinklers manufactured by Central Sprinkler Corporation contain a defect which creates a substantial product hazard. 15 U.S.C. § 2064. The staff believes that ERE Yarmouth and its officers, employees, and agents possess or control information that may assist in the determination. Therefore, the Commission authorizes issuance of this Subpoena to carry out its specific regulatory functions under Sections 5 and 27(b)(1), (3) & (4) of the Consumer Product Safety Act, 15 U.S.C. §§ 2054 and 2076(b)(1), (3) & (4), and 16

C.F.R. Part 1025. The Subpoena requires that you testify at a deposition and produce documents.

I. GENERAL INSTRUCTIONS

The Commission's rules for adjudications govern this Subpoena. 16 C.F.R. Parts 1025. Section 1025.38 sets forth procedures for motions to quash or modify the terms of this Subpoena.

This Subpoena shall be answered by the organization and individual named above, or such other responsible individual who has the same or greater knowledge of and control over the information being sought. He or she must respond to this Subpoena within 5 calendar days after receipt.

The public disclosure of any information provided to the Commission under Subpoena shall be governed by the Freedom of Information Act, 5 U.S.C. § 552 and the Commission's regulations under that Act, 16 C.F.R. Part 1015. If you wish to request confidential treatment for any information provided, you should submit a request for such treatment.

Questions about this Subpoena should be directed to Eric H. Singer, Trial Attorney, Consumer Product Safety Commission, Legal Division, Office of Compliance, 4330 East-West Highway, Bethesda 20814, (301) 504-0626, Ext. 1376.

II. DEFINITIONS

For purposes of this Subpoena, the following definitions apply:

a. The term "ERE" refers to ERE Yarmouth, presently residing at 3424 Peachtree St., Suite 800, Atlanta, GA 30326, and Equitable Real Estate, previously residing at the same address, and any agent, subsidiary, affiliate, or division of either, doing business, or previously doing business, under the ERE name or any other name, or any entity in which ERE holds or shares an equity interest.

b. The term "Central" refers to Central Sprinkler Corporation, presently residing at 451 N. Cannon Avenue, Lansdale, Pennsylvania 19446, and any agent, subsidiary, affiliate, or division doing business under the Central name or any other name.

c. The term "Omega" or "Omega sprinkler" includes, but is not limited to, the following sub-types or models of automatic fire sprinkler, all manufactured by Central: AC; C-1, C-1A, C-1A Pro, C-1A PRO ID; R-1, R-1A, R-1M, EC-20, EC-20A; EC-20 AID; Model M Upright, Model M Pendent, Model M Sidewall, HEC-12, HEC-12 ID; HEC-12 PRO; HEC-12A, HEC-12 RES; HEC-20; HEC-20 ID; Flow Control Pendent Flush, and Flow Control Pendent.

d. "Corrective action" means any action taken with respect to remedying Omega sprinklers, including, but not limited to, replacement, repair, modification, retrofit, agreements to

conduct further testing on Omegas, refunds, discounted purchases of equipment, goods, or services, and settlement of legal claims.

e. The term "record" or "records" means the original and any non-identical copy of any written, graphic, photographic, audio, or visual materials, however produced or reproduced, of any kind or description, whether sent or received or neither, including, but not limited to: papers, books, letters, telefacsimiles, photographs, motion pictures, video tapes, audio recordings, correspondence, drawings, sketches, schematics, manuals, blueprints, work papers, intra- and interoffice communications, transcripts, minutes, reports, and recordings of telephone or other conversations, or of interviews, conferences, or meetings, affidavits, statements, summaries, opinions, court pleadings, reports, indices, studies, analyses, evaluations, contracts, licenses, agreements, questionnaires, answers to questionnaires, statistical records, desk calendar, appointment books, diaries, telephone logs, lists, tabulations, charts, graphs, data sheets, computer tapes, disks, cards, printouts or programs, microfilms, all other records kept by electronic, photographic, or mechanical means, and things similar to any of the foregoing, regardless of their author or origin, however denominated.

f. "Relating to" shall mean consisting of, referring to, describing, discussing, constituting, evidencing, containing, mentioning, concerning, pertaining to, citing, summarizing,

analyzing, or bearing any logical or factual connection with the matter discussed.

III. SUBPOENA AD TESTIFICANDUM AND DUCES TECUM

You are ordered to appear at the Commission's headquarters at 4330 East West Highway, Bethesda, MD 20814 to testify with respect to matters referred to above on the 23rd day of April, 1998 at 9:00 a.m. and continuing thereafter until your testimony is concluded. You are also directed to produce copies of all records relating to servicing, testing, evaluating or analyzing Omegas and copies of all records relating to corrective action on Omegas.

BY ORDER OF THE COMMISSION

Sadye E. Dunn

SADYE E. DUNN
Secretary
Consumer Products Safety Commission

DATE: April 17, 1998

Sadye E. Dunn

SADYE E. DUNN

DATE: April 17, 1998

ORIGINAL

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of CENTRAL SPRINKLER CORP. 451 North Cannon Avenue Lansdale, PA 19446 and CENTRAL SPRINKLER CO. 451 North Cannon Avenue Lansdale, PA 19446 Respondents.	CPSC Docket No. 98-2 Subpoena of a Non-Party: ERE Yarmouth

TO: James Quille, President
ERE Yarmouth
3424 Peachtree Street
Suite 800
Atlanta, GA 30326

SUBPOENA

The staff of the Consumer Product Safety Commission ("staff") is conducting administrative litigation seeking an order determining that "Omega" series fire sprinklers manufactured by Central Sprinkler Corporation contain a defect which creates a substantial product hazard. 15 U.S.C. § 2064. The staff believes that ERE Yarmouth and its officers, employees, and agents possess or control information that may assist in the determination. Therefore, the Commission authorizes issuance of this Subpoena to carry out its specific regulatory functions under Sections 5 and 27(b)(1), (3) & (4) of the Consumer Product Safety Act, 15 U.S.C. §§ 2054 and 2076(b)(1), (3) & (4), and 16

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b. The term "Central" refers to Central Sprinkler Corporation, presently residing at 451 N. Cannon Avenue, Lansdale, Pennsylvania 19446, and any agent, subsidiary, affiliate, or division doing business under the Central name or any other name.

c. The term "Omega" or "Omega sprinkler" includes, but is not limited to, the following sub-types or models of automatic fire sprinkler, all manufactured by Central: AC; C-1, C-1A, C-1A Pro, C-1A PRO ID; R-1, R-1A, R-1M, EC-20, EC-20A; EC-20 AID; Model M Upright, Model M Pendent, Model M Sidewall, HEC-12, HEC-12 ID; HEC-12 PRO; HEC-12A, HEC-12 RES; HEC-20; HEC-20 ID; Flow Control Pendent Flush, and Flow Control Pendent.

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conduct further testing on Omegas, refunds, discounted purchases of equipment, goods, or services, and settlement of legal claims.

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f. "Relating to" shall mean consisting of, referring to, describing, discussing, constituting, evidencing, containing, mentioning, concerning, pertaining to, citing, summarizing,

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BY ORDER OF THE COMMISSION

Sadye E. Dunn

SADYE E. DUNN
Secretary
Consumer Products Safety Commission

DATE: April 17, 1998

Sadye E. Dunn

SADYE E. DUNN

DATE: April 17, 1998

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☒ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

James Quille, President
ERE Yarmouth
3424 Peachtree Street
Suite 800
Atlanta, GA 30326

4a. Article Number

Z-069-249-318

4b. Service Type

☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

9-2-98

5. Received By: *(Print Name)*

6. Signature: *(Addressee or Agent)*

X

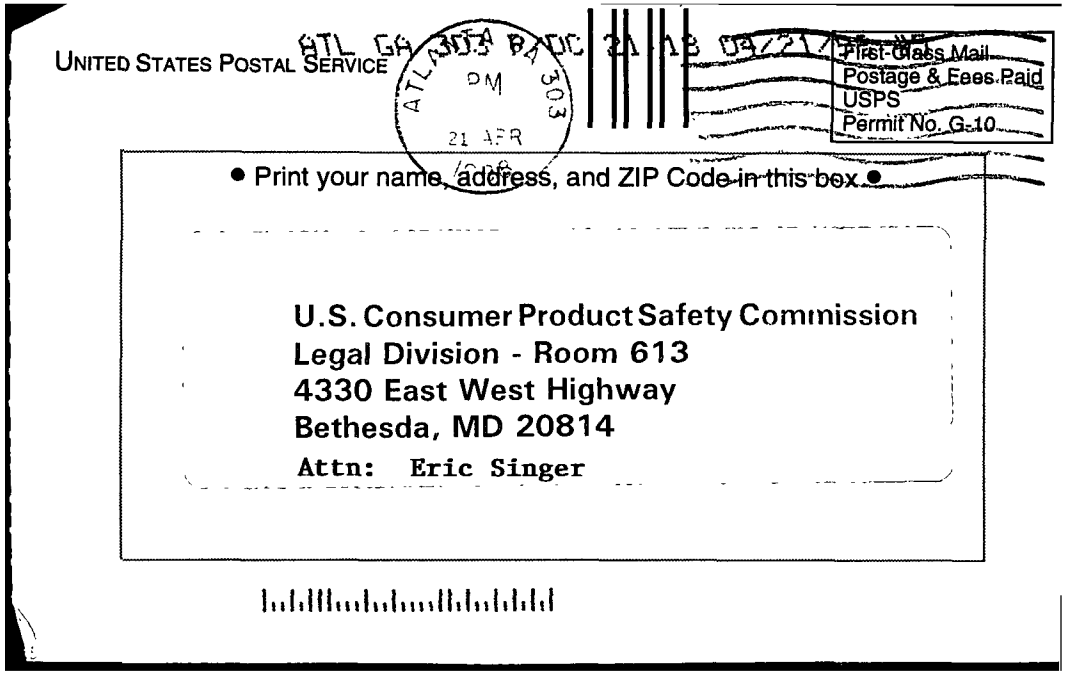
8. Addressee's Address *(Only if requested and fee is paid)*

RE: Central Sprinkler

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

PS Form **3811**, December 1994 102595-97-B-0179 Domestic Return Receipt


UNITED STATES POSTAL SERVICE
ATL GA 303 PM 21 APR
First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10
• Print your name, address, and ZIP Code in this box •
U.S. Consumer Product Safety Commission
Legal Division - Room 613
4330 East West Highway
Bethesda, MD 20814
Attn: Eric Singer

ORIGINAL

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of CENTRAL SPRINKLER CORP. 451 North Cannon Avenue Lansdale, PA 19446 and CENTRAL SPRINKLER CO. 451 North Cannon Avenue Lansdale, PA 19446 Respondents.	CPSC Docket No. 98-2 Subpoena of a Non-Party: Massachusetts State Fire Marshal

TO: Steven Rourke
Department of Fire Services
Office of the Massachusetts State Fire Marshal
P.O. Box 1075 - State Road
Stow, MA 01775

SUBPOENA

The staff of the Consumer Product Safety Commission ("staff") is conducting administrative litigation seeking an order determining that "Omega" series fire sprinklers manufactured by Central Sprinkler Corporation contain a defect which creates a substantial product hazard. 15 U.S.C. § 2064. The staff believes that the Department of Fire Services and its officers, employees, and agents possess or control information that may assist in the determination. Therefore, the Commission authorizes issuance of this Subpoena to carry out its specific regulatory functions under Sections 5 and 27(b)(1), (3) & (4) of the Consumer Product Safety Act, 15 U.S.C. §§ 2054 and

2076(b)(1), (3) & (4), and 16 C.F.R. Part 1025. The Subpoena requires that you produce documents and tangible things.

I. GENERAL INSTRUCTIONS

The Commission's rules for adjudications govern this Subpoena. 16 C.F.R. Parts 1025. Section 1025.38 sets forth procedures for motions to quash or modify the terms of this Subpoena.

This Subpoena shall be answered by the organization and individual named above, or such other responsible individual who has the same or greater knowledge of and control over the information being sought. He or she must respond to this Subpoena within 5 calendar days after receipt.

The public disclosure of any information provided to the Commission under Subpoena shall be governed by the Freedom of Information Act, 5 U.S.C. § 552 and the Commission's regulations under that Act, 16 C.F.R. Part 1015. If you wish to request confidential treatment for any information provided, you should submit a request for such treatment.

Questions about this Subpoena should be directed to Eric H. Singer, Trial Attorney, Consumer Product Safety Commission, Legal Division, 4330 East-West Highway, Bethesda 20814, (301) 504-0626, Ext. 1376.

II. DEFINITIONS

For purposes of this Subpoena, the following definitions apply:

a. The term "Department of Fire Services" refers to the Department of Fire Services within, or that is the very same entity as, the Office of the Massachusetts State Fire Marshal, and to any agent, affiliate, bureau, or division operating under the name or authority of the Department of Fire Services or Office of the Massachusetts State Fire Marshal.

b. The term "Central" refers to Central Sprinkler Corporation, presently residing at 451 N. Cannon Avenue, Lansdale, Pennsylvania 19446, and any agent, subsidiary, affiliate, or division doing business under the Central name or any other name.

c. The term "Omega" or "Omega sprinkler" includes, but is not limited to, the following sub-types or models of automatic fire sprinkler, all manufactured by Central: AC; C-1, C-1A, C-1A Pro, C-1A PRO ID; R-1, R-1A, R-1M, EC-20, EC-20A; EC-20 AID; Model M Upright, Model M Pendent, Model M Sidewall, HEC-12, HEC-12 ID; HEC-12 PRO; HEC-12A, HEC-12 RES; HEC-20; HEC-20 ID; Flow Control Pendent Flush, and Flow Control Pendent.

d. The term "affected Omega" refers to the Omega sprinkler or sprinklers that allegedly failed to activate properly in the fires and over which the Department of Fire Services has retained custody.

e. The term "the fire" or "the fires" refers to the fire that occurred on or about February 7, 1998 at a rooming house in Milford, Massachusetts and to the fire that occurred on or about March 1, 1998 in a dormitory at Montserrat College of Art in Beverly, Massachusetts.

f. The term "Vikings" refers to the Viking brand fire sprinklers located inside the dormitory at Montserrat College of Art that did activate in the fire.

g. The term "record" or "records" means the original and any non-identical copy of any written, graphic, photographic, audio, or visual materials, however produced or reproduced, of any kind or description, whether sent or received or neither, including, but not limited to: papers, books, letters, telefacsimiles, photographs, motion pictures, video tapes, audio recordings, correspondence, drawings, sketches, schematics, manuals, blueprints, work papers, intra- and interoffice communications, transcripts, minutes, reports, and recordings of telephone or other conversations, or of interviews, conferences, or meetings, affidavits, statements, summaries, opinions, court pleadings, reports, indices, studies, analyses, evaluations, contracts, licenses, agreements, questionnaires, answers to questionnaires, statistical records, desk calendar, appointment books, diaries, telephone logs, lists, tabulations, charts, graphs, data sheets, computer tapes, disks, cards, printouts or programs, microfilms, all other records kept by electronic, photographic, or mechanical means, and things similar to any of the foregoing, regardless of their author or origin, however denominated.

h. "Relating to" shall mean consisting of, referring to, describing, discussing, constituting, evidencing, containing, mentioning, concerning, pertaining to, citing, summarizing, analyzing, or bearing any logical or factual connection with the matter discussed.

III. SUBPOENA DUCES TECUM

You are directed to produce the affected Omegas and Vikings and provide copies of all records (including any photographs, videotape, audiotape, and drawings) relating to the following:

(a) the investigation of the fires;

(b) the removal of affected Omegas and the Vikings;

(c) the installation, maintenance, or servicing of any fire sprinklers in the buildings in which the fires occurred;

(d) the sprinkler system design and calculations at the buildings in which the fires occurred; and

(e) any evaluations, tests, or reports on fire sprinklers or sprinkler water at the buildings in which the fires occurred.

BY ORDER OF THE COMMISSION

Sadye E. Dunn

SADYE E. DUNN
Secretary
Consumer Products Safety Commission

DATE: April 17, 1998

Sadye E. Dunn

SADYE E. DUNN

DATE: April 17, 1998

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☒ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Mr. Steven Rourke
Dept. of Fire Services
P.O. Box 1075, State Road
Stow, MA 01775

4a. Article Number

Z-069-249-317

4b. Service Type

☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

4/21/98

5. Received By: *(Print Name)*

Thomas B. Walsh

6. Signature: *(Addressee or Agent)*

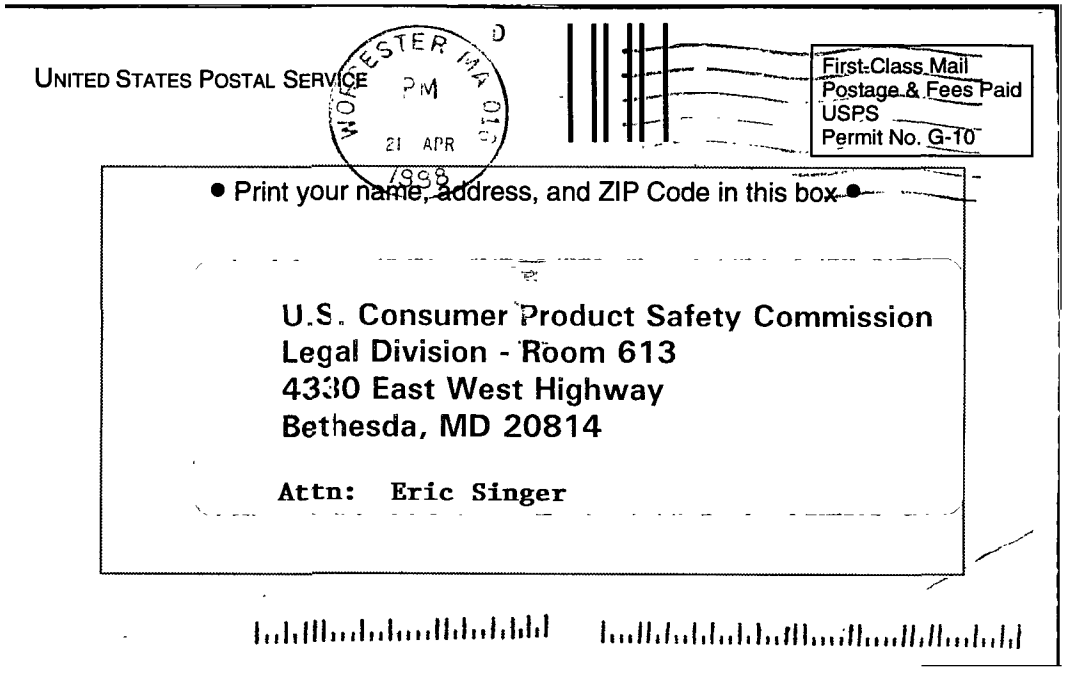
X Thomas B. Walsh

8. Addressee's Address *(Only if requested and fee is paid)*

Subpoena for Central Sprinkler Case

Thank you for using Return Receipt Service.

PS Form **3811**, December 1994 102595-97-B-0179 Domestic Return Receipt


UNITED STATES POSTAL SERVICE
WORCESTER MA 015
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1998
First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10
• Print your name, address, and ZIP Code in this box •
U.S. Consumer Product Safety Commission
Legal Division - Room 613
4330 East West Highway
Bethesda, MD 20814
Attn: Eric Singer

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

TRIPLICATE

In the Matter of	
CENTRAL SPRINKLER CORP. 451 North Cannon Avenue Lansdale, PA 19446	CPSC Docket No. 98-2
and	Subpoena of a Non-Party: Massachusetts State Fire Marshal
CENTRAL SPRINKLER CO. 451 North Cannon Avenue Lansdale, PA 19446	
Respondents.	

TO: Steven Rourke
Department of Fire Services
Office of the Massachusetts State Fire Marshal
P.O. Box 1075 - State Road
Stow, MA 01775

SUBPOENA

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(d) the sprinkler system design and calculations at the buildings in which the fires occurred; and

(e) any evaluations, tests, or reports on fire sprinklers or sprinkler water at the buildings in which the fires occurred.

BY ORDER OF THE COMMISSION

Sadye E. Dunn

SADYE E. DUNN
Secretary
Consumer Products Safety Commission

DATE: April 17, 1998

Sadye E. Dunn

SADYE E. DUNN

DATE: April 17, 1998

ORIGINAL

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
CENTRAL SPRINKLER CORP. 451 North Cannon Avenue Lansdale, PA 19446	)	CPSC Docket No. 98-2 Subpoena of a Non-Party: Hilton Hotels Corp.
and	)	
CENTRAL SPRINKLER CO. 451 North Cannon Avenue Lansdale, PA 19446	)	
Respondents.	)	

TO: Stephen F. Bollenbach
President & Chief Executive Officer
Hilton Hotels Corporation
9336 Civic Center Drive
Beverly Hills, CA 90210

SUBPOENA

The staff of the Consumer Product Safety Commission ("staff") is conducting administrative litigation seeking an order determining that "Omega" series fire sprinklers manufactured by Central Sprinkler Corporation contain a defect which creates a substantial product hazard. 15 U.S.C. § 2064. The staff believes that Hilton Hotels Corp. and its officers, employees, and agents possess or control information that may assist in the determination. Therefore, the Commission authorizes issuance of this Subpoena to carry out its specific regulatory functions under Sections 5 and 27(b)(1), (3) & (4) of

the Consumer Product Safety Act, 15 U.S.C. §§ 2054 and 2076(b)(1), (3) & (4), and 16 C.F.R. Part 1025. The Subpoena requires that you testify at a deposition and produce documents and tangible things.

I. GENERAL INSTRUCTIONS

The Commission's rules for adjudications govern this Subpoena. 16 C.F.R. Parts 1025. Section 1025.38 sets forth procedures for motions to quash or modify the terms of this Subpoena.

This Subpoena shall be answered by the organization and individual named above, or such other responsible individual who has the same or greater knowledge of and control over the information being sought. He or she must respond to this Subpoena within 5 calendar days.

The public disclosure of any information provided to the Commission under Subpoena shall be governed by the Freedom of Information Act, 5 U.S.C. § 552 and the Commission's regulations under that Act, 16 C.F.R. Part 1015. If you wish to request confidential treatment for any information provided, you should submit a request for such treatment in accordance with 16 C.F.R. §§ 1015.18 and 1118.3(e).

Questions about this Subpoena should be directed to Eric H. Singer, Trial Attorney, Consumer Product Safety Commission, Legal Division, 4330 East-West Highway, Bethesda 20814, (301) 504-0626, Ext. 1376.

II. DEFINITIONS

For purposes of this Subpoena, the following definitions apply:

a. The term "Hilton" refers to Hilton Hotels Corporation, whose headquarters presently are located at 9336 Civic Center Drive, Beverly Hills, California 90210, and any agent, subsidiary, affiliate, or division doing business under the Hilton name or any other name, or any entity in which Hilton has either an ownership interest or property management interest.

b. The term "Central" refers to Central Sprinkler Corporation, presently residing at 451 N. Cannon Avenue, Lansdale, Pennsylvania 19446, and any agent, subsidiary, affiliate, or division doing business under the Central name or any other name.

c. The term "Omega" or "Omega sprinkler" includes, but is not limited to, the following sub-types or models of automatic fire sprinkler, all manufactured by Central: AC; C-1, C-1A, C-1A Pro, C-1A PRO ID; R-1, R-1A, R-1M, EC-20, EC-20A; EC-20 AID; Model M Upright, Model M Pendent, Model M Sidewall, HEC-12, HEC-12 ID; HEC-12 PRO; HEC-12A, HEC-12 RES; HEC-20; HEC-20 ID; Flow Control Pendent Flush, and Flow Control Pendent.

d. "Corrective action" means any action taken with respect to remedying Omega sprinklers, including, but not limited to, replacement, repair, modification, retrofit, agreements to conduct further testing on Omegas, refunds, and discounted purchases of equipment, goods, or services, and settlement of

legal claims.

e. The term "record" or "records" means the original and any non-identical copy of any written, graphic, photographic, audio, or visual materials, however produced or reproduced, of any kind or description, whether sent or received or neither, including, but not limited to: papers, books, letters, telefacsimiles, photographs, motion pictures, video tapes, audio recordings, correspondence, drawings, sketches, schematics, manuals, blueprints, work papers, intra- and interoffice communications, transcripts, minutes, reports, and recordings of telephone or other conversations, or of interviews, conferences, or meetings, affidavits, statements, summaries, opinions, court pleadings, reports, indices, studies, analyses, evaluations, contracts, licenses, agreements, questionnaires, answers to questionnaires, statistical records, desk calendar, appointment books, diaries, telephone logs, lists, tabulations, charts, graphs, data sheets, computer tapes, disks, cards, printouts or programs, microfilms, all other records kept by electronic, photographic, or mechanical means, and things similar to any of the foregoing, regardless of their author or origin, however denominated.

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You are ordered to appear at the Commission's headquarters at 4330 East West Highway, Bethesda, MD 20814 to testify with respect to the matters referred to above on the 20th day of April 1998 at 9:30 a.m. and continuing thereafter until your testimony is concluded.

You are also directed to produce with you the Omegas identified on Attachment A and to provide copies of all records relating to servicing, testing, evaluating or analyzing Omegas and copies of all records relating to corrective action on Omegas.

BY ORDER OF THE COMMISSION

Sadye E. Dunn

SADYE E. DUNN
Secretary
Consumer Products Safety Commission

DATE: April 17, 1998

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Attachment A

Logan Airport Hilton

Sample No.	Model No.	Manuf. Date	Activ. Pres. (psi)	Location
1	HEC-12	3-1-88	28	Paint Chest
2	HEC-12	3-1-88	43	ACC Tele Rm
3	EC-20	5-22-88	15	Sales Hall
4	EC-20	4-25-88	5	Sales

Oakland Airport Hilton

Sample No.	Model No.	Manuf. Date	Activ. Pres. (psi)	Location
1	CI	5-12-86	>60	n/a
5	HEC-12	5-27-86	5	n/a

Waikoloa Village, Kamuela, Hawaii

Sample No.	Model No.	Manuf. Date	Activ. Pres. (psi)	Location
4 (tested 2/20/97)	HEC-12	1-23-89	60	Lagoon 1st Hall
5 (tested 4/7/97)	HEC-12	1-23-89	5	5303

Hawaiian Village, Honolulu, Hawaii

Sample No.	Model No.	Manuf. Date	Activ. Pressure	Location
2	EC-20	6-9-86	>60	ALII 9th Fl.
7	EC-20	6-9-86	5	Rainbow 30th Fl.

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☒ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Stephen F. Bollenbach
Hilton Hotels Corporation
9336 Civic Center Drive
Beverly Hills, CA 90210

4a. Article Number

Z-069-249-320

4b. Service Type

☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

5. Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

Re: Central Sprinkler

6. Signature: *(Addressee or Agent)*

X

PS Form **3811,** December 1994 102595-97-B-0179 Domestic Return Receipt

Thank you for using Return Receipt Service.

UNITED STATES POSTAL SERVICE

First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

• Print your name, address, and ZIP Code in this box •

U.S. Consumer Product Safety Commission
Legal Division - Room 613
4330 East West Highway
Bethesda, MD 20814

Attn: Eric Singer

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10.

TRIPLICATE

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CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of CENTRAL SPRINKLER CORP. 451 North Cannon Avenue Lansdale, PA 19446 and CENTRAL SPRINKLER CO. 451 North Cannon Avenue Lansdale, PA 19446 Respondents.	CPSC Docket No. 98-2 Subpoena of a Non-Party: Hilton Hotels Corp.

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ORIGINAL

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of CENTRAL SPRINKLER CORP. 451 North Cannon Avenue Lansdale, PA 19446 and CENTRAL SPRINKLER CO. 451 North Cannon Avenue Lansdale, PA 19446 Respondents.	CPSC Docket No. 98-2 Subpoena of a Non-Party: Factory Mutual Research Corp.

TO: Peter H. Hackenburg, Esq., Vice President
Joseph Hankins
Roger L. Allard, Manager
Richard P. Ferron, P.E., Senior Engineer
Antonio Braga
Mark Gilkey
Factory Mutual Research Corporation
1157 Boston-Providence Turnpike
Norwood, MA 02062

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b. The term "Central Sprinkler" refers to Central Sprinkler Corporation, presently residing at 451 N. Cannon Avenue, Lansdale, Pennsylvania 19446 and any agent, subsidiary, affiliate, or division doing business under the Central name or any other name.

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d. The term "Straight-on Sprinkler" refers to an automatic fire sprinkler and sprinkler design, predecessor to the Omega, invented by Mr. Wilfred V. Johnson (deceased), with U.S. Patent

No. 4,465,141 issued to U.S. Fire Control on Aug. 14, 1984. (Patent is attached.)

e. The term "On-Off Fire Sprinkler" refers to any one or more automatic sprinklers and sprinkler designs, predecessor to the Flow Control, invented by Mr. Wilfred V. Johnson (deceased), with U.S. Patent Nos. Des. 231,529, issued April 30, 1974; 3,734,191, issued May 22, 1973; 3,802,510, issued April 9, 1974; 3,877,527, issued April 15, 1975; 3,911,940, issued Oct. 14, 1975; 3,991,829, issued Nov. 16, 1976; and 4,359,098, issued Nov. 16, 1982. (Patents are attached.)

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h. "June 17 answer and response" refers to FM's answer and response, dated June 17, 1997, to a special order and subpoena issued to it by the CPSC, dated May 13, 1997.

III. SUBPOENA AD TESTIFICANDUM AND DUCES TECUM

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You are also directed to produce any On-Off or Straight-On Sprinkler and any Omega prototype in FM's possession or control. You are further directed to produce copies of records relating to the sampling and testing of Omegas since the June 17 answer and

response, and copies of all records relating to the testing, analysis, or demonstration of the Straight-On or On-Off Sprinkler.

BY ORDER OF THE COMMISSION

Sadye E. Dunn

SADYE E. DUNN
Secretary
Consumer Product Safety Commission

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Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
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3. Article Addressed to:

Peter H. Hackenburg, Esq.
Factory Mutual Research Corp.
1157 Boston-Providence Turnpike
Norwood, MA 02062

4a. Article Number

Z-069-249-319

4b. Service Type

☐ Registered ☑ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

APR 2 1 1998

5. Received By: *(Print Name)*

6. Signature: *(Addressee or Agent)*

X

8. Addressee's Address *(Only if requested and fee is paid)*

Re: Central Sprinkler

Thank you for using Return Receipt Service.

PS Form **3811**, December 1994 102595-97-B-0179 Domestic Return Receipt

UNITED STATES POSTAL SERVICE

First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

• Print your name, address, and ZIP Code in this box •

U.S. Consumer Product Safety Commission
Legal Division - Room 613
4330 East West Highway
Bethesda, MD 20814

Attn: Eric Singer

TRIPLICATE

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US CONSUMER PROD. SAFETY COMM
CATHERINE A. CUMBERLAND
4330 EASTWEST HIGHWAY
BETHESDA ,MD 20814

000028851

KN U000

United States Patent Office

Des. 231,529

Patented Apr. 30, 1974

231,529

SPRINKLER HEAD

Wilfred V. Johnson, 35 Rocky Hill Road,
Oxford, Mass. 01540

Filed Jan. 26, 1972, Ser. No. 221,130

Term of patent 14 years

Int. Cl. D23—*01*

U.S. Cl. D23—6

Fig. 1.

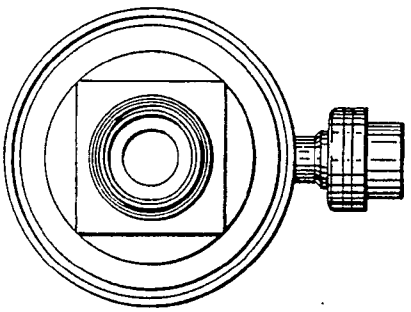

Fig. 3.

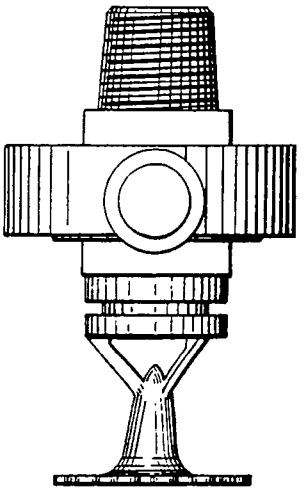

Fig. 2.

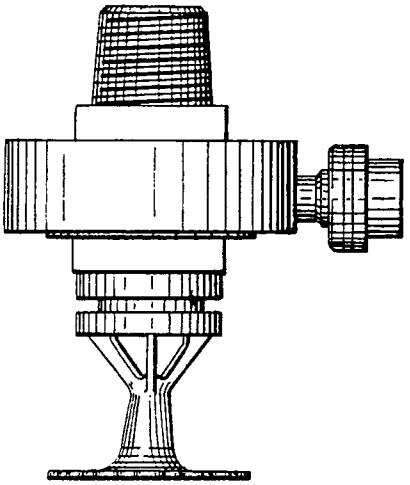

Fig. 4.

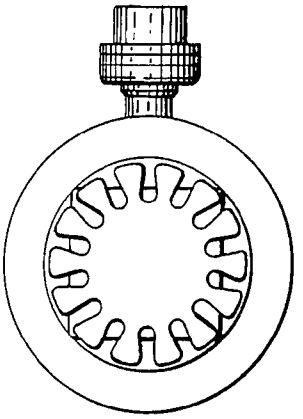

FIG. 1 is a top plan view of a sprinkler head showing my new design;

FIG. 2 is a front view thereof;

FIG. 3 is a right end view thereof; and

FIG. 4 is a bottom view thereof.

I claim:

The ornamental design for a sprinkler head, substantially as shown.

References Cited

UNITED STATES PATENTS

D. 191,346	9/1961	Hanson	D23—6
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JAMES R. LARGEN, Primary Examiner

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CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION
1998 APR 20 P 3:41

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446	:	**CPSC Docket No. 98-2**
	:	
and	:	**Motion For Leave To Submit Reply**
	:	**Brief In Support Of Motion To Dismiss**
Central Sprinkler Co., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446,	:	
	:	
Respondents.	:	
	:	

MOTION FOR LEAVE TO SUBMIT REPLY BRIEF
IN SUPPORT OF THE MOTION TO DISMISS
OF RESPONDENTS CENTRAL SPRINKLER CORPORATION
AND CENTRAL SPRINKLER COMPANY

Respondents Central Sprinkler Corporation and Central Sprinkler Company (collectively, "Central") filed a Motion To Dismiss the administrative Complaint on March 26, 1998. Complaint Counsel filed its Response on April 6, 1998. Because Complaint Counsel's Response misstates or misapprehends respondents' arguments and the applicable caselaw, respondents hereby seek leave to file a Reply Brief. The Reply Brief is attached hereto as Exhibit "A."

WHEREFORE, Central respectfully requests that the Administrative Law Judge grant

this Motion for leave to submit reply brief.

Respectfully submitted,

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DATED: April 20, 1998

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CPSC/OFC. OF THE SECRETARY
FREEDOM OF INFORMATION
1998 APR 20 P 3:42

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446	:	**CPSC Docket No. 98-2**
	:	
and	:	
	:	**Reply Brief In Support Of Motion To**
Central Sprinkler Co., a Corporation,	:	**Dismiss Of Respondents**
451 North Cannon Avenue	:	**Central Sprinkler Corporation and**
Lansdale, PA 19446,	:	**Central Sprinkler Company**
	:	
Respondents.	:	
	:	

REPLY BRIEF IN SUPPORT OF THE MOTION TO DISMISS OF RESPONDENTS CENTRAL SPRINKLER CORPORATION AND CENTRAL SPRINKLER COMPANY

I. INTRODUCTION

Because the administrative Complaint in the above-referenced matter would expand jurisdiction far beyond the boundaries set by the Consumer Product Safety Act, respondents Central Sprinkler Corporation and Central Sprinkler Company (collectively, "Central") filed a Motion To Dismiss the administrative Complaint on March 26, 1998 (hereinafter "Mot. to Dismiss"). Complaint Counsel filed their Response on April 6, 1998. Complaint Counsel's Response embraces a distorted view of the Consumer Product Safety Commission's ("CPSC") jurisdiction -- essentially advocating a position that would set no limits to CPSC jurisdiction. Moreover, the Response does not properly construe or address the key case applicable to deciding this issue. Accordingly, Central hereby files its Reply to Complaint Counsel's Response.

II. LEGAL ARGUMENT

A. The CPSC Complaint Counsel's View Of CPSC Jurisdiction Is Overbroad, Incorrect And Not Supported By Law.

According to Complaint Counsel's view of jurisdiction under the Consumer Product Safety Act, 15 U.S.C. § 2051 et seq. ("the Act"), there are essentially no limits to CPSC jurisdiction. To Complaint Counsel, as long as an item is a "distinct article" -- even if fully integrated into, and an inherent part of, building construction -- it is subject to jurisdiction under the Act. Moreover, despite the express language of the Act and caselaw regarding industrial users, Complaint Counsel recognizes no limits to the types of buildings and usages covered by the Act. Because Complaint Counsel's view of CPSC jurisdiction is both incorrect and would dramatically expand jurisdiction under the Act, the Administrative Law Judge should reject Complaint Counsel's arguments and grant the respondents' Motion To Dismiss.

1. Complaint Counsel Does Not Properly Address Anaconda And Its Discussion Of Building Components.

Complaint Counsel's response focuses first on the fact that Omega sprinkler heads are distinct articles of commerce, as opposed to being items in an intermediate stage of production. (Compl. Counsel Response in Opposition to Mot. to Dism., pp. 5-6.) (hereinafter "Response"). Central does not dispute that point. That fact, however, is not dispositive in this matter. The issue here is whether a fundamental, integral component of a building's structure is a consumer product.

Similarly, Complaint Counsel's attempt to distinguish Consumer Product Safety Commission v. Anaconda Company, 593 F.2d 1314 (D.C. Cir. 1979), from Kaiser Aluminum and Chemical Corporation v. Consumer Product Safety Commission, 574 F.2d 178 (3d Cir.),

cert. denied, 439 U.S. 881 (1978), and to ignore the former while adopting the latter, is unavailing. Complaint Counsel asserts that because Kaiser involved wiring and Anaconda involved wiring systems, and because Complaint Counsel is attempting to recall only Omega sprinkler heads rather than the entire sprinkler system of which the sprinkler heads are an integral, fundamental part, then Kaiser is controlling. This argument fails on several counts.

First, the District of Columbia Circuit did not base its decision in Anaconda on the "system versus article" distinction that Complaint Counsel attempts to draw. To the contrary, the crux of the Court's decision focused on the fact that housing is not a consumer product, as housing itself is not be used "in or around" a household or residence, as required by the Act. Anaconda, 593 F.2d at 1320, 1321. The court noted that the CPSC

> has taken the position that its jurisdiction extends to every component part of a dwelling including the central wiring and plumbing systems as well as the wall and flooring systems and their various building components. Such an extension of the statutory language would seem to ignore a contrary congressional intention and potentially raises significant problems of federalism in areas of building construction currently regulated extensively by local jurisdictions.

Id. at 1320 (emphasis added).

Contrary to Complaint Counsel's argument in the instant matter, the Anaconda court did not base its opinion on the distinction between systems and distinct components of systems. Rather, as noted above, the Court recognized that Complaint Counsel was arguing that the CPSC had jurisdiction over both systems and system components in building construction. The Anaconda court rejected that argument in toto, observing that even the CPSC's counsel "had obvious difficulty" defending the position at oral argument. Id. In a telling colloquy cited by

the Anaconda court, the CPSC's counsel was unable to identify a single component of a house that would not be subject to CPSC regulation under the CPSC's view of its jurisdiction.

> COUNSEL FOR THE COMMISSION: No, Your Honor, what I am trying to say is that there may be many products within the household environment that are not consumer products within the definition.
>
> THE COURT: Such as what?
>
> COUNSEL FOR THE COMMISSION: Well.
>
> THE COURT: Under your theory.
>
> COUNSEL FOR THE COMMISSION: Your Honor, there may be a brick.
>
> THE COURT: Pardon?
>
> COUNSEL FOR THE COMMISSION: A brick, which is not transported in interstate commerce made in a local jurisdiction. Now, that brick may not present any case for federal jurisdiction.
>
> THE COURT: Suppose you conclude it does?
>
> COUNSEL FOR THE COMMISSION: Well, if we conclude that it does, it possibly would be a consumer product.

Id. at 1321 n.20. Complaint Counsel here takes the same position, that if it concludes an item is a consumer product, then it is.

Second, although the Anaconda court observed that Kaiser had involved aluminum wiring, while Anaconda concerned aluminum wiring systems, that difference did not drive the Anaconda decision, as discussed above. To the contrary, the Anaconda court merely observed that the two products were different from a collateral estoppel perspective, and hence the issues before the two courts was not the same. Anaconda, 593 F.2d at 1322.

Complaint Counsel's Response ignores the basic meaning of Anaconda -- fundamental, key products and integral product components used in building construction are not consumer products because the building itself is not a consumer product under the Act's "in or around" language. Thus, even if Omega sprinkler heads are distinct articles, they are available to building owners only as an integral component part of a sprinkler system, which system is an integral component part of the building structure. (Aff. of Carmine Schiavone, attached to Mot. to Dismiss as Exhibit "A," ¶¶ 6, 8).[1/]

As Central established, sprinkler systems and the attendant sprinkler heads are a fixed and integral part of a building's basic structure and are incorporated into the building's fundamental structure as constructed. (Mot. to Dismiss, pp. 14-15; Aff. of Frank Hill, attached to Mot. to Dismiss as Exhibit "B," ¶¶ 3, 10, 11.) As discussed in the affidavits, sprinkler heads have no use as a free standing item, but are designed to be integrated into a building's overall sprinkler system. (Schiavone Aff. ¶ 6.) Hence, they are not marketed or sold to building owners. (Schiavone Aff. ¶¶ 8-10.) Indeed, sprinkler systems as a whole also are not marketed or sold to building owners, who acquire sprinkler systems and sprinkler heads only as part of the overall building after an installation contractor has designed, selected and installed the sprinkler system

---

1/ Complaint Counsel attempts to avoid the affidavits attached to respondents' Motion To Dismiss on the ground that they were not sworn before a notary. (Response, p. 12, n.5). As provided in 28 U.S.C. § 1746, any matter permitted to be supported by an affidavit in writing of a person may, "with like force and effect, be supported, evidenced, established or proved by the unsworn declaration . . ., in writing of such person which is subscribed by him as true under penalty of perjury, and dated, in substantially the following form . . . ." 28 U.S.C. § 1746. The affidavits of Carmine Schiavone and Frank Hill, signed under penalty of perjury and dated, comport with the statutory form. Complaint Counsel's attempt to exclude the affidavits must be rejected.

and sprinkler heads. (Hill Aff. ¶¶ 3, 6, 7.) Sprinkler systems and sprinkler heads are installed in buildings even before the ceilings and walls are built. (Hill Aff. ¶¶ 10, 11.)

Nowhere in its Response does Complaint Counsel refute Central's evidence regarding sprinkler system design, sprinkler system and sprinkler head installation, or their incorporation into the fundamental structure of a building. Because Central's unrefuted affidavits establish that a sprinkler system, including the sprinkler heads, is designed and constructed as part of a building's fundamental construction, it is clear that, despite Complaint Counsel's attempt artificially to separate the two, the sprinkler system and sprinkler heads cannot be divorced from one another.[2/]

Complaint Counsel attempts to denigrate Central's argument by asserting that "[r]espondents claim that because 'housing' is not within the Commission's jurisdiction, anything 'incorporated' therein is also outside the Commission's reach." (Response, p. 14.) Complaint Counsel implies that Central's position, therefore, is that any item installed in a residence is not a consumer product. Central's argument, to the contrary, goes far beyond "installation" or the law regarding fixtures. As Central's Motion and supporting affidavits make clear, a sprinkler system and sprinkler heads are more than mere fixtures. They are not simply attached to a building. Rather, they become part of the basic building structure itself, built into the internal structure with drywall, ceiling materials, flooring and walls built around them at a later stage of construction. (Hill Aff. ¶¶ 10, 11.) Thus, Central's argument did not rely on the

---

2/ Although Complaint Counsel appears to concede that sprinkler systems are not within the CPSC's jurisdiction, (Response, p. 7), it is unclear how Complaint Counsel can then distinguish sprinkler heads from sprinkler piping, sprinkler valves or any other "distinct" items that are incorporated into a sprinkler system as system components.

law of fixtures to support its position that sprinkler systems and sprinkler heads, like bricks, roof trusses, and the wiring system in Anaconda, are a fundamental part of a building's structure and therefore, like a building itself, are not consumer products.

2. Complaint Counsel's Interpretation Of The Act Eliminates The "Use" Requirement.

In its discussion of "use" of consumer products, Complaint Counsel argues that Central is creating a new statutory requirement. (Response, pp. 12-13.) To the contrary, it is Complaint Counsel's interpretation of "use" that would read the requirement out of the Act. As Central argued on pages 10-11 of its Motion To Dismiss, although the Act requires that a consumer product be one produced or distributed for consumers' "use in or around a permanent or temporary household or residence . . . .," the Act does not define "use." The requirement, however, can only be understood as requiring some sort of consumer interaction with the product -- even if, as in Kaiser, the interaction is one step removed from direct use, i.e., plugging an electric razor into branch circuit wiring. Kaiser, 574 F.2d at 180. Contrary to Complaint Counsel's insinuation, Central does not suggest that a consumer must have control over a product in order for it to be used. There must, however, be some sort of enjoyment, holding, occupation, or availment of the product. See Consumer Product Safety Comm'n v. Chance Mnfg. Co., 441 F. Supp. 228, 233 (D.D.C. 1977) (although riders of amusement park "Zipper" do not control, own or possess ride, their occupancy of its cars satisfies the "personal use, consumption or enjoyment" clause).

Consumers in no way interact with sprinkler systems or sprinkler heads. Unlike a fire extinguisher, they do not pick up a sprinkler head and spray it onto a localized fire. Unlike a

smoke detector, consumers do not purchase sprinkler heads off the shelf for self-installation. Under Complaint Counsel's interpretation, mere exposure to a product would be "use" -- a definition that Congress eschewed when it rejected the Senate's definition of "use" as including "exposure to" a product. (See Mot. to Dism., pp. 10-11.) Indeed, under Complaint Counsel's definition of "use," a building's roof trusses or foundation would be consumer products because consumers are "exposed to the risk caused by their failure to function," (Response, p. 13); to wit, exposed to harm if the roof collapses or the foundation fails to support the building. Such a definition of "use" would eliminate a key requirement of the Act and is therefore incorrect.

3. Complaint Counsel's Reliance on Kaiser Is Misplaced.

Not only does Complaint Counsel fail to address the rationale of Anaconda or the "use" discussion in Kaiser, but Complaint Counsel's heavy reliance on other aspects of Kaiser is misplaced. First, the Kaiser decision is, simply, poorly-reasoned. It fails to address the important issues raised and properly considered in Anaconda, the better-reasoned decision. The Kaiser court focused on whether branch circuit wiring is an "article." Kaiser, 574 F.2d at 180. In so doing, the Court did not discuss the textual requirement in the Act that a consumer product be an article used "in or around" a household, residence or school. 15 U.S.C. § 2052(a)(1).[3/]

Moreover, the Kaiser court also considered that branch circuit wiring is used and enjoyed by consumers "whenever they turn on an electric switch." Kaiser, 574 F.2d at 180. The Court

---

3/ Indeed, although Complaint Counsel argues that Kaiser rejected the "in or around" discussion and the argument that fundamental components of housing, like housing itself, are not consumer products, Complaint Counsel admits that Kaiser referred to such arguments only within the context of the manufacturer's argument that branch circuit wiring was not an "article." (Response, p. 14.) Central does not assert that sprinkler heads are not "articles."

noted that the wiring made it possible for consumers to use other consumer products, stating, "it would be impossible for a consumer to enjoy the use of an electric razor without also enjoying the use of the branch circuit wiring to which it connected." Id. In contrast, consumers use neither sprinkler systems nor sprinkler heads to enjoy other consumer products, and they do not use or control the sprinkler heads themselves. (Hill Aff., Ex. B, ¶ 24.) In ignoring that the Kaiser court relied, in part, on consumers' use of branch wiring in order to use and enjoy other consumer products in determining that branch wiring is a consumer product, Complaint Counsel thus ignores a key distinction between sprinkler heads and consumer products.

Further, to the extent that Kaiser holds that fundamental components of building structures -- as opposed to mere fixtures -- are consumer products, it is incorrect. In reaching its conclusion, the Kaiser court stated that if the CPSC lacked jurisdiction over wiring, "then many consumer products in common use such as furnaces, water heaters, dishwashers, and lighting fixtures would be excluded from coverage." Kaiser, 574 F.2d at 180. One does not necessarily follow the other, particularly where the fixtures are marketed to, purchased by or distributed to, and actively used by, consumers. Thus, while the listed items may be fixtures, and also consumer products, sprinkler heads, in contrast, are not consumer products because they are not merely fixtures. Rather, they are fundamental components of the building itself, incorporated into the inherent structure during construction, and, further, are neither marketed nor sold to consumers. In contrast, furnaces, water heaters, dishwashers and lighting fixtures are marketed and sold to consumers, are not part of the internal building structure itself, and are readily used directly by consumers. Thus, whereas Kaiser is correct in providing that the examples it lists are consumer products, it is incorrect to extend that rationale from mere fixtures to inherent

components of the building structure itself. The Anaconda court recognized the distinction, and its holding thus has the stronger basis.

4. Without A Clear Statement Of Congressional Intent, The Act Cannot Be Construed To Displace An Area Closely Regulated By State And Local Authorities.

Complaint Counsel misapprehends Central's discussion of the extensive state and local codes that already exist to regulate building construction. Central does not suggest that if the CPSC had the authority to regulate sprinkler systems and sprinkler heads, then such regulations could not displace state and local regulations. Rather, Central's argument is that in construing the Act, the Administrative Law Judge must look to Congress' intent to ascertain what types of products the Act was meant to address and what perceived regulatory gaps the Act was intended to fill. As Anaconda recognized, building construction is already extensively regulated by local jurisdictions. Anaconda, 593 F.2d at 1320. Thus, without a clear statement that Congress intended the Act to displace that entire body of regulatory codes, the Act cannot, and should not, be so broadly construed.

Further, Complaint Counsel seriously misstates the extent to which sprinkler systems and sprinkler heads are regulated by local building codes. Complaint Counsel states that local codes require only that sprinklers be approved, and that Central "provides no evidence that the safety or efficacy of the sprinklers themselves . . . are regulated by state or local authorities." (Response, pp. 19-20.) That statement illustrates precisely why the CPSC, in contrast to the experienced fire safety professionals who write and enforce building and fire codes, regulations and standards, is ill-equipped to regulate the fire sprinkler industry. Were Complaint Counsel more experienced in building codes and sprinkler regulations, it would recognize that all three building codes cited

by Central incorporate by reference the standards of the National Fire Protection Association ("NFPA"), and that NFPA standards detail virtually every aspect of implementing the codes' fire safety provisions. For example, although the BOCA Code attached to Central's Motion To Dismiss as Exhibit "C," says only that a sprinkler system "shall be designed and installed in accordance with NfiPA [NFPA] 13," that simple reference to NFPA 13 incorporates an entire volume over 130 pages long of specific instructions, technical requirements and specifications governing all aspects of sprinkler system installation, including the sprinkler heads themselves. (See NFPA 13, attached hereto as Exhibit "B.") Thus, Complaint Counsel's assertion that sprinklers are not sufficiently regulated by local codes, which incorporate NFPA 13, evidences how dangerously ignorant Complaint Counsel is about the very products it demands to regulate. Moreover, even a brief examination of NFPA 13 indicates the extensive, detailed, technical standards that would be displaced by an exercise of CPSC's rulemaking authority. As Anaconda wisely recognized, Congress, in passing the Act, did not intend to impose federal regulation on an area closely and effectively regulated by knowledgeable and experienced local jurisdictions. Anaconda, 593 F.2d at 1320.

5. In Ignoring The Statutory Exclusion For Industrial Products, Complaint Counsel Recognizes No Limit On CPSC's Regulatory Authority.

Accepting Complaint Counsel's interpretation of the Act and pertinent caselaw means accepting the proposition that there are no jurisdictional limits to the CPSC's authority, and that the CPSC can recall items from any location and from any kind of use, as long as the item is used somewhere by consumers in a consumer setting. Given that the Act expressly excludes, inter

alia, industrial products and products associated with risks that can be addressed by OSHA, Complaint Counsel's view of jurisdiction as limitless and unbounded is incorrect.

As argued in Central's Motion To Dismiss, the Act expressly excludes from CPSC authority articles "not customarily produced or distributed for sale to, or use or consumption by, or enjoyment of, a consumer." 15 U.S.C. § 2052(a)(1)(A). (Mot. To Dismiss, pp. 9, n.3; 19-21.) Complaint Counsel, despite its reliance on Kaiser, ignores both the text of the Act and the Kaiser court's recognition that the Act "undoubtedly intended to exclude industrial products, on the theory that industrial purchasers are better able to protect themselves . . . ." Kaiser, 574 F.2d at 180-81. Further, as the Court stated, citing the legislative history of the Act, the "occasional use of industrial products by consumers would not be sufficient to bring the product under the Commission's jurisdiction."[4/] Id. at 181. By Complaint Counsel's logic, once an item is identified as a consumer product in one setting, it can be recalled by the CPSC no matter where it is located and regardless of the commercial or industrial nature of the product. Such "logic" disregards the statutory exception, ignores courts' recognition that industrial users are well-poised to protect themselves, and means the CPSC's jurisdiction would be virtually limitless.

In the same vein, while conceding that the CPSC lacks authority to regulate where potential risks in the workplace can be addressed under OSHA, Complaint Counsel asserts nonetheless that it can recall sprinkler heads from workplaces as long as OSHA has not sufficiently regulated risks associated with a particular product. (Response, p. 17.) Sprinkler

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4/ Thus, despite Complaint Counsel's affidavit from Francis Teevan alleging that he has seen certain industrial/commercial Omega models in a nursing home and hospital, even under Kaiser, such occasional "crossover" use would not bring the commercial/industrial models within the CPSC's jurisdiction. Kaiser, 574 F.2d at 181.

systems and sprinkler heads are specifically addressed in OSHA standards, which regulate the overall fire safety of workplaces. Again, by Complaint Counsel's logic, as long as OSHA has not taken the precise action that Complaint Counsel wants the CPSC to take, then the CPSC can step into the breach. As above, this "logic" overstates and oversteps the authority granted to the CPSC by the Act, and it must be rejected.

B. The Complaint And List Of Documents Do Not Comply With CPSC Regulations.

Although purporting to rely on the pleading rules of the Federal Rules of Civil Procedure, Complaint Counsel does not address the numerous cases cited by Central in which parties were ordered under the Federal Rules to plead more specifically their allegations of, e.g., product defects, misappropriation, conspiracy and negligence. (Mot. To Dismiss, pp. 23-24.) The Complaint alleges only that Omega sprinklers could fail to function as a result of a failure to operate. Such circular reasoning does not comply with 16 C.F.R. § 1025.11(b)(3) because it does not inform Central with "reasonable definiteness of the factual basis or bases" of Complaint Counsel's charges of violation or hazard. Further, Complaint Counsel's Response purports to have evidence of "thousands of failures of Omega sprinklers," (Response, p. 2), yet admits that it is aware of only eight alleged failures during fires out of approximately 10 million Omega sprinklers manufactured since 1982. (Id., pp. 1, 2.) Complaint Counsel's statistics alone -- eight fires out of 10 million sprinklers sold over a 15-year period-- make clear that this is not an instance where a substantial number of products do not work.[5/]

5/ In its original brief in support of the Motion to Dismiss, Central addressed the number of reported fires allegedly concerning Omegas. (See Mot. to Dismiss, pp. 5-6 and n.2.)

Moreover, Complaint Counsel's view of what constitutes a sufficient list of documents makes a mockery of the regulations' requirement that a complaint attach a list and summary of documentary evidence. Given the serious allegations of the Complaint and the complex technical issue underlying those allegations, a mere recitation of : "Data compilations depicting over 40% failure rates in testing of Central's Omega brand fire sprinklers" and "Documents evidencing failure of Omega fire sprinklers in actual fire situations" hardly satisfies the requirement that a "list and summary of documentary evidence supporting the charges shall be attached" to the Complaint. 16 C.F.R. § 1025.11(b)(3). Moreover, it is difficult to believe that Complaint Counsel purports to base this action solely on documents relating to a small number of fires and laboratory test results. The regulations were promulgated, inter alia, to permit respondents to understand the allegations and documentary bases supporting them. Complaint Counsel has not complied with these requirements and their hide-the-ball tactics should not be condoned.

Because the administrative Complaint does not comply with the pleading requirements of the CPSC's own regulations, it must be dismissed or, at a minimum, repleaded with greater specificity.

III. CONCLUSION

For all of the foregoing reasons, in addition to those argued in Central's Motion To Dismiss, Central respectfully requests that the Administrative Law Judge grant Central's Motion To Dismiss.

Respectfully submitted,

J. Gordon Cooney, Jr.

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DATED: April 20, 1998

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446	:	**CPSC Docket No. 98-2**
	:	
and	:	
	:	
Central Sprinkler Co., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446,	:	
	:	
Respondents.	:	
	:	

ORDER

AND NOW, this _____ day of _____, 1998, it is hereby ORDERED that respondents' Motion For Leave To Submit Reply Brief is GRANTED.

_____
Hon. William P. Moran
Administrative Law Judge

CERTIFICATE OF SERVICE

I, Michael F. Healy, hereby certify that I have served the attached document, the Motion For Leave To Submit Attached Reply Brief, upon all parties and participants of record in these proceedings by hand, a copy to each on April 20, 1998.

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U.S. Enviromental Protection Agency
1099 14th St., N.W. Suite 350
Washington, D.C. 20005

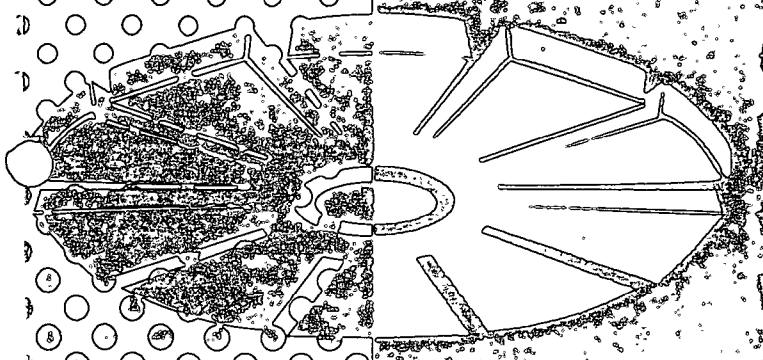
Michael F. Healy

Michael F. Healy

For: Respondents Central Sprinkler Corporation and
Central Sprinkler Company

DATED: April 20, 1998

Installation of Sprinkler Systems



NFPA

13

1996 Edition

National Fire Protection Association

NFPA

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NOTICE

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Policy Adopted by NFPA Board of Directors on December 3, 1982

The Board of Directors reaffirms that the National Fire Protection Association recognizes that the toxicity of the products of combustion is an important factor in the loss of life from fire. NFPA has dealt with that subject in its technical committee documents for many years.

There is a concern that the growing use of synthetic materials may produce more or additional toxic products of combustion in a fire environment. The Board has, therefore, asked all NFPA technical committees to review the documents for which they are responsible to be sure that the documents respond to this current concern. To assist the committees in meeting this request, the Board has appointed an advisory committee to provide specific guidance to the technical committees on questions relating to assessing the hazards of the products of combustion.

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NFPA 13

Standard for the

Installation of Sprinkler Systems

1996 Edition

This edition of NFPA 13, *Standard for the Installation of Sprinkler Systems*, was prepared by the Technical Committee on Automatic Sprinklers and acted on by the National Fire Protection Association, Inc., at its Annual Meeting held May 20-23, 1996, in Boston, MA. It was issued by the Standards Council on July 18, 1996, with an effective date of August 9, 1996, and supersedes all previous editions.

Changes other than editorial are indicated by a vertical rule in the margin of the pages on which they appear. These lines are included as an aid to the user in identifying changes from the previous edition.

This document has been submitted to ANSI for approval.

Origin and Development of NFPA 13

NFPA 13 represents the first standard published under the auspices of the NFPA Committee on Automatic Sprinklers. Originally titled *Rules and Regulations of the National Board of Fire Underwriters for Sprinkler Equipments, Automatic and Open Systems*, the standard has been continuously updated to keep in step with change.

Full information about the NFPA actions on various changes will be found in the NFPA Proceedings. The dates of successive editions are as follows: 1896, 1899, 1902, 1905, 1907, 1908, 1912, 1913, 1915, 1916, 1917, 1919, 1920, 1921, 1922, 1923, 1924, 1925, 1926, 1927, 1928, 1929. In 1930 a separate standard was published on "Class B" systems. This was integrated into the 1931 edition. Further revisions were adopted in 1934, 1935, and 1936. A two-step revision was presented in the form of a progress report in 1939 and finally adopted in 1940. Further amendments were made in 1947, 1950, 1953, 1956, 1958, 1960, 1961, 1963, 1964, 1965, 1966, 1968, 1969, 1971, 1972, 1973, 1974, 1975, 1976, 1978, 1980, 1982, 1984, 1986, and 1989.

The 1991 edition incorporated an entire rewrite of the standard to make the overall format user friendly. Substantive changes were made to numerous terms, definitions, and descriptions, with additional refinements made in 1994.

This centennial edition contains a major reformatting of those portions of the chapter on installation of sprinklers. A number of subsections have been added to allow the installation requirements for each type of style of sprinkler to be readily located. These include positioning rules, spacing rules, and area of coverage rules to be found in one location for each type of sprinkler. Other changes have been made to mainstream the extended coverage sprinkler and to recognize the benefits of fast-response sprinkler technology.

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This list represents the membership at the time the Committee was balloted on the text of this edition. Since that time, changes in the membership may have occurred.

NOTE Membership on a Committee shall not in and of itself constitute an endorsement of the Association or any document developed by the Committee on which the member serves.

Committee Scope: This Committee shall have primary responsibility for documents on the design and installation of automatic and of open sprinkler systems, including the character and adequacy of water supplies, and the selection of sprinklers, piping, valves, and all materials and accessories; this committee does not cover the installation of fire pumps, nor the construction and installation of gravity and pressure tanks and towers, nor the installation, maintenance, and use of central station, proprietary, auxiliary, and local signaling systems for watchmen, fire alarm, and supervisory service, nor the care of valves controlling water supplies, nor the design of fire department hose connections, nor the installation of private fire service mains and their appurtenances.

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NFPA 13

Standard for the

Installation of Sprinkler Systems

1996 Edition

NOTICE: An asterisk (*) following the number or letter designating a paragraph indicates explanatory material on that paragraph in Appendix A.

Information on referenced publications can be found in Chapter 11 and Appendix C.

Chapter 1 General Information

1-1 Scope. This standard provides the minimum requirements for the design and installation of automatic fire sprinkler systems and exposure protection sprinkler systems, including the character and adequacy of water supplies and the selection of sprinklers, piping, valves, and all materials and accessories, but not including the installation of private fire service mains and water supplies.

NOTE: Consult other NFPA standards for additional requirements relating to water supplies.

Storage in excess of 12 ft (3.7 m) in height or storage in excess of 5 ft (1.5 m) in height of high hazard materials such as Level II and III aerosols, idle pallets, rubber tires, rolled paper stored on end, plastics, and flammable liquids are outside the scope of this standard. (For guidance and limitations regarding areas, quantities, or methods of storage for high hazard materials, see NFPA 30, 30B, 40, 58, 231, 231C, 231D, 231F, and 409.)

Exception No. 1: Wooden pallets stored up to 6 ft (1.8 m) in height or plastic pallets up to 4 ft (1.2 m) in height with not over four stacks of wooden pallets or two stacks of plastic pallets separated from other stacks by at least an 8-ft (2.4-m) aisle. (For heights or quantities exceeding these limits, see NFPA 231, Standard for General Storage.)

Exception No. 2: Storage of rubber tires that is incidental to the main use of the building and not more than 2,000 ft^2 (185.8 m^2). On-tread storage, regardless of piling method, shall not exceed 25 ft (7.62 m) in the direction of the wheel hole. Laced tires in racks shall not exceed 5 ft (1.52 m) in height. Storage arrangements that are acceptable as miscellaneous storage are:*

(a) On floor, on side storage less than 12 ft (3.66 m) in height, or

(b) On floor, on tread storage less than 5 ft (1.52 m) in height, or

(c) Double row or multi-row portable or fixed rack storage less than 5 ft (1.52 m) in height, or

(d) Single row portable or fixed rack storage less than 12 ft (3.66 m) in height.

Exception No. 3: Miscellaneous storage is within the scope of this standard.

1-2 Purpose. The purpose of this standard is to provide a reasonable degree of protection for life and property from fire through standardization of design, installation, and testing requirements for sprinkler systems based upon sound engineering principles, test data, and field experience. This standard endeavors to continue the excellent record that has been established by sprinkler systems while meeting the needs of changing technology. Nothing in this standard is intended to restrict new technologies or alternate arrangements, provided the level of safety prescribed by this standard is not lowered. Materials or devices not specifically designated by this standard shall be utilized in complete accord with all conditions, requirements, and limitations of their listings.

NOTE 1: A sprinkler system is a specialized fire protection system and requires knowledgeable and experienced design and installation.

NOTE 2: Since its inception, this document has been developed on the basis of standardized materials, devices, and design practices. However, certain paragraphs, such as 2-3.5, 4-4.9, and this one, allow the use of materials and devices not specifically designated by this standard, provided such use is within parameters established by a listing organization. In using such materials or devices, it is important that all conditions, requirements, and limitations of the listing be fully understood and accepted and that the installation be in complete accord with such listing requirements.

1-3 Retroactivity Clause. The provisions of this document are considered necessary to provide a reasonable level of protection from loss of life and property from fire. They reflect situations and the state of the art at the time the standard was issued.

Unless otherwise noted, it is not intended that the provisions of this document be applied to facilities, equipment, structures, or installations that were existing or approved for construction or installation prior to the effective date of this document.

Exception: In those cases where it is determined by the authority having jurisdiction that the existing situation involves a distinct hazard to life or property, this standard shall apply.

1-4 Definitions.

1-4.1 NFPA Definitions.

Approved.* Acceptable to the authority having jurisdiction.

Authority Having Jurisdiction.* The organization, office, or individual responsible for approving equipment, an installation, or a procedure.

Listed.* Equipment, materials, or services included in a list published by an organization acceptable to the authority having jurisdiction and concerned with evaluation of products or services that maintains periodic inspection of production of listed equipment or materials or periodic evaluation of services and whose listing states either that the equipment, material, or service meets identified standards or has been tested and found suitable for a specified purpose.

Shall. Indicates a mandatory requirement.

Should. Indicates a recommendation or that which is advised but not required.

Standard. A document, the main text of which contains only mandatory provisions using the word "shall" to indicate requirements, which is in a form generally suitable for mandatory reference by another standard or code or for adoption into law. Nonmandatory provisions shall be located in an Appendix, footnote, or fine-print note and are not to be considered a part of the requirements of a standard.

1-4.2 General Definitions.

Compartment. As used in 4-4.5.3 and 6-4.4.4, a space completely enclosed by walls and a ceiling. The compartment enclosure is permitted to have openings to an adjoining space if the openings have a minimum lintel depth of 8 in. (203 mm) from the ceiling.

Drop-Out Ceiling. A suspended ceiling system with listed translucent or opaque panels that are heat sensitive and fall from their setting when exposed to heat. This ceiling system is installed below the sprinklers.

Dwelling Unit. One or more rooms arranged for the use of one or more individuals living together, as in a single housekeeping unit normally having cooking, living, sanitary, and sleeping facilities.

For purposes of this standard, dwelling unit includes hotel rooms, dormitory rooms, apartments, condominiums, sleeping rooms in nursing homes, and similar living units.

Fire Control. Limiting the size of a fire by distribution of water so as to decrease the heat release rate and pre-wet adjacent combustibles, while controlling ceiling gas temperatures to avoid structural damage.

Fire Suppression. Sharply reducing the heat release rate of a fire and preventing its regrowth by means of direct and sufficient application of water through the fire plume to the burning fuel surface.

High Challenge Fire Hazard. A fire hazard typical of that produced by fires in combustible high-piled storage.

High-Piled Storage. Solid-piled, palletized, rack storage, bin box, and shelf storage in excess of 12 ft (3.7 m) in height. (*See 5-2.3.1.1.*)

Hydraulically Designed System. A calculated sprinkler system in which pipe sizes are selected on a pressure loss basis to provide a prescribed water density, in gallons per minute per square foot [(L/min)/m^2], or a prescribed minimum discharge pressure or flow per sprinkler, distributed with a reasonable degree of uniformity over a specified area.

Limited-Combustible Material. As applied to a building construction material, a material not complying with the definition of noncombustible material that, in the form in which it is used, has a potential heat value not exceeding 3500 Btu per lb (8141 kJ/kg) and complies with one of the following paragraphs, (a) or (b). Materials subject to increase in combustibility or flame spread rating beyond the limits herein established through the effects of age, moisture, or other atmospheric condition shall be considered combustible.

(a) Materials having a structural base of noncombustible material, with a surfacing not exceeding a thickness of $^1/_8$ in. (3.2 mm) that has a flame spread rating not greater than 50.

(b) Materials, in the form and thickness used, other than as described in (a), having neither a flame spread rating greater than 25 nor evidence of continued progressive combustion and of such composition that surfaces that would be exposed by cutting through the material on any plane would have neither a flame spread rating greater than 25 nor evidence of continued progressive combustion.

Miscellaneous Storage.* Storage that does not exceed 12 ft (3.66 m) in height and is incidental to another occupancy use group as defined in 1-4.7 (*see 5-2.3.1.1*). Such storage shall not constitute more than 10 percent of the building area or 4,000 sq ft (372 m^2) of the sprinklered area, whichever is greater. Such storage shall not exceed 1,000 sq ft (93 m^2) in one pile or area, and each such pile or area shall be separated from other storage areas by at least 25 ft (7.62 m). Protection criteria for miscellaneous storage are within the scope of this standard.

Noncombustible Material. A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors when subjected to fire or heat. Materials that are reported as passing ASTM E136, *Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C*, shall be considered noncombustible materials.

Pipe Schedule System. A sprinkler system in which the pipe sizing is selected from a schedule that is determined by the occupancy classification. A given number of sprinklers are allowed to be supplied from specific sizes of pipe.

Shop Welded. As used in this standard, shop in the term shop welded means either:

(a) At a sprinkler contractor's or fabricator's premise.

(b) In an area specifically designed or authorized for such work such as a detached outside location, maintenance shop, or other area (either temporary or permanent) of noncombustible or fire-resistive construction free of combustible and flammable contents and suitably segregated from adjacent areas.

Small Rooms. Rooms of Light Hazard Occupancy classification having unobstructed construction and floor areas not exceeding 800 sq ft (74.3 m^2). (*See 1-4.7.1.*) Rooms shall be enclosed by walls and a ceiling. Openings to the adjoining space are permitted if the minimum lintel depth is 8 in. (203 mm) from the ceiling.

Sprinkler System.* For fire protection purposes, an integrated system of underground and overhead piping designed in accordance with fire protection engineering standards. The installation includes one or more automatic water supplies. The portion of the sprinkler system aboveground is a network of specially sized or hydraulically designed piping installed in a building, structure, or area, generally overhead, and to which sprinklers are attached in a systematic pattern. The valve controlling each system riser is located in the system riser or its supply piping. Each sprinkler system riser includes a device for actuating an alarm when the system is in operation. The system is usually activated by heat from a fire and discharges water over the fire area.

NOTE: The design and installation of water supply facilities such as gravity tanks, fire pumps, reservoirs or pressure tanks, and underground piping are covered by the following NFPA standards: NFPA 20, *Standard for the Installation of Centrifugal Fire Pumps*; NFPA 22, *Standard for Water Tanks for Private Fire Protection*; and NFPA 24, *Standard for the Installation of Private Fire Service Mains and Their Appurtenances.*

Thermal Barrier. A material that will limit the average temperature rise of the unexposed surface to not more than 250°F (121°C) after 15 minutes of fire exposure complying with the standard time-temperature curve of NFPA 251, *Standard Methods of Fire Tests of Building Construction and Materials.*

1-4.3 Sprinkler System Type Definitions.

Antifreeze System. A wet pipe sprinkler system employing automatic sprinklers attached to a piping system containing an antifreeze solution and connected to a water sup-

ply. The antifreeze solution is discharged, followed by water, immediately upon operation of sprinklers opened by heat from a fire.

Circulating Closed-Loop System. A wet pipe sprinkler system having non-fire-protection connections to automatic sprinkler systems in a closed-loop piping arrangement for the purpose of utilizing sprinkler piping to conduct water for heating or cooling. Water is not removed or used from the system, but only circulated through the piping system.

Combined Dry Pipe-Preaction System. A sprinkler system employing automatic sprinklers attached to a piping system containing air under pressure with a supplemental detection system installed in the same areas as the sprinklers. Operation of the detection system actuates tripping devices that open dry pipe valves simultaneously and without loss of air pressure in the system. Operation of the detection system also opens listed air exhaust valves at the end of the feed main, which usually precedes the opening of sprinklers. The detection system also serves as an automatic fire alarm system.

Deluge System. A sprinkler system employing open sprinklers attached to a piping system connected to a water supply through a valve that is opened by the operation of a detection system installed in the same areas as the sprinklers. When this valve opens, water flows into the piping system and discharges from all sprinklers attached thereto.

Dry Pipe System. A sprinkler system employing automatic sprinklers attached to a piping system containing air or nitrogen under pressure, the release of which (as from the opening of a sprinkler) permits the water pressure to open a valve known as a dry pipe valve. The water then flows into the piping system and out the opened sprinklers.

Gridded System.* A sprinkler system in which parallel cross mains are connected by multiple branch lines. An operating sprinkler will receive water from both ends of its branch line while other branch lines help transfer water between cross mains.

Looped System.* A sprinkler system in which multiple cross mains are tied together so as to provide more than one path for water to flow to an operating sprinkler and branch lines are not tied together.

Preaction System. A sprinkler system employing automatic sprinklers attached to a piping system containing air that may or may not be under pressure, with a supplemental detection system installed in the same areas as the sprinklers. Actuating means of the valve are described in 3-3.2.1. Actuation of the detection system opens a valve that permits water to flow into the sprinkler piping system and to be discharged from any sprinklers that are open.

Wet Pipe System. A sprinkler system employing automatic sprinklers attached to a piping system containing water and connected to a water supply so that water discharges immediately from sprinklers opened by heat from a fire.

1-4.4* System Component Definitions.

Branch Lines. The pipes in which the sprinklers are placed, either directly or through risers.

Cross Mains. The pipes supplying the branch lines, either directly or through risers.

Feed Mains. The pipes supplying cross mains either directly or through risers.

Flexible Listed Pipe Coupling. A listed coupling or fitting that allows axial displacement, rotation, and at least 1 degree of angular movement of the pipe without inducing harm on the pipe.

Exception: For pipe diameters of 8 in. (203.2 mm) and larger, the angular movement shall be permitted to be less than 1 degree but not less than 0.5 degrees.

Risers. The vertical supply pipes in a sprinkler system.

Sprig-up. A line that rises vertically and supplies a single sprinkler.

Supervisory Devices. Devices arranged to supervise the operative condition of automatic sprinkler systems.

System Riser. The aboveground horizontal or vertical pipe between the water supply and the mains (cross or feed), which contains a control valve (either directly or within its supply pipe) and a waterflow alarm device.

1-4.5 Sprinkler Definitions.

1-4.5.1* The characteristics of a sprinkler that define its ability to control or extinguish a fire are:

(a) *Thermal Sensitivity.* A measure of the rapidity with which the thermal element operates as installed in a specific sprinkler or sprinkler assembly. One measure of thermal sensitivity is the Response Time Index (RTI) as measured under standardized test conditions.

1. Sprinklers defined as fast response have a thermal element with an RTI of 50 (meters–seconds) $^1/_2$ or less, or

2. Sprinklers defined as standard response have a thermal element with an RTI of 80 (meters–seconds) $^1/_2$ or more.

(b) *Temperature Rating.*

(c) *Orifice Size.* See Chapter 2.

(d) *Installation Orientation (see 1-4.5.3).*

(e) *Water Distribution Characteristics* (i.e., application rate, wall wetting).

(f) *Special Service Conditions (see 1-4.5.4).*

1-4.5.2 Sprinklers defined according to design and performance characteristics:

Early Suppression Fast-Response (ESFR) Sprinkler.* A type of fast-response sprinkler that meets the criteria of 1-4.5.1(a)1 and is listed for its capability to provide fire suppression of specific high challenge fire hazards.

Extended Coverage Sprinkler. A type of spray sprinkler that complies with the extended protection areas defined in Chapter 4.

Large-Drop Sprinkler. A type of sprinkler that is capable of producing characteristic large water droplets and that is listed for its capability to provide fire control of specific high challenge fire hazards.

Nozzles. Devices for use in applications requiring special water discharge patterns, directional spray, or other unusual discharge characteristics.

Old-Style/Conventional Sprinkler. Sprinklers that direct from 40 to 60 percent of the total water initially in a downward direction and that are designed to be installed with the deflector either upright or pendent.

Open Sprinklers. Sprinkler that do not have actuators or heat-responsive elements.

Quick-Response (QR) Sprinkler. A type of spray sprinkler that meets the criteria of 1-4.5.1(a)1 and is listed as a quick-response sprinkler for its intended use.

Quick-Response Early Suppression (QRES) Sprinkler.* A type of quick-response sprinkler that meets the criteria of 1-4.5.1(a)1 and is listed for its capability to provide fire suppression of specific fire hazards.

Quick-Response Extended Coverage Sprinkler. A type of quick-response sprinkler that meets the criteria of 1-4.5.1(a)1 and complies with the extended protection areas defined in Chapter 4.

Residential Sprinkler. A type of fast-response sprinkler that meets the criteria of 1-4.5.1(a)1 that has been specifically investigated for its ability to enhance survivability in the room of fire origin and is listed for use in the protection of dwelling units.

Special Sprinkler. Sprinklers that have been tested and listed as prescribed in 4-4.9.

Spray Sprinkler. A type of sprinkler listed for its capability to provide fire control for a wide range of fire hazards.

1-4.5.3 Sprinklers defined according to orientation:

Concealed Sprinkler. Recessed sprinklers with cover plates.

Flush Sprinkler. Sprinklers in which all or part of the body, including the shank thread, is mounted above the lower plane of the ceiling.

Pendent Sprinkler. Sprinklers designed to be installed in such a way that the water stream is directed downward against the deflector.

Recessed Sprinkler. Sprinklers in which all or part of the body, other than the shank thread, is mounted within a recessed housing.

Sidewall Sprinkler. Sprinklers having special deflectors that are designed to discharge most of the water away from the nearby wall in a pattern resembling one quarter of a sphere, with a small portion of the discharge directed at the wall behind the sprinkler.

Upright Sprinkler. Sprinklers designed to be installed in such a way that the water spray is directed upwards against the deflector.

1-4.5.4 Sprinklers defined according to special application or environment:

Corrosion-Resistant Sprinkler. Sprinklers fabricated with corrosion-resistant material or with special coatings or platings to be used in an atmosphere that would normally corrode sprinklers.

Dry Sprinkler.* Sprinklers secured in an extension nipple that has a seal at the inlet end to prevent water from entering the nipple until the sprinkler operates. Dry sprinklers are intended to extend into an unheated area from a wet pipe system or (for dry-pendent sprinklers) to be used on a dry pipe system in the pendent position.

Intermediate Level Sprinkler/Rack Storage Sprinkler. Sprinklers equipped with integral shields to protect their operating elements from the discharge of sprinklers installed at higher elevations.

Ornamental/Decorative Sprinkler. Sprinklers that have been painted or plated by the manufacturer.

1-4.6 Construction Definitions.

Obstructed Construction.* Construction where beams, trusses, or other members impede heat flow or water distribution in a manner that materially affects the ability of sprinklers to control or suppress a fire.

Unobstructed Construction.* Construction where beams, trusses, or other members do not impede heat flow or water distribution in a manner that materially affects the ability of sprinklers to control or suppress a fire. Unobstructed construction has horizontal structural members that are not solid, where the openings are at least 70 percent of the cross section area, and the depth of the member does not exceed the least dimension of the openings, or all construction types where the spacing of structural members exceeds 7½ ft (2.3 m) on center.

For descriptions of construction types, see A-1-4.6(a) and (b).

1-4.7* Classification of Occupancies. Occupancy classifications for this standard relate to sprinkler installations and their water supplies only. They are not intended to be a general classification of occupancy hazards.

1-4.7.1* Light Hazard Occupancies. Occupancies or portions of other occupancies where the quantity and/or combustibility of contents is low, and fires with relatively low rates of heat release are expected.

1-4.7.2 Ordinary Hazard Occupancies.

1-4.7.2.1* Ordinary Hazard (Group 1). Occupancies or portions of other occupancies where combustibility is low, quantity of combustibles is moderate, stockpiles of combustibles do not exceed 8 ft (2.4 m), and fires with moderate rates of heat release are expected.

1-4.7.2.2* Ordinary Hazard (Group 2). Occupancies or portions of other occupancies where quantity and combustibility of contents is moderate to high, stockpiles do not exceed 12 ft (3.7 m), and fires with moderate to high rates of heat release are expected.

1-4.7.3 Extra Hazard Occupancies.

1-4.7.3.1* Occupancies or portions of other occupancies where quantity and combustibility of contents is very high and flammable and combustible liquids, dust, lint, or other materials are present, introducing the probability of rapidly developing fires with high rates of heat release.

1-4.7.3.2 Extra hazard occupancies involve a wide range of variables that may produce severe fires. The following shall be used to evaluate the severity of Extra Hazard Occupancies:

Extra Hazard (Group 1) includes occupancies described in 1-4.7.3.1 with little or no flammable or combustible liquids.

Extra Hazard (Group 2) includes occupancies described in 1-4.7.3.1 with moderate to substantial amounts of flammable or combustible liquids or where shielding of combustibles is extensive.

1-4.7.4 Special Occupancy Hazards.

1-4.7.4.1* Other NFPA standards contain sprinkler system design criteria for fire control or suppression of specific hazards. These are listed in Chapter 11 and include but are not limited to NFPA 30, *Flammable and Combustible Liquids Code*; NFPA 30B, *Code for the Manufacture and Storage of Aerosol Products*; NFPA 40, *Standard for the Storage and Handling of*

Cellulose Nitrate Motion Picture Film; NFPA 58, *Standard for the Storage and Handling of Liquefied Petroleum Gases*; NFPA 231, *Standard for General Storage*; NFPA 231C, *Standard for Rack Storage of Materials*; NFPA 231D, *Standard for Storage of Rubber Tires*; NFPA 231E, *Recommended Practice for the Storage of Baled Cotton*; NFPA 231F, *Standard for the Storage of Roll Paper*; NFPA 232, *Standard for the Protection of Records*; and NFPA 409, *Standard on Aircraft Hangars*.

1-4.7.4.2 Miscellaneous storage as defined herein shall be classified as to occupancy group in accordance with Table 1-4.7.4.2.

1-4.7.4.2.1 The commodity classifications and storage characteristics in Table 1-4.7.4.2 shall be as defined in NFPA 231, *Standard for General Storage*, and NFPA 231C, *Standard for Rack Storage of Materials*.

1-5 Abbreviations. The standard abbreviations in Table 1-5 shall be used on the hydraulic calculation form.

1-6 Level of Protection.

1-6.1 A building, where protected by an automatic sprinkler system installation, shall be provided with sprinklers in all areas.

Exception: Where specific sections of this standard permit the omission of sprinklers.

1-6.2 Limited Area Systems. When partial sprinkler systems are installed, the requirements of this standard shall be used insofar as they are applicable. The authority having jurisdiction shall be consulted in each case.

Table 1-4.7.4.2 Occupancy Group Classification for Miscellaneous Storage 12 ft (3.7 m) or Less in Height*†

Group A Plastics

Height of Storage	Ceiling Clearance to Top of Storage	Rack-R or Palletized-P	Cartoned		Exposed	
			Solid	Expanded	Solid	Expanded
To 5 ft	No limit	R-P	OH-2	OH-2	OH-2	OH-2
Over 5 ft to 10 ft	To 5 ft	R-P	EH-1	EH-1	EH-2	EH-2
Over 5 ft to 10 ft	Over 5 ft to 10 ft	R-P	EH-2	EH-2	EH-2	
Over 5 ft to 8 ft	Over 5 ft	P				EH-2
Over 10 ft to 12 ft	To 15 ft	P	EH-2	EH-2		
Over 10 ft to 12 ft	Over 5 ft	R	OH-2 +1 level in rack	OH-2 +1 level in rack	OH-2 +1 level in rack	OH-2 +1 level in rack
Over 10 ft to 12 ft	To 5 ft	R-P	EH-2**	EH-2**	EH-2**	EH-2

Miscellaneous Tire Storage

Piling Methods	Height of Storage	Occupancy Group
On floor, on side	5 ft to 12 ft	EH-1
On floor, on tread or side	To 5 ft	OH-2
Single, double, or multi-row racks	To 5 ft	OH-2
Single row rack, portable	5 ft to 12 ft	EH-1
Single row rack, fixed	5 ft to 12 ft	EH-1 or OH-2 plus 1 level of in-rack sprinklers

Rolled Paper Stored on End	Height of Storage	Occupancy Group
Heavy and medium weight	To 8 ft	OH-2
	Over 8 ft to 12 ft	EH-1
Tissue	To 10 ft	EH-1

Idle Pallet Storage	Height of Storage	Occupancy Group
	To 6 ft wooden	OH-2
	To 4 ft plastic	OH-2

For SI Units: 1 ft = 0.3048 m.
*For storage heights or clearance to ceiling in excess of the above configurations, see NFPA 231, 231C, 231D, or 231F as appropriate.
**For rack storage, OH-2 +1 Level in rack shall also be permitted.
†The design of the sprinkler system shall be based on the conditions that will routinely or periodically exist in the building creating the greatest water demand, including pile height and clearance.

Table 1-5 Hydraulic Symbols

Symbol or Abbreviation	Item
p	Pressure in psi
gpm	U.S. gallons per minute
q	Flow increment in gpm to be added at a specific location
Q	Summation of flow in gpm at a specific location
P_t	Total pressure in psi at a point in a pipe
P_f	Pressure loss due to friction between points indicated in location column
P_e	Pressure due to elevation difference between indicated points. This can be a plus value or a minus value. Where minus, the (−) shall be used; where plus, no sign need be indicated.
P_v	Velocity pressure in psi at a point in a pipe
P_n	Normal pressure in psi at a point in a pipe
E	90° Ell
EE	45° Ell
Lt.E	Long-turn elbow
Cr	Cross
T	Tee—flow turned 90°
GV	Gate valve
BV	Butterfly (wafer) check valve
Del V	Deluge valve
ALV	Alarm valve
DPV	Dry pipe valve
CV	Swing check valve
WCV	Butterfly (wafer) check valve
St	Strainer
psi	Pounds per square inch
v	Velocity of water in pipe in feet per second

Chapter 2 System Components and Hardware

2-1 General. This chapter provides requirements for correct use of sprinkler system components.

2-1.1* All materials and devices essential to successful system operation shall be listed.

Exception No. 1: Equipment as permitted in Table 2-3.1, Table 2-4.1, and the Exceptions to 2-6.1 and 2-6.1.1 shall not be required to be listed.

Exception No. 2: Components that do not affect system performance such as drain piping, drain valves, and signs need not be listed. The use of reconditioned valves and devices other than sprinklers as replacement equipment in existing systems shall be permitted.

2-1.2 System components shall be rated for the maximum working pressure to which they are exposed but not less than 175 psi (12.1 bars).

2-2 Sprinklers.

2-2.1 Only new sprinklers shall be installed.

2-2.2 Sprinkler Discharge Characteristics.

2-2.2.1 The K factor, relative discharge, and identification for sprinklers having different orifice sizes shall be in accordance with Table 2-2.2.

Exception No. 1: Listed sprinklers having pipe threads different from those shown in Table 2-2.2 shall be permitted.

Exception No. 2 Sprinklers with a larger orifice diameter and which increase the flow by a 50-percent increment when compared with a 1/2-in. (12.7-mm) orifice sprinkler shall be permitted where listed in accordance with 4-4.9.

2-2.2.2 Large drop and ESFR sprinklers shall be minimum 5/8 in. nominal orifice size. The ESFR sprinkler orifice shall be selected as appropriate for the hazard. (*See Chapter 5.*)

2-2.3 Limitations.

2-2.3.1 Sprinklers shall not be listed for protection of a portion of an occupancy classification.

Exception No. 1: Residential sprinklers.

Exception No. 2: Special sprinklers shall be permitted to be listed for protection of a specific construction feature in a portion of an occupancy classification. (See 4-4.9.)

2-2.3.2 For Light Hazard Occupancies not requiring as much water as is discharged by a nominal 1/2-in. (12.7-mm) orifice sprinkler operating at 7 psi (0.5 bar), sprinklers having a smaller orifice shall be permitted subject to the following restrictions:

(a) The system shall be hydraulically calculated. (*See Chapter 6.*)

(b) Small-orifice sprinklers shall be installed in wet systems only.

Exception: Small-orifice outside sprinklers for protection from exposure fires installed in conformance with Section 3-7 shall be permitted.

(c) A listed strainer shall be provided on the supply side of sprinklers having nominal orifice sizes smaller than 3/8 in. (9.5 mm).

2-2.3.3 Sprinklers having orifice sizes exceeding 1/2 in. (12.7 mm) and having 1/2 in. (12.7 mm) NPT shall not be installed in new sprinkler systems.

2-2.4* Temperature Characteristics.

2-2.4.1 The standard temperature ratings of automatic sprinklers are shown in Table 2-2.4.1. Automatic sprinklers shall have their frame arms colored in accordance with the color code designated in Table 2-2.4.1.

Exception No. 1: A dot on the top of the deflector, or the color of the coating material, or colored frame arms shall be permitted for color identification of corrosion-resistant sprinklers.

Exception No. 2: Color identification shall not be required for ornamental sprinklers such as factory-plated or factory-painted sprinklers or for recessed, flush, or concealed sprinklers.

Exception No. 3: The frame arms of bulb-type sprinklers shall not be required to be color coded.

2-2.4.2 The liquid in bulb-type sprinklers shall be color coded in accordance with Table 2-2.4.1.

2-2.5 Special Coatings.

2-2.5.1* Listed corrosion-resistant sprinklers shall be installed in locations where chemicals, moisture, or other corrosive vapors sufficient to cause corrosion of such devices exist.

Table 2-2.2 Sprinkler Discharge Characteristics Identification

Nominal Orifice Size (in.)	(mm)	K Factor[1]	Percent of Nominal ½ in. Discharge	Thread Type	Pintle	Nominal Orifice Size Marked On Frame
¼	6.4	1.3–1.5	25	½ in. NPT	Yes	Yes
5/16	8.0	1.8–2.0	33.3	½ in. NPT	Yes	Yes
⅜	9.5	2.6–2.9	50	½ in. NPT	Yes	Yes
7/16	11.0	4.0–4.4	75	½ in. NPT	Yes	Yes
½	12.7	5.3–5.8	100	½ in. NPT	No	No
17/32	13.5	7.4–8.2	140	¾ in. NPT or	No	No
				½ in. NPT	Yes	Yes
⅝	15.9	11.0–11.5	200	½ in. NPT or	Yes	Yes
				¾ in. NPT	Yes	Yes
¾	19.0	13.5–14.5	250	¾ in. NPT	Yes	Yes

[1]K factor is the constant in the formula $Q = K\sqrt{p}$
where Q = Flow in gpm
p = Pressure in psi

For SI Units: $Q_m = K_m\sqrt{P_m}$
where Q_m = Flow in L/min
P_m = Pressure in bars
K_m = 14 K

Table 2-2.4.1 Temperature Ratings, Classifications, and Color Codings

Max. Ceiling Temp. °F	°C	Temperature Rating °F	°C	Temperature Classification	Color Code	Glass Bulb Colors
100	38	135 to 170	57 to 77	Ordinary	Uncolored or black	Orange or red
150	66	175 to 225	79 to 107	Intermediate	White	Yellow or green
225	107	250 to 300	121 to 149	High	Blue	Blue
300	149	325 to 375	163 to 191	Extra high	Red	Purple
375	191	400 to 475	204 to 246	Very extra high	Green	Black
475	246	500 to 575	260 to 302	Ultra high	Orange	Black
625	329	650	343	Ultra high	Orange	Black

2-2.5.2* Corrosion-resistant coatings shall be applied only by the manufacturer of the sprinkler.

Exception: Any damage to the protective coating occurring at the time of installation shall be repaired at once using only the coating of the manufacturer of the sprinkler in the approved manner so that no part of the sprinkler will be exposed after installation has been completed.

2-2.5.3* Unless applied by the manufacturer, sprinklers shall not be painted, and any sprinklers that have been painted shall be replaced with new listed sprinklers of the same characteristics, including orifice size, thermal response, and water distribution.

Exception: Factory-applied paint or coating to sprinkler frames in accordance with 2-2.4.1 shall be permitted.

2-2.5.4 Ornamental finishes shall not be applied to sprinklers by anyone other than the sprinkler manufacturer, and only sprinklers listed with such finishes shall be used.

2-2.6 Escutcheon Plates.

2-2.6.1 Nonmetallic escutcheon plates shall be listed.

2-2.6.2* Escutcheon plates used with a recessed or flush-type sprinkler shall be part of a listed sprinkler assembly.

2-2.7* Guards and Shields. Sprinklers subject to mechanical injury shall be protected with listed guards.

2-2.8 Stock of Spare Sprinklers.

2-2.8.1 A supply of spare sprinklers (never fewer than 6) shall be maintained on the premises so that any sprinklers that have operated or been damaged in any way can be promptly replaced. These sprinklers shall correspond to the types and temperature ratings of the sprinklers in the property. The sprinklers shall be kept in a cabinet located where the temperature to which they are subjected will at no time exceed 100°F (38°C).

2-2.8.2 A special sprinkler wrench shall also be provided and kept in the cabinet to be used in the removal and installation of sprinklers.

2-2.8.3 The stock of spare sprinklers shall include all types and ratings installed and shall be as follows:

(a) For systems having less than 300 sprinklers, not fewer than 6 sprinklers.

(b) For systems with 300 to 1000 sprinklers, not fewer than 12 sprinklers.

(c) For systems with over 1000 sprinklers, not fewer than 24 sprinklers.

2-3 Pipe and Tube.

2-3.1 Pipe or tube used in sprinker systems shall meet or exceed one of the standards in Table 2-3.1 or be in accordance with 2-3.5. In addition, steel pipe must be in accordance with 2-3.2 and 2-3.3, copper tube must be in accordance with 2-3.4, and nonmetallic pipe must be in accordance with 2-3.5 and with the portions of the ASTM standards specified in Table 2-3.5 that apply to fire protection service.

Table 2-3.1 Pipe or Tube Materials and Dimensions

Materials and Dimensions	Standard
Ferrous Piping (Welded and Seamless)	
Spec. for Black and Hot-Dipped Zinc Coated (Galvanized) Welded and Seamless Steel Pipe for Fire Protection Use	ASTM A 795
Spec. for Welded and Seamless Steel Pipe	ANSI/ ASTM A 53
Wrought Steel Pipe	ANSI B36.10M
Spec. for Elec.-Resistance Welded Steel Pipe	ASTM A 135
Copper Tube (Drawn, Seamless)	
Spec. for Seamless Copper Tube	ASTM B 75
Spec. for Seamless Copper Water Tube	ASTM B 88
Spec. for General Requirements for Wrought Seamless Copper and Copper-Alloy Tube	ASTM B 251
Fluxes for Soldering Applications of Copper and Copper Alloy Tube	ASTM B 813
Brazing Filler Metal (Classification BCuP-3 or BCuP-4)	AWS A5.8
Solder Metal, 95-5 (Tin-Antimony-Grade 95TA)	ASTM B 32
Alloy Materials	ASTM B 446 ASTM B 467

2-3.2* When steel pipe listed in Table 2-3.1 is used and joined by welding as referenced in 2-5.2 or by roll-grooved pipe and fittings as referenced in 2-5.3, the minimum nominal wall thickness for pressures up to 300 psi (20.7 bars) shall be in accordance with Schedule 10 for sizes up to 5 in. (127 mm); 0.134 in. (3.40 mm) for 6 in. (152 mm); and 0.188 in. (4.78 mm) for 8- and 10-in. (203- and 254-mm) pipe.

Exception: Pressure limitations and wall thickness for steel pipe listed in accordance with 2-3.5 shall be in accordance with the listing requirements.

2-3.3 When steel pipe listed in Table 2-3.1 is joined by threaded fittings referenced in 2-5.1 or by fittings used with pipe having cut grooves, the minimum wall thickness shall be in accordance with Schedule 30 [in sizes 8 in. (203 mm) and larger] or Schedule 40 [in sizes less than 8 in. (203 mm)] pipe for pressures up to 300 psi (20.7 bars).

Exception: Pressure limitations and wall thickness for steel pipe specially listed in accordance with 2-3.5 shall be in accordance with the listing requirements.

2-3.4* Copper tube as specified in the standards listed in Table 2-3.1 shall have a wall thickness of Type K, L, or M where used in sprinkler systems.

2-3.5* Other types of pipe or tube investigated for suitability in automatic sprinkler installations and listed for this service, including but not limited to polybutylene, chlorinated polyvinyl chloride (CPVC), and steel, differing from that provided in Table 2-3.1 shall be permitted where installed in accordance with their listing limitations, including installation instructions. Pipe or tube shall not be listed for portions of an occupancy classification. Bending of pipe conforming to 2-3.5 shall be permitted as allowed by the listing.

2-3.6 Pipe Bending. Bending of Sch-10 steel pipe, or any steel pipe of wall thickness equal to or greater than Sch-10 and Types K and L copper tube shall be permitted when bends are made with no kinks, ripples, distortions, reductions in diameter, or any noticeable deviations from round. For Sch-40 and copper tubing, the minimum radius of a bend shall be 6 pipe diameters for pipe sizes 2 in. (51 mm) and smaller, and 5 pipe diameters for pipe sizes 2½ in. (64 mm) and larger. For all other steel pipe, the minimum radius of a bend shall be 12 pipe diameters for all sizes.

Table 2-3.5 Specially Listed Pipe or Tube Materials and Dimensions

Materials and Dimensions	Standard
Nonmetallic Piping	
Specification for Special Listed Chlorinated Polyvinyl Chloride (CPVC) Pipe	ASTM F 442
Specification for Special Listed Polybutylene (PB) Pipe	ASTM D 3309

2-3.7 Pipe Identification. All pipe, including specially listed pipe allowed by 2-3.5, shall be marked continuously along its length by the manufacturer in such a way as to properly identify the type of pipe. This identification shall include the manufacturer's name, model designation, or schedule.

2-4 Fittings.

2-4.1 Fittings used in sprinkler systems shall meet or exceed the standards in Table 2-4.1 or be in accordance with 2-4.2. In addition to the standards in Table 2-4.1, CPVC fittings shall also be in accordance with 2-4.2 and with the portions of the ASTM standards specified in Table 2-4.2 that apply to fire protection service.

2-4.2* Other types of fittings investigated for suitability in automatic sprinkler installations and listed for this service, including but not limited to polybutylene, chlorinated polyvinyl chloride (CPVC), and steel differing from that provided in Table 2-4.1, shall be permitted when installed in accordance with their listing limitations, including installation instructions.

2-4.3 Fittings shall be extra-heavy pattern where pressures exceed 175 psi (12.1 bars).

Exception No. 1: Standard weight pattern cast-iron fittings 2 in. (51 mm) in size and smaller shall be permitted where pressures do not exceed 300 psi (20.7 bars).

Exception No. 2: Standard weight pattern malleable iron fittings 6 in. (152 mm) in size and smaller shall be permitted where pressures do not exceed 300 psi (20.7 bars).

Exception No. 3: Fittings shall be permitted for system pressures up to the limits specified in their listings.

2-4.4* Couplings and Unions. Screwed unions shall not be used on pipe larger than 2 in. (51 mm). Couplings and unions of other than screwed-type shall be of types listed specifically for use in sprinkler systems.

2-4.5 Reducers and Bushings. A one-piece reducing fitting shall be used wherever a change is made in the size of the pipe.

Exception No. 1: Hexagonal or face bushings shall be permitted in reducing the size of openings of fittings when standard fittings of the required size are not available.

Exception No. 2: Hexagonal bushings as permitted in 4-13.18.1 are acceptable.

Table 2-4.1 Fittings Materials and Dimensions

Materials and Dimensions	Standard
Cast Iron	
Cast Iron Threaded Fittings, Class 125 and 250	ANSI B16.4
Cast Iron Pipe Flanges and Flanged Fittings	ANSI B16.1
Malleable Iron	
Malleable Iron Threaded Fittings, Class 150 and 300	ANSI B16.3
Steel	
Factory-made Wrought Steel Buttweld Fittings	ANSI B16.9
Buttwelding Ends for Pipe, Valves, Flanges, and Fittings	ANSI B16.25
Spec. for Piping Fittings of Wrought Carbon Steel and Alloy Steel for Moderate and Elevated Temperatures	ASTM A 234
Steel Pipe Flanges and Flanged Fittings	ANSI B16.5
Forged Steel Fittings, Socket Welded and Threaded	ANSI B16.11
Copper	
Wrought Copper and Bronze Solder-Joint Pressure Fittings	ANSI B16.22
Cast Bronze Solder-Joint Pressure Fittings	ANSI B16.18

Table 2-4.2 Specially Listed Fittings Materials and Dimensions

Materials and Dimensions	Standard
Chlorinated Polyvinyl Chloride (CPVC)	
Specification for Schedule 80 CPVC Threaded Fittings	ASTM F 437
Specification for Schedule 40 CPVC Socket-type Fittings	ASTM F 438
Specification for Schedule 80 CPVC Socket-type Fittings	ASTM F 439

2-5 Joining of Pipe and Fittings.

2-5.1 Threaded Pipe and Fittings.

2-5.1.1 All threaded pipe and fittings shall have threads cut to ANSI/ASME B1.20.1, *Pipe Threads, General Purpose.*

2-5.1.2* Steel pipe with wall thicknesses less than Schedule 30 [in sizes 8 in. (203 mm) and larger] or Schedule 40 [in sizes less than 8 in. (203 mm)] shall not be joined by threaded fittings.

Exception: A threaded assembly investigated for suitability in automatic sprinkler installations and listed for this service shall be permitted.

2-5.1.3 Joint compound or tape shall be applied only to male threads.

2-5.2* Welded Pipe and Fittings.

2-5.2.1 Welding methods that comply with all of the requirements of AWS D10.9, *Specification for Qualification of Welding Procedures and Welders for Piping and Tubing*, Level AR-3, are acceptable means of joining fire protection piping.

2-5.2.2* Sprinkler piping shall be shop welded.

Exception No 1: Welding of tabs for longitudinal earthquake bracing to in-place piping shall be permitted where the welding process is performed in accordance with NFPA 51B, Standard for Fire Prevention in Use of Cutting and Welding Processes.

Exception No. 2: Where the design specifications call for all or part of the piping to be welded in place, welding of sprinkler piping in place shall be permitted where the welding process is performed in accordance with NFPA 51B, and the mechanical fittings required by 4-13.15 and 4-13.22 are provided.

2-5.2.3 Fittings used to join pipe shall be listed fabricated fittings or manufactured in accordance with Table 2-4.1. Such fittings joined in conformance with a qualified welding procedure as set forth in this section are an acceptable product under this standard, provided that materials and wall thickness are compatible with other sections of this standard.

Exception: Fittings are not required where pipe ends are buttwelded.

2-5.2.4 No welding shall be performed if there is impingement of rain, snow, sleet, or high wind on the weld area of the pipe product.

2-5.2.5 When welding is performed:

(a)* Holes in piping for outlets shall be cut to the full inside diameter of fittings prior to welding in place of the fittings.

(b) Discs shall be retrieved.

(c) Openings cut into piping shall be smooth bore, and all internal slag and welding residue shall be removed.

(d) Fittings shall not penetrate the internal diameter of the piping.

(e) Steel plates shall not be welded to the ends of piping or fittings.

(f) Fittings shall not be modified.

(g) Nuts, clips, eye rods, angle brackets, or other fasteners shall not be welded to pipe or fittings.

Exception: Only tabs welded to pipe for longitudinal earthquake braces shall be permitted. (See 4-14.4.3.5.5.)

2-5.2.6 When the pipe size in a run of piping is reduced, a reducing fitting designed for that purpose shall be used.

2-5.2.7 Torch cutting and welding shall not be permitted as a means of modifying or repairing sprinkler systems.

2-5.2.8 Qualifications.

2-5.2.8.1 A welding procedure shall be prepared and qualified by the contractor or fabricator before any welding is done. Qualification of the welding procedure to be used and the performance of all welders and welding operators is required and shall meet or exceed the requirements of American Welding Society Standard AWS D10.9, Level AR-3.

2-5.2.8.2 Contractors or fabricators shall be responsible for all welding they produce. Each contractor or fabricator shall have available to the authority having jurisdiction an established written quality assurance procedure ensuring compliance with the requirements of 2-5.2.5.

2-5.2.9 Records.

2-5.2.9.1 Welders or welding machine operators shall, upon completion of each weld, stamp an imprint of their identification into the side of the pipe adjacent to the weld.

2-5.2.9.2 Contractors or fabricators shall maintain certified records, which shall be available to the authority having jurisdiction, of the procedures used and the welders or welding machine operators employed by them along with their welding identification imprints. Records shall show the date and the results of procedure and performance qualifications.

2-5.3 Groove Joining Methods.

2-5.3.1 Pipe joined with grooved fittings shall be joined by a listed combination of fittings, gaskets, and grooves. Grooves cut or rolled on pipe shall be dimensionally compatible with the fittings.

2-5.3.2 Grooved fittings including gaskets used on dry pipe systems shall be listed for dry pipe service.

2-5.4* Brazed and Soldered Joints. Joints for the connection of copper tube shall be brazed.

Exception No. 1: Solder joints shall be permitted for exposed wet pipe systems in Light Hazard Occupancies where the temperature classification of the installed sprinklers is ordinary or intermediate.

Exception No. 2: Solder joints shall be permitted for wet pipe systems in Light Hazard and Ordinary Hazard (Group 1) Occupancies where the piping is concealed, irrespective of sprinkler temperature ratings.

2-5.4.1* Soldering fluxes shall be in accordance with Table 2-3.1. Brazing fluxes, if used, shall not be of a highly corrosive type.

2-5.5 Other Types. Other joining methods investigated for suitability in automatic sprinkler installations and listed for this service shall be permitted where installed in accordance with their listing limitations, including installation instructions.

2-5.6 End Treatment. After cutting, pipe ends shall have burrs and fins removed.

2-5.6.1 Pipe used with listed fittings and its end treatment shall be in accordance with the fitting manufacturer's installation instructions and the fitting's listing.

2-6 Hangers.

2-6.1* General. Types of hangers shall be in accordance with the requirements of Section 2-6.

Exception: Hangers certified by a registered professional engineer to include all of the following shall be acceptable:

(a) Hangers are designed to support five times the weight of the water-filled pipe plus 250 lb (114 kg) at each point of piping support.

(b) These points of support are adequate to support the sprinkler system.

(c) The spacing between hangers shall not exceed the value given for the type of pipe as indicated in Table 4-14.2.2.1.

(d) Hanger components shall be ferrous.

Detailed calculations shall be submitted, when required by the reviewing authority, showing stresses developed in hangers, piping, and fittings, and safety factors allowed.

2-6.1.1 The components of hanger assemblies that directly attach to the pipe or to the building structure shall be listed.

Exception: Mild steel hangers formed from rods need not be listed.

2-6.1.2 Hangers and their components shall be ferrous.

Exception: Nonferrous components that have been proven by fire tests to be adequate for the hazard application, that are listed for this purpose, and that are in compliance with the other requirements of this section shall be acceptable.

2-6.1.3 Sprinkler piping shall be substantially supported from the building structure, which must support the added load of the water-filled pipe plus a minimum of 250 lb (114 kg) applied at the point of hanging.

Exception: Branch line hangers under metal deck shall be permitted only for the support of pipe 1 in. (25.4 mm) or smaller in size, by drilling or punching vertical members and using through bolts. The distance from the bottom of the bolt hole to the bottom of the vertical member shall be not less than $^3/_8$ in. (9.5 mm).

2-6.1.4 Where sprinkler piping is installed below ductwork, piping shall be supported from the building structure or from the ductwork supports, provided such supports are capable of handling both the load of the ductwork and the load specified in 2-6.1.3.

2-6.1.5* For trapeze hangers, the minimum size of steel angle or pipe span between purlins or joists shall be such that the available section modulus of the trapeze member from Table 2-6.1.5(b) equals or exceeds the section modulus required in Table 2-6.1.5(a).

Any other sizes or shapes giving equal or greater section modulus shall be acceptable. All angles shall be used with the longer leg vertical. The trapeze member shall be secured to prevent slippage. Where a pipe is suspended from a pipe trapeze of a diameter less than the diameter of the pipe being supported, ring, strap, or clevis hangers of the size corresponding to the suspended pipe shall be used on both ends.

2-6.1.6 The size of hanger rods and fasteners required to support the steel angle iron or pipe indicated in Table 2-6.1.5(a) shall comply with 2-6.4.

2-6.1.7* Sprinkler piping or hangers shall not be used to support nonsystem components.

2-6.2 Hangers in Concrete.

2-6.2.1 The use of listed inserts set in concrete to support hangers shall be permitted.

2-6.2.2 Listed expansion shields for supporting pipes under concrete construction shall be permitted to be used in a horizontal position in the sides of beams. In concrete having gravel or crushed stone aggregate, expansion shields shall be permitted to be used in the vertical position to support pipes 4 in. (102 mm) or less in diameter.

2-6.2.3 For the support of pipes 5 in. (127 mm) and larger, expansion shields, if used in the vertical position, shall alternate with hangers connected directly to the structural members, such as trusses and girders, or to the sides of concrete beams. In the absence of convenient structural members, pipes 5 in. (127 mm) and larger shall be permitted to be supported entirely by expansion shields in the vertical position, but spaced not over 10 ft (3 m) apart.

2-6.2.4 Expansion shields shall not be used in ceilings of gypsum or similar soft material. In cinder concrete, expansion shields shall not be used except on branch lines where they shall alternate with through-bolts or hangers attached to beams.

Table 2-6.1.5(a) Section Modulus Required for Trapeze Members (in.^{3})

Span of Trapeze	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.	3½ in.	4 in.	5 in.	6 in.	8 in.	10 in.
1 ft 6 in.	.08	.09	.09	.09	.10	.11	.12	.13	.15	.18	.24	.32
	.08	.09	.09	.10	.11	.12	.13	.15	.18	.22	.30	.41
2 ft 0 in.	.11	.12	.12	.13	.13	.15	.16	.17	.20	.24	.32	.43
	.11	.12	.12	.13	.15	.16	.18	.20	.24	.29	.40	.55
2 ft 6 in.	.14	.14	.15	.16	.17	.18	.20	.21	.25	.30	.40	.54
	.14	.15	.15	.16	.18	.21	.22	.25	.30	.36	.50	.68
3 ft 0 in.	.17	.17	.18	.19	.20	.22	.24	.26	.31	.36	.48	.65
	.17	.18	.18	.20	.22	.25	.27	.30	.36	.43	.60	.82
4 ft 0 in.	.22	.23	.24	.25	.27	.29	.32	.34	.41	.48	.64	.87
	.22	.24	.24	.26	.29	.33	.36	.40	.48	.58	.80	1.09
5 ft 0 in.	.28	.29	.30	.31	.34	.37	.40	.43	.51	.59	.80	1.08
	.28	.29	.30	.33	.37	.41	.45	.49	.60	.72	1.00	1.37
6 ft 0 in.	.33	.35	.36	.38	.41	.44	.48	.51	.61	.71	.97	1.30
	.34	.35	.36	.39	.44	.49	.54	.59	.72	.87	1.20	1.64
7 ft 0 in.	.39	.40	.41	.44	.47	.52	.55	.60	.71	.83	1.13	1.52
	.39	.41	.43	.46	.51	.58	.63	.69	.84	1.01	1.41	1.92
8 ft 0 in.	.44	.46	.47	.50	.54	.59	.63	.68	.81	.95	1.29	1.73
	.45	.47	.49	.52	.59	.66	.72	.79	.96	1.16	1.61	2.19
9 ft 0 in.	.50	.52	.53	.56	.61	.66	.71	.77	.92	1.07	1.45	1.95
	.50	.53	.55	.59	.66	.74	.81	.89	1.08	1.30	1.81	2.46
10 ft 0 in.	.56	.58	.59	.63	.68	.74	.79	.85	1.02	1.19	1.61	2.17
	.56	.59	.61	.65	.74	.82	.90	.99	1.20	1.44	2.01	2.74

For SI Units: 1 in = 25.4 mm; 1 ft = 0.3048 m.
Top values are for Schedule 10 pipe; bottom values are for Schedule 40 pipe.
NOTE: The table is based on a maximum allowable bending stress of 15 KSI and a midspan concentrated load from 15 ft (4.6 m) of water-filled pipe, plus 250 lb (114 kg)

2-6.2.5 Where expansion shields are used in the vertical position, the holes shall be drilled to provide uniform contact with the shield over its entire circumference. Depth of the hole shall not be less than specified for the type of shield used.

2-6.2.6 Holes for expansion shields in the side of concrete beams shall be above the center line of the beam or above the bottom reinforcement steel rods.

2-6.3 Powder-Driven Studs and Welding Studs.

2-6.3.1* Powder-driven studs, welding studs, and the tools used for installing these devices shall be listed. Pipe size, installation position, and construction material into which they are installed shall be in accordance with individual listings.

2-6.3.2 Powder-driven fasteners shall not be used to attach hangers to the building structure where the systems are required to be protected against earthquakes using a horizontal force factor exceeding 0.50 Wp.

Exception: Powder-driven fasteners shall be permitted where they are specifically listed for horizontal force factors in excess of 0.50 Wp.

2-6.3.3* Representative samples of concrete into which studs are to be driven shall be tested to determine that the studs will hold a minimum load of 750 lb (341 kg) for 2-in. (51-mm) or smaller pipe, 1000 lb (454 kg) for 2½-, 3-, or 3½-in. (64-, 76-, or 89-mm) pipe, and 1200 lb (545 kg) for 4- or 5-in. (102- or 127-mm) pipe.

2-6.3.4 Increaser couplings shall be attached directly to the powder-driven studs or welding studs.

2-6.3.5 Welding studs or other hanger parts shall not be attached by welding to steel less than U.S. Standard, 12 gauge.

2-6.4 Rods and "U" Hooks.

2-6.4.1 Hanger rod size shall be the same as that approved for use with the hanger assembly, and the size of rods shall not be less than that given in Table 2-6.4.1.

Exception: Rods of smaller diameter shall be permitted where the hanger assembly has been tested and listed by a testing laboratory and installed within the limits of pipe sizes expressed in individual listings. For rolled threads, the rod size shall not be less than the root diameter of the thread.

2-6.4.2 U-Hooks. The size of the rod material of U-hooks shall not be less than that given in Table 2-6.4.2. Drive screws shall be used only in a horizontal position as in the side of a beam in conjunction with U-hangers only.

2-6.4.3 The size of the rod material for eye rods shall not be less than specified in Table 2-6.4.3. Where eye rods are fastened to wood structural members, the eye rod shall be backed with a large flat washer bearing directly against the structural member, in addition to the lock washer.

2-6.4.3.1 Eye rods shall be secured with lock washers to prevent lateral motion.

Table 2-6.1.5(b) Available Section Moduli of Common Trapeze Hangers

Pipe	Modulus	Angles					Modulus
Schedule 10							
1 in.	.12	1½	×	1½	×	3/16	.10
1¼ in.	.19	2	×	2	×	⅛	.13
1½ in.	.26	2	×	1½	×	3/16	.18
2 in.	.42	2	×	2	×	3/16	.19
2½ in.	.69	2	×	2	×	¼	.25
3 in.	1.04	2½	×	1½	×	3/16	.28
3½ in.	1.38	2½	×	2	×	3/16	.29
4 in.	1.76	2	×	2	×	5/16	.30
5 in.	3.03	2½	×	2½	×	3/16	.30
6 in.	4.35	2	×	2	×	⅜	.35
		2½	×	2½	×	¼	.39
		3	×	2	×	3/16	.41
Schedule 40		3	×	2½	×	3/16	.43
1 in.	.13	3	×	3	×	3/16	.44
1¼ in.	.23	2½	×	2½	×	5/16	.48
1½ in.	.33	3	×	2	×	¼	.54
2 in.	.56	2½	×	2	×	⅜	.55
2½ in.	1.06	2½	×	2½	×	⅜	.57
3 in.	1.72	3	×	3	×	¼	.58
3½ in.	2.39	3	×	3	×	5/16	.71
4 in.	3.21	2½	×	2½	×	½	.72
5 in.	5.45	3½	×	2½	×	¼	.75
6 in.	8.50	3	×	2½	×	⅜	.81
		3	×	3	×	⅜	.83
		3½	×	2½	×	5/16	.93
		3	×	3	×	7/16	.95
		4	×	4	×	¼	1.05
		3	×	3	×	½	1.07
		4	×	3	×	5/16	1.23
		4	×	4	×	5/16	1.29
		4	×	3	×	⅜	1.46
		4	×	4	×	⅜	1.52
		5	×	3½	×	5/16	1.94
		4	×	4	×	½	1.97
		4	×	4	×	⅝	2.40
		4	×	4	×	¾	2.81
		6	×	4	×	⅜	3.32
		6	×	4	×	½	4.33
		6	×	4	×	¾	6.25
		6	×	6	×	1	8.57

For SI Units: 1 in. = 25.4 mm; 1 ft = 0.3048 m

Table 2-6.4.1 Hanger Rod Sizes

Pipe Size	Diam. of Rod in.	mm	Pipe Size	Diam. of Rod in.	mm
Up to and including 4 in.	⅜	9.5	5, 6, and 8 in.	½	12.7
			10 and 12 in.	⅝	15.9

For SI Units: 1 in. = 25.4 mm

Table 2-6.4.2 U-Hook Rod Sizes

Pipe Size	Hook Material Diameter in.	mm
Up to 2 in.	5/16	7.9
2½ to 6 in.	⅜	9.5
8 in.	½	12.7

For SI Units: 1 in. = 25.4 mm.

Table 2-6.4.3 Eye Rod Sizes

Pipe Size	Diameter of Rod With Bent Eye in.	mm	With Welded Eye in.	mm
Up to 4 in.	⅜	9.5	⅜	9.5
5 to 6 in.	½	12.7	½	12.7
8 in.	¾	19.1	½	12.7

For SI Units: 1 in. = 25.4 mm.

2-6.4.4 Threaded sections of rods shall not be formed or bent.

2-6.4.5 Screws. For ceiling flanges and U-hooks, screw dimensions shall not be less than those given in Table 2-6.4.5.

Exception: When the thickness of planking and thickness of flange do not permit the use of screws 2 in. (51 mm) long, screws 1¾ in. (44 mm) long shall be permitted with hangers spaced not over 10 ft (3 m) apart. When the thickness of beams or joists does not permit the use of screws 2 ½ in. (64 mm) long, screws 2 in. (51 mm) long shall be permitted with hangers spaced not over 10 ft (3 m) apart.

Table 2-6.4.5 Screw Dimensions for Ceiling Flanges and U-Hooks

Pipe Size	2 Screw Flanges
Up to 2 in.	Wood screw No. 18 × 1½ in. or Lag screw 5/16 in. × 1½ in.
Pipe Size	**3 Screw Flanges**
Up to 2 in.	Wood screw No. 18 × 1½ in.
2½ in., 3 in., 3½ in.	Lag screw ⅜ in. × 2 in.
4 in., 5 in., 6 in.	Lag screw ½ in. × 2 in.
8 in.	Lag screw ⅝ in. × 2 in.
Pipe Size	**4 Screw Flanges**
Up to 2 in.	Wood screw No. 18 × 1½ in.
2½ in., 3 in., 3½ in.	Lag screw ⅜ in. × 1½ in.
4 in., 5 in., 6 in.	Lag screw ½ in. × 2 in.
8 in.	Lag screw ⅝ in. × 2 in.
Pipe Size	**U-Hooks Flanges**
Up to 2 in.	Drive screw No. 16 × 2 in.
2½ in., 3 in., 3½ in.	Lag screw ⅜ in. × 2½ in.
4 in., 5 in., 6 in.	Lag screw ½ in. × 3 in.
8 in.	Lag screw ⅝ in. × 3 in.

For SI Units: 1 in. = 25.4 mm

2-6.4.6 The size bolt or lag (coach) screw used with an eye rod or flange on the side of the beam shall not be less than specified in Table 2-6.4.6.

Exception: Where the thickness of beams or joists does not permit the use of screws 2 ½ in. (64 mm) long, screws 2 in. (51 mm) long shall be permitted with hangers spaced not over 10 ft (3 m) apart.

2-6.4.7 Wood screws shall be installed with a screwdriver. Nails are not acceptable for fastening hangers.

2-6.4.8 Screws in the side of a timber or joist shall be not less than 2 ½ in. (64 mm) from the lower edge where supporting branch lines and not less than 3 in. (76 mm) where supporting main lines.

Exception: This requirement shall not apply to 2-in. (51-mm) or thicker nailing strips resting on top of steel beams.

Table 2-6.4.6 Minimum Bolt or Lag Screw Sizes

Size of Pipe	Size of Bolt or Lag Screw		Length of Lag Screw Used with Wood Beams	
	in.	mm	in.	mm
Up to and including 2 in.	3/8	9.5	2 1/2	64
2 1/2 to 6 in. (inclusive)	1/2	12.7	3	76
8 in.	5/8	15.9	3	76

For SI Units: 1 in. = 25.4 mm.

2-6.4.9 The minimum plank thickness and the minimum width of the lower face of beams or joists in which lag screw rods are used shall be as given in Table 2-6.4.9.

Table 2-6.4.9 Minimum Plank Thicknesses and Beam or Joist Widths

Pipe Size	Nominal Plank Thickness		Nominal Width of Beam or Joist Face	
	in.	mm	in.	mm
Up to 2 in.	3	76	2	51
2 1/2 to 3 1/2 in.	4	102	2	51
4 in. and 5 in.	4	102	3	76
6 in.	4	102	4	102

For SI Units: 1 in. = 25.4 mm.

2-6.4.10 Lag screw rods shall not be used for support of pipes larger than 6 in. (152 mm). All holes for lag screw rods shall be predrilled 1/8 in. (3.2 mm) less in diameter than the maximum root diameter of the lag screw thread.

2-7 Valves.

2-7.1 Types of Valves to Be Used.

2-7.1.1 All valves controlling connections to water supplies and to supply pipes to sprinklers shall be listed indicating valves. Such valves shall not close in less than 5 sec when operated at maximum possible speed from the fully open position.

Exception No. 1: A listed underground gate valve equipped with a listed indicator post shall be permitted.

Exception No. 2: A listed water control valve assembly with a reliable position indication connected to a remote supervisory station shall be permitted.

Exception No. 3: A nonindicating valve, such as an underground gate valve with approved roadway box complete with T-wrench, accepted by the authority having jurisdiction, shall be permitted.

2-7.1.2 When water pressures exceed 175 psi (12.1 bars), valves shall be used in accordance with their pressure ratings.

2-7.1.3 Wafer-type valves with components that extend beyond the valve body shall be installed in a manner that does not interfere with the operation of any system components.

2-7.2 Drain Valves and Test Valves. Drain valves and test valves shall be approved.

2-7.3* Identification of Valves. All control, drain, and test connection valves shall be provided with permanently marked weather-proof metal or rigid plastic identification signs. The sign shall be secured with corrosion-resistant wire, chain, or other approved means.

2-8 Fire Department Connections.

2-8.1 The fire department connection(s) shall be internal threaded swivel fitting(s) having threads compatible with those of the local fire department.

Exception: The use of threadless couplings shall be permitted where required by the authority having jurisdiction and where listed for such use.

2-8.2 Connections shall be equipped with listed plugs or caps.

2-9 Waterflow Alarms.

2-9.1 Waterflow alarm apparatus shall be listed for the service and so constructed and installed that any flow of water from a sprinkler system equal to or greater than that from a single automatic sprinkler of the smallest orifice size installed on the system will result in an audible alarm on the premises within 5 min after such flow begins and until such flow stops.

2-9.2 Waterflow Detecting Devices.

2-9.2.1 Wet Pipe Systems. The alarm apparatus for a wet pipe system shall consist of a listed alarm check valve or other listed waterflow detecting alarm device with the necessary attachments required to give an alarm.

2-9.2.2 Dry Pipe Systems. The alarm apparatus for a dry pipe system shall consist of listed alarm attachments to the dry pipe valve. When a dry pipe valve is located on the system side of an alarm valve, connection of the actuating device of the alarms for the dry pipe valve to the alarms on the wet pipe system is permitted.

2-9.2.3 Preaction and Deluge Systems. The alarm apparatus for deluge and preaction systems shall consist of alarms actuated independently by the detection system and the flow of water.

2-9.2.4* Paddle-type waterflow alarm indicators shall be installed in wet systems only.

2-9.3 Attachments — General.

2-9.3.1* An alarm unit shall include a listed mechanical alarm, horn, or siren or a listed electric gong, bell, speaker, horn, or siren.

2-9.3.2* Outdoor water motor operated or electrically operated bells shall be weatherroofed and guarded.

2-9.4 All piping to water motor operated devices shall be galvanized or brass or other corrosion-resistant material acceptable under this standard and of a size not less than 3/4 in. (19 mm).

2-9.5* Attachments — Electrically Operated.

2-9.5.1 Electrically operated alarm attachments forming part of an auxiliary, central station, local protective, proprietary, or remote station signaling system shall be installed in accordance with NFPA 72, *National Fire Alarm Code*.

Exception: Sprinkler waterflow alarm systems that are not part of a required protective signaling system need not be supervised and shall be installed in accordance with NFPA 70, National Electrical Code®, Article 760.

2-9.5.2 Outdoor electric alarm devices shall be listed for outdoor use.

2-9.6 Drains from alarm devices shall be so arranged that there will be no overflowing at the alarm apparatus, at domestic connections, or elsewhere with the sprinkler drains wide open and under system pressure. *(See 4-14.3.6.1.)*

Chapter 3 System Requirements

3-1 Wet Pipe Systems.

3-1.1 Pressure Gauges. A listed pressure gauge conforming to 4-15.3.2 shall be installed in each system riser. Pressure gauges shall be installed above and below each alarm check valve where such devices are present.

3-1.2 Relief Valves. A gridded wet pipe system shall be provided with a relief valve not less than ¼ in. (6.4 mm) in size set to operate at pressures not greater than 175 psi (12.1 bars).

Exception No. 1: When the maximum system pressure exceeds 165 psi (11.4 bars), the relief valve shall operate at 10 psi (0.7 bars) in excess of the maximum system pressure.

Exception No. 2: Where auxiliary air reservoirs are installed to absorb pressure increases, a relief valve shall not be required.

3-1.3 Auxiliary Systems. A wet pipe system shall be permitted to supply an auxiliary dry pipe, preaction, or deluge system, provided the water supply is adequate.

3-2* Dry Pipe Systems.

3-2.1 Pressure Gauges. Listed pressure gauges conforming with 4-15.3.2 shall be connected:

(a) On the water side and air side of the dry pipe valve,

(b) At the air pump supplying the air receiver where one is provided,

(c) At the air receiver where one is provided,

(d) In each independent pipe from air supply to dry pipe system, and

(e) At exhausters and accelerators.

3-2.2 Upright Sprinklers. Only upright sprinklers shall be installed on dry pipe systems.

Exception No. 1: Listed dry sprinklers shall be permitted.*

Exception No. 2: Pendent sprinkles installed on return bends shall be permitted where both the sprinklers and the return bends are located in a heated area.

Exception No. 3: Horizontal sidewall sprinklers, installed so that water is not trapped, shall be permitted.

3-2.3* Size of Systems.

3-2.3.1* Volume Limitations. Not more than 750 gal (2839 L) system capacity shall be controlled by one dry pipe valve.

Exception: Piping volume shall be permitted to exceed 750 gal (2839 L) for nongridded systems if the system design is such that water is delivered to the system test connection in not more than 60 sec, starting at the normal air pressure on the system and at the time of fully opened inspection test connection.

3-2.3.2 Gridded dry pipe systems shall not be installed. *(See 4-14.3.5.3.3.)*

3-2.4 Quick-Opening Devices.

3-2.4.1 Dry pipe valves shall be provided with a listed quick-opening device where system capacity exceeds 500 gal (1893 L).

Exception: A quick-opening device shall not be required if the requirements of 3-2.3.1 Exception can be met without such a device.

3-2.4.2 The quick-opening device shall be located as close as practical to the dry pipe valve. To protect the restriction orifice and other operating parts of the quick-opening device against submergence, the connection to the riser shall be above the point at which water (priming water and back drainage) is expected when the dry pipe valve and quick-opening device are set, except where design features of the particular quick-opening device make these requirements unnecessary.

3-2.4.3 A soft disc globe or angle valve shall be installed in the connection between the dry pipe sprinkler riser and the quick-opening device.

3-2.4.4 A check valve shall be installed between the quick-opening device and the intermediate chamber of the dry pipe valve. If the quick-opening device requires pressure feedback from the intermediate chamber, a valve type that will clearly indicate whether it is opened or closed shall be permitted in place of that check valve. This valve shall be constructed so that it may be locked or sealed in the open position.

3-2.4.5 A listed antiflooding device shall be installed in the connection between the dry pipe sprinkler riser and the quick-opening device.

Exception: Where the quick-opening device has built-in antiflooding design features.

3-2.5* Location and Protection of Dry Pipe Valve.

3-2.5.1 The dry pipe valve and supply pipe shall be protected against freezing and mechanical injury.

3-2.5.2 Valve rooms shall be lighted and heated. The source of heat shall be of a permanently installed type. Heat tape shall not be used in lieu of heated valve enclosures to protect the dry pipe valve and supply pipe against freezing.

3-2.5.3 The supply for the sprinkler in the dry pipe valve enclosure shall be from the dry side of the system.

3-2.5.4 Protection against accumulation of water above the clapper shall be provided for a low differential dry pipe valve. An automatic high water level signaling device or an automatic drain device is acceptable.

3-2.6 Air Pressure and Supply.

3-2.6.1 Maintenance of Air Pressure. Air or nitrogen pressure shall be maintained on dry pipe systems throughout the year.

3-2.6.2* Air Supply. The compressed air supply shall be from a source available at all times and having a capacity capable of restoring normal air pressure in the system within 30 min.

Exception: In refrigerated spaces maintained below 5°F (−15°C), normal system air pressure shall be restored within 60 min.

3-2.6.3 Air Filling Connection. The connection pipe from the air compressor shall not be less than 1/2 in. (13 mm) in diameter and shall enter the system above the priming water level of the dry pipe valve. A check valve shall be installed in this air line, and a shutoff valve of the renewable disc type shall be installed on the supply side of this check valve and shall remain closed unless filling the system.

3-2.6.4 Relief Valve. A listed relief valve shall be provided between the compressor and controlling valve, set to relieve at a pressure 5 psi (0.3 bars) in excess of maximum air pressure carried in the system.

3-2.6.5 Shop Air Supply. Where the air supply is taken from a shop system having a normal pressure greater than that required for dry pipe systems and an automatic air maintenance device is not used, the relief valve shall be installed between two control valves in the air line, and a small air cock, which is normally left open, shall be installed in the fitting below the relief valve. (*See Figure 3-2.6.5.*)

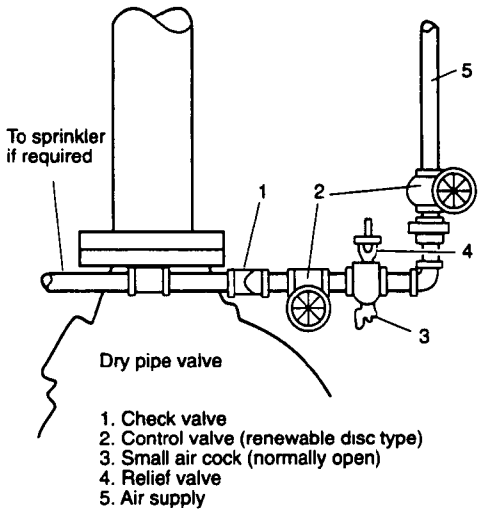


Figure 3-2.6.5 Air supply from shop system.

3-2.6.6 Automatic Air Compressor. Where a dry pipe system is supplied by an automatic air compressor or plant air system, any device or apparatus used for automatic maintenance of air pressure shall be of a type specifically listed for such service and capable of maintaining the required air pressure on the dry pipe system. Automatic air supply to more than one dry pipe system shall be connected to enable individual maintenance of air pressure in each system. A check valve or other positive backflow prevention device shall be installed in the air supply to each system to prevent air- or waterflow from one system to another.

3-2.6.7 System Air Pressure. The system air pressure shall be maintained in accordance with the instruction sheet furnished with the dry pipe valve, or 20 psi (1.4 bars) in excess of the calculated trip pressure of the dry pipe valve, based on the highest normal water pressure of the system supply. The permitted rate of air leakage shall be as specified in 8-2.3.

3-2.6.8 Nitrogen. Where used, nitrogen shall be introduced through a pressure regulator set to maintain system pressure in accordance with 3-2.6.7.

3-3 Preaction Systems and Deluge Systems.

3-3.1* General.

3-3.1.1 All components of pneumatic, hydraulic, or electrical systems shall be compatible.

3-3.1.2 The automatic water control valve shall be provided with hydraulic, pneumatic, or mechanical manual means for operation that is independent of detection devices and of the sprinklers.

3-3.1.3 Pressure Gauges. Listed pressure gauges conforming with 4-15.3.2 shall be installed as follows:

(a) Above and below preaction valve and below deluge valve.

(b) On air supply to preaction and deluge valves.

3-3.1.4 A supply of spare fusible elements for heat-responsive devices, not less than two of each temperature rating, shall be maintained on the premises for replacement purposes.

3-3.1.5 Hydraulic release systems shall be designed and installed in accordance with manufacturer's requirements and listing for height limitations above deluge valves or deluge valve actuators to prevent water column.

3-3.1.6 Location and Spacing of Detection Devices. Spacing of detection devices, including automatic sprinklers used as detectors, shall be in accordance with their listing and manufacturer's specifications.

3-3.1.7 Devices for Test Purposes and Testing Apparatus.

3-3.1.7.1 Where detection devices installed in circuits are located where not readily-accessible, an additional detection device shall be provided on each circuit for test purposes at an accessible location and shall be connected to the circuit at a point that will assure a proper test of the circuit.

3-3.1.7.2 Testing apparatus capable of producing the heat or impulse necessary to operate any normal detection device shall be furnished to the owner of the property with each installation. Where explosive vapors or materials are present, hot water, steam, or other methods of testing not involving an ignition source shall be used.

3-3.1.8 Location and Protection of System Water Control Valves.

3-3.1.8.1 System water control valves and supply pipes shall be protected against freezing and mechanical injury.

3-3.1.8.2 Valve rooms shall be lighted and heated. The source of heat shall be of a permanently installed type. Heat tape shall not be used in lieu of heated valve enclosure rooms to protect preaction and deluge valves and supply pipe against freezing.

3-3.2 Preaction Systems.

3-3.2.1 Preaction systems shall be one of the types described in (a) through (c) below.

(a) *Single Interlock System.* Systems that admit water to sprinkler piping upon operation of detection devices.

(b) *Non-Interlock System.* Systems that admit water to sprinkler piping upon operation of detection devices or automatic sprinklers.

(c) *Double Interlock System.* Systems that admit water to sprinkler piping upon operation of both detection devices and automatic sprinklers.

3-3.2.2 Size of Systems. Not more than 1000 automatic sprinklers shall be controlled by any one preaction valve.

Exception: For preaction system types described in 3-3.2.1(c), system volume shall not exceed 750 gal (2839 L) controlled by one preaction valve unless the system is designed to deliver water to the system test connection in not more than 60 sec, starting at the normal air pressure on the system with the detection system operated and at the time of fully opened inspection test connection. Air pressure and supply shall comply with 3-2.6.

3-3.2.3 Supervision. Sprinkler piping and fire detection devices shall be automatically supervised where there are more than 20 sprinklers on the system. All preaction system types described in 3-3.2.1(b) and (c) shall maintain a minimum supervising air pressure of 7 psi (0.5 bars.)

3-3.2.4 Upright Sprinklers. Only upright sprinklers shall be installed on preaction systems.

Exception No. 1: Listed dry sprinklers shall be permitted.*

Exception No. 2: Pendent sprinklers installed on return bends shall be permitted where both the sprinklers and the return bends are located in a heated area.

Exception No. 3: Horizontal sidewall sprinklers, installed so that water is not trapped, shall be permitted.

3-3.2.5 System Configuration. Preaction systems of the type described in 3-3.2.1(c) shall not be gridded.

3-3.3* Deluge Systems.

3-3.3.1 The detection devices or systems shall be automatically supervised.

3-3.3.2 Deluge systems shall be hydraulically calculated.

3-4 Combined Dry Pipe and Preaction Systems.

3-4.1* General.

3-4.1.1* Combined automatic dry pipe and preaction systems shall be so constructed that failure of the detection system shall not prevent the system from functioning as a conventional automatic dry pipe system.

3-4.1.2 Combined automatic dry pipe and preaction systems shall be so constructed that failure of the dry pipe system of automatic sprinklers shall not prevent the detection system from properly functioning as an automatic fire alarm system.

3-4.1.3 Provisions shall be made for the manual operation of the detection system at locations requiring not more than 200 ft (61 m) of travel.

3-4.1.4 Upright Sprinklers. Only upright sprinklers shall be installed on combined dry pipe and preaction systems.

Exception No. 1: Listed dry sprinklers shall be permitted.*

Exception No. 2: Pendent sprinklers installed on return bends shall be permitted where both sprinklers and return bends are located in a heated area.

Exception No. 3: Horizontal sidewall sprinklers, installed so that water is not trapped, shall be permitted.

3-4.2 Dry Pipe Valves in Combined Systems.

3-4.2.1 Where the system consists of more than 600 sprinklers or has more than 275 sprinklers in any fire area, the entire system shall be controlled through two 6-in. (152-mm) dry pipe valves connected in parallel and shall feed into a common feed main. These valves shall be checked against each other. (*See Figure 3-4.2.*)

3-4.2.2 Each dry pipe valve shall be provided with a listed tripping device actuated by the detection system. Dry pipe valves shall be cross-connected through a 1-in. (25.4-mm) pipe connection to permit simultaneous tripping of both dry pipe valves. This 1-in. (25.4-mm) pipe connection shall be equipped with an indicating valve so that either dry pipe valve can be shut off and worked on while the other remains in service.

3-4.2.3 The check valves between the dry pipe valves and the common feed main shall be equipped with $^1/_2$-in. (13-mm) bypasses so that a loss of air from leakage in the trimmings of a dry pipe valve will not cause the valve to trip until the pressure in the feed main is reduced to the tripping point. An indicating valve shall be installed in each of these bypasses so that either dry pipe valve can be completely isolated from the main riser or feed main and from the other dry pipe valve.

3-4.2.4 Each combined dry pipe and preaction system shall be provided with listed quick-opening devices at the dry pipe valves.

3-4.3* Air Exhaust Valves. One or more listed air exhaust valves of 2-in. (51-mm) or larger size controlled by operation of a fire detection system shall be installed at the end of the common feed main. These air exhaust valves shall have soft-seated globe or angle valves in their intakes; also, approved strainers shall be installed between these globe valves and the air exhaust valves.

3-4.4 Subdivision of System Using Check Valves.

3-4.4.1 Where more than 275 sprinklers are required in a single fire area, the system shall be divided into sections of 275 sprinklers or less by means of check valves. If the system is installed in more than one fire area or story, not more than 600 sprinklers shall be supplied through any one check valve. Each section shall have a $1^1/_4$-in. (33-mm) drain on the system side of each check valve supplemented by a dry pipe system auxiliary drain.

3-4.4.2 Section drain lines and dry pipe system auxiliary drains shall be located in heated areas or inside of heated cabinets to enclose drain valves and auxiliary drains for each section.

3-4.4.3 Air exhaust valves at the end of a feed main and associated check valves shall be protected against freezing.

3-4.5 Time Limitation. The sprinkler system shall be so constructed and the number of sprinklers controlled shall be so limited that water shall reach the farthest sprinkler within a period of time not exceeding 1 min for each 400 ft (122 m) of common feed main from the time the heat-responsive system operates. Maximum time permitted shall not exceed 3 min.

3-4.6 System Test Connection. The end section shall have a system test connection as required for dry pipe systems.

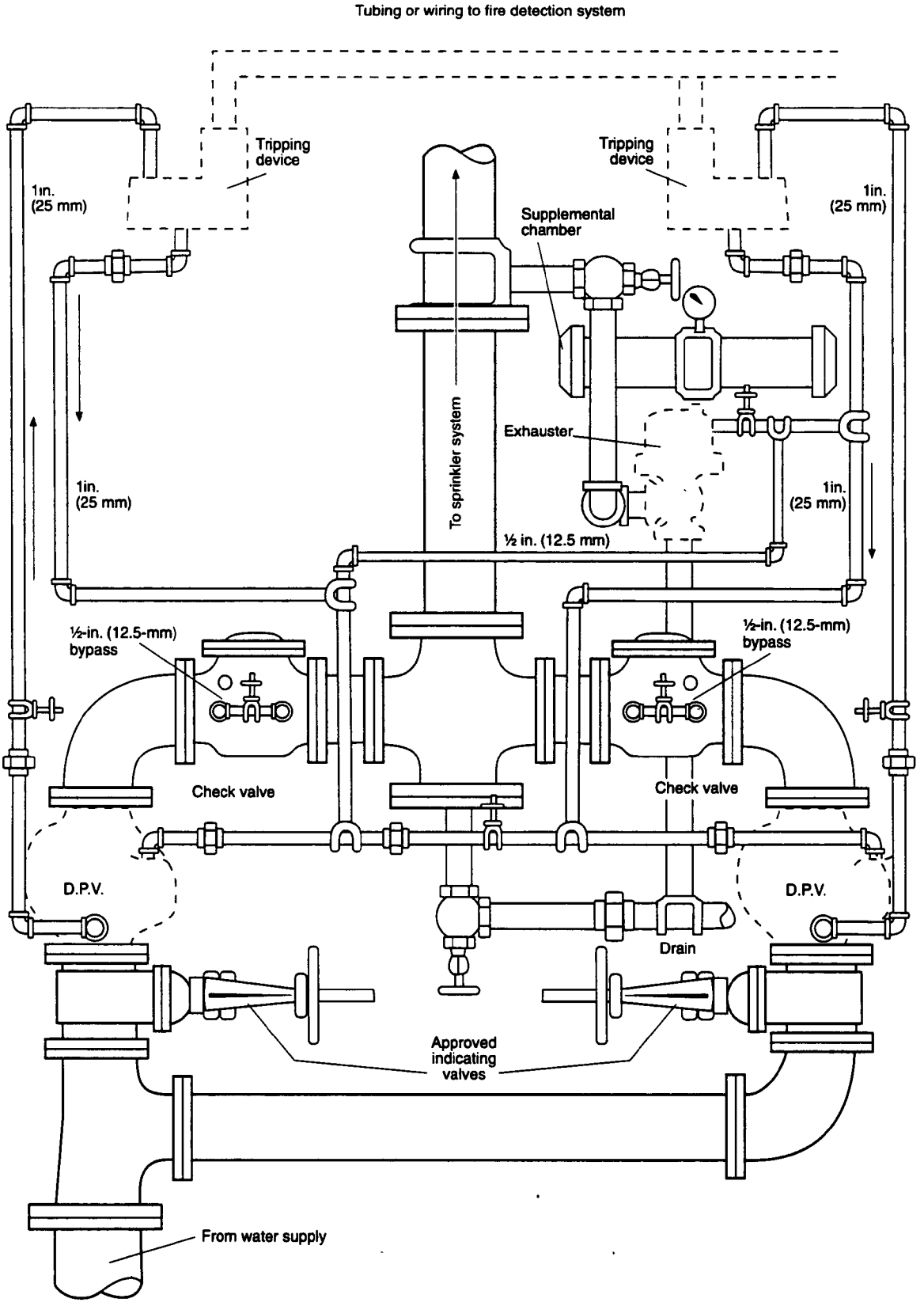


Figure 3-4.2 Header for dry pipe valves installed in parallel for combined systems; standard trimmings not shown. Arrows indicate direction of fluid flow.

3-5 Antifreeze Systems.

3-5.1* Where Used. The use of antifreeze solutions shall be in conformity with state and local health regulations.

3-5.2* Antifreeze Solutions.

3-5.2.1 Where sprinkler systems are supplied by potable water connections, the use of antifreeze solutions other than water solutions of pure glycerine (C.P. or U.S.P. 96.5 percent grade) or propylene glycol shall not be permitted. Suitable glycerine-water and propylene glycol-water mixtures are shown in Table 3-5.2.1.

Table 3-5.2.1 Antifreeze Solutions to Be Used if Potable Water Is Connected to Sprinklers

Material	Solution (by Volume)	Specific Gravity at 60°F (15.6°C)	Freezing Point °F	Freezing Point °C
Glycerine	50% Water	1.133	−15	−26.1
C.P. or U.S.P. Grade*	40% Water	1.151	−22	−30.0
	30% Water	1.165	−40	−40.0
Hydrometer Scale 1.000 to 1.200				
Propylene Glycol	70% Water	1.027	+9	−12.8
	60% Water	1.034	−6	−21.1
	50% Water	1.041	−26	−32.2
	40% Water	1.045	−60	−51.1
Hydrometer Scale 1.000 to 1.200 (Subdivisions 0.002)				

*C.P.—Chemically Pure. U.S.P.—United States Pharmacopoeia 96.5%.

3-5.2.2 If potable water is not connected to sprinklers, the commercially available materials indicated in Table 3-5.2.2 shall be permitted for use in antifreeze solutions.

3-5.2.3* An antifreeze solution shall be prepared with a freezing point below the expected minimum temperature for the locality. The specific gravity of the prepared solution shall be checked by a hydrometer with suitable scale or refractometer having a scale calibrated for the antifreeze solution involved. [*See Figures 3-5.2.3(a) and (b).*]

3-5.3 Arrangement of Supply Piping and Valves. A control valve and two small solution test valves shall be provided as illustrated in Figures 3-5.3(a) and 3-5.3(b).

3-5.3.1* Where sprinklers are above the water/antifreeze interface, a check valve with a 1/32-in. (0.8-mm) hole in the clapper shall be provided. In most cases, this necessitates the use of a 5-ft (1.5-m) drop pipe or U-loop as illustrated in Figure 3-5.3(a).

Exception: Where the connection between the antifreeze system and the wet pipe system incorporates a backflow prevention device, piping and valves shall be arranged as illustrated in Figure 3-5.3(b). An expansion chamber of appropriate size and pre-charged air pressure shall be provided to compensate for thermal expansion of the antifreeze solution as illustrated in Figure 3-5.3(b).

3-5.3.2 Where a backflow prevention device is provided between the antifreeze system and the wet pipe system, piping and valves shall be arranged as illustrated in Figure 3-5.3(b). An expansion chamber of appropriate size shall be provided to compensate for thermal expansion of the antifreeze solution as illustrated in Figure 3-5.3(b).

Table 3-5.2.2 Antifreeze Solution to Be Used if Nonpotable Water Is Connected to Sprinklers

Material	Solution (by Volume)	Specific Gravity at 60°F (15.6°C)	Freezing Point °F	Freezing Point °C
Glycerine	If glycerine is used, see Table 3-5.2.1.			
Diethylene Glycol	50% Water	1.078	−13	−25.0
	45% Water	1.081	−27	−32.8
	40% Water	1.086	−42	−41.1
Hydrometer Scale 1.000 to 1.120 (Subdivisions 0.002)				
Ethylene Glycol	61% Water	1.056	−10	−23.3
	56% Water	1.063	−20	−28.9
	51% Water	1.069	−30	−34.4
	47% Water	1.073	−40	−40.0
Hydrometer Scale 1.000 to 1.120 (Subdivisions 0.002)				
Propylene Glycol	If propylene glycol is used, see Table 3-5.2.1.			
Calcium Chloride 80% "Flake"	lb $CaCl_2$ per gal of Water			
Fire Protection Grade†	2.83	1.183	0	−17.8
Add corrosion inhibitor	3.38	1.212	−10	−23.3
of sodium bichromate	3.89	1.237	−20	−28.9
1/4 oz per gal water	4.37	1.258	−30	−34.4
	4.73	1.274	−40	−40.0
	4.93	1.283	−50	−45.6

† Free from magnesium chloride and other impurities.

3-6 Automatic Sprinkler Systems with Nonfire Protection Connections.

3-6.1 Circulating Closed-Loop Systems.

3-6.1.1 System Components.

3-6.1.1.1 A circulating closed-loop system is primarily a sprinkler system and shall comply with all provisions of this standard such as those for control valves, area limitations of a system, alarms, fire department connections, sprinkler spacing, etc.

Exception: Items as specifically detailed within 3-6.1.

3-6.1.1.2 Piping, fittings, valves, and pipe hangers shall meet the requirements specified in Chapter 2.

3-6.1.1.3 A dielectric fitting shall be installed in the junction where dissimilar piping materials are joined, e.g., copper to steel.

Exception: Dielectric fittings are not required in the junction where sprinklers are connected to piping.

3-6.1.1.4 It is not required that other auxiliary devices be listed for sprinkler service; however, these devices, such as pumps, circulating pumps, heat exchangers, radiators, and luminaries, shall be pressure rated at 175 or 300 psi (12.1 or 20.7 bars) (rupture pressure of 5 times rated water working pressure) to match the required rating of sprinkler system components.

3-6.1.1.5 Auxiliary devices shall incorporate materials of construction and be so constructed that they will maintain their physical integrity under fire conditions to avoid impairment to the fire protection system.

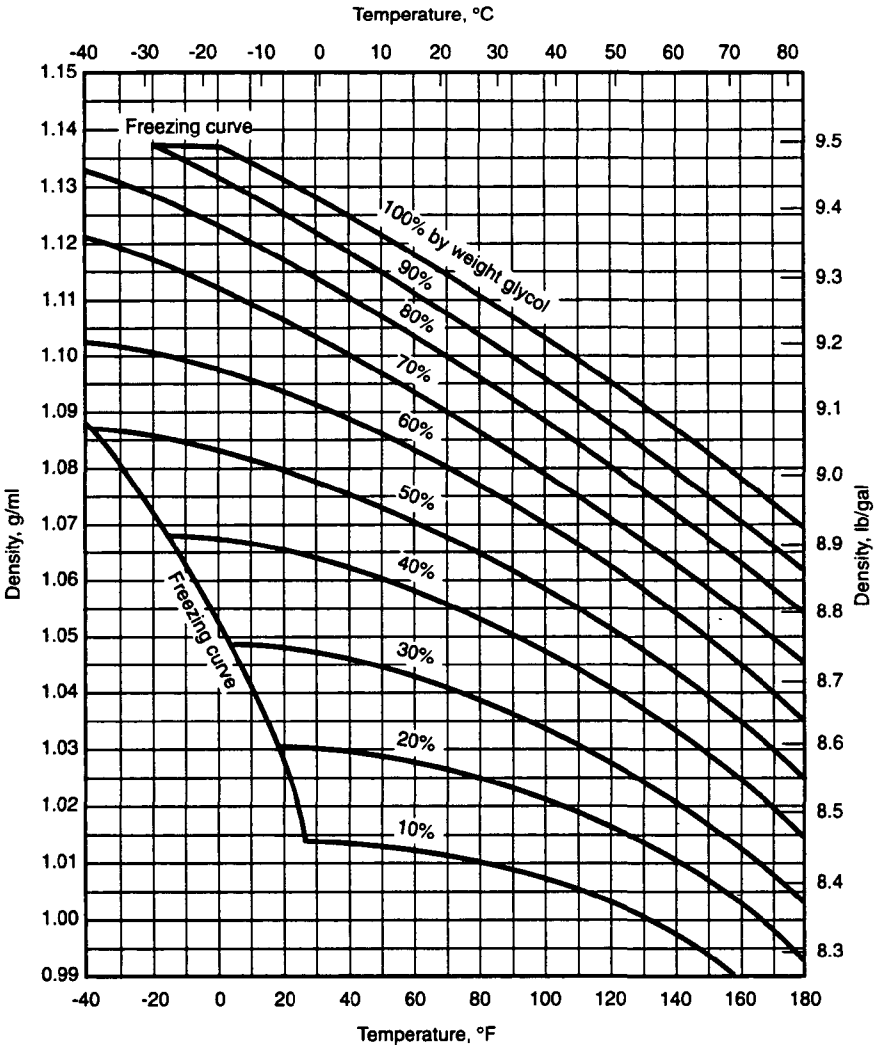


Figure 3-5.2.3(a) Densities of aqueous ethylene glycol solutions (percent by weight).

3-6.1.1.6 Auxiliary devices, where hung from the building structure, shall be supported independently from the sprinkler portion of the system, following recognized engineering practices.

3-6.1.2* Hydraulic Characteristics. Piping systems for attached heating and cooling equipment shall have auxiliary pumps or an arrangement made to return water to the piping system in order to assure the following:

(a) Water for sprinklers shall not be required to pass through heating or cooling equipment. At least one direct path shall exist for waterflow from the sprinkler water supply to every sprinkler. Pipe sizing in the direct path shall be in accordance with design requirements of this standard.

(b) No portions of the sprinkler piping shall have less than the sprinkler system design pressure regardless of the mode of operation of the attached heating or cooling equipment.

(c) There shall be no loss or outflow of water from the system due to or resulting from the operation of heating or cooling equipment.

(d) Shutoff valves and a means of drainage shall be provided on piping to heating or cooling equipment at all points of connection to sprinkler piping and shall be installed in such a manner as to make possible repair or removal of any auxiliary component without impairing the serviceability and response to the sprinkler system. All auxiliary components, including the strainer, shall be installed on the auxiliary equipment side of the shutoff valves.

3-6.1.3 Water Temperature.

3-6.1.3.1 Maximum. In no case shall maximum water temperature flowing through the sprinkler portion of the system exceed 120°F (49°C). Protective control devices listed for this purpose shall be installed to shut down heating or cooling systems when temperature of water flowing through the sprinkler portion of the system exceeds 120°F (49°C). When water temperature exceeds 100°F (37.8°C), intermediate or higher temperature rated sprinklers shall be used.

3-6.1.3.2 Minimum. Precautions shall be taken to ensure that temperatures below 40°F (4°C) are not permitted.

3-6.1.4 Obstruction to Discharge. Automatic sprinklers shall not be obstructed by auxiliary devices, piping, insulation, etc., from detecting fire or from proper distribution of water.

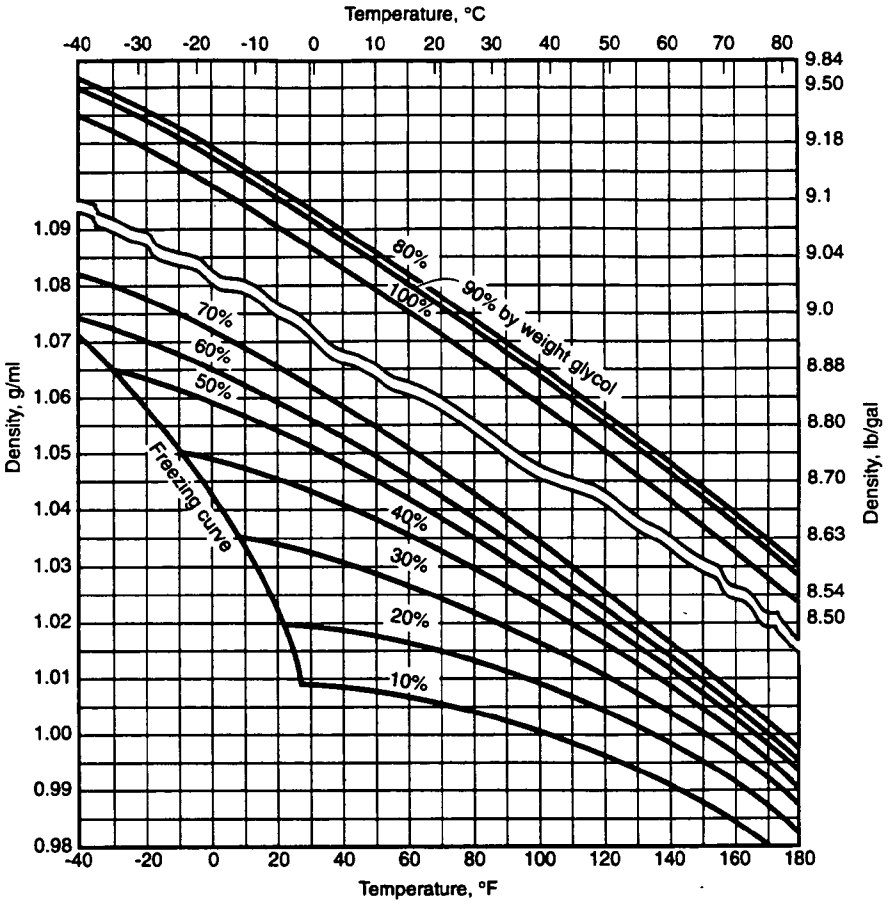
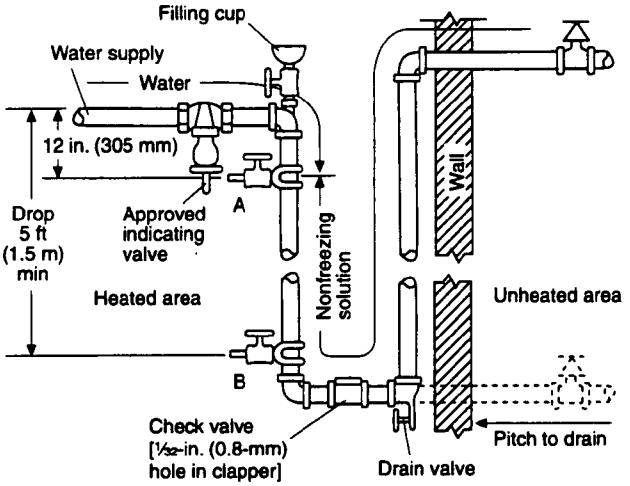


Figure 3-5.2.3(b) Densities of aqueous propylene glycol solutions (percent by weight).



Note 1: Check valve shall be permitted to be omitted where sprinklers are below the level of valve A.
Note 2: The 1/32-in. (0.8-mm) hole in the check valve clapper is needed to allow for expansion of the solution during a temperature rise, thus preventing damage to sprinklers.

Figure 3-5.3(a) Arrangement of supply piping and valves.

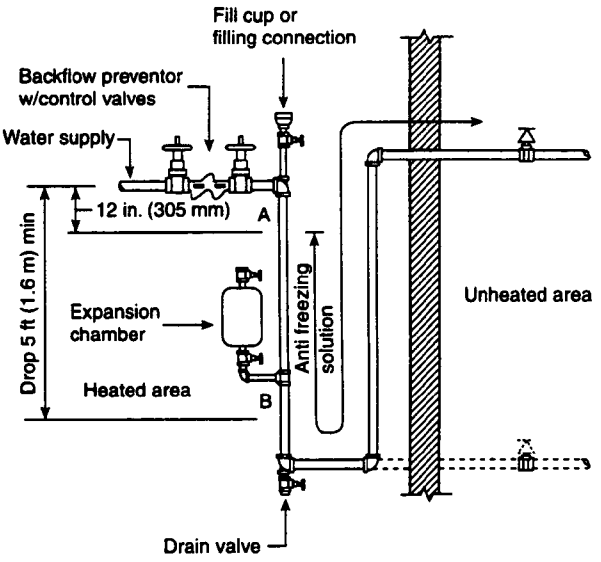


Figure 3-5.3(b) Arrangement of supply piping with backflow device.

3-6.1.5 Signs. Caution signs shall be attached to all valves controlling sprinklers. The caution sign shall be worded as follows:

"This valve controls fire protection equipment. Do not close until after fire has been extinguished. Use auxiliary valves when necessary to shut off supply to auxiliary equipment.

CAUTION: Automatic alarm will be sounded if this valve is closed."

3-6.1.6 Water Additives. Materials added to water shall not adversely affect the fire fighting properties of the water and shall be in conformity with any state or local health regulations. Due care and caution shall be given to the use of additives that may remove or suspend scale from older piping systems. Where additives are necessary for proper system operation, due care shall be taken to ensure that additives are replenished after alarm testing or whenever water is removed from the system.

3-6.1.7 Waterflow Detection. The supply of water from sprinkler piping through auxiliary devices, circulatory piping, and pumps shall not under any condition or operation, transient or static, cause false sprinkler waterflow signals.

3-6.1.7.1 A sprinkler waterflow signal shall not be impaired when water is discharged through an opened sprinkler or through the system test connection while auxiliary equipment is in any mode of operation (on, off, transient, stable).

3-7 Outside Sprinklers for Protection against Exposure Fires.

3-7.1 Applications. Exposure protection systems shall be permitted on buildings regardless of whether the building's interior is protected by a sprinkler system.

3-7.2 Water Supply and Control.

3-7.2.1* Sprinklers installed for protection against exposure fires shall be supplied from a standard water supply as outlined in Chapter 7.

Exception: Where approved, other supplies, such as manual valves or pumps or fire department connections, shall be acceptable.

3-7.2.2 Where fire department connections are used for water supply, they shall be so located that they will not be affected by the exposing fire.

3-7.3 Control.

3-7.3.1 Each system of outside sprinklers shall have an independent control valve.

3-7.3.2 Manually controlled open sprinklers shall be used only where constant supervision is present.

3-7.3.3 Sprinklers shall be of the open or automatic type. Automatic sprinklers in areas subject to freezing shall be on dry pipe systems conforming to Section 3-2 or antifreeze systems conforming to Section 3-5.

3-7.3.4 Automatic systems of open sprinklers shall be controlled by the operation of fire detection devices designed for the specific application.

3-7.4 System Components.

3-7.4.1 Drain Valves. Each system of outside sprinklers shall have a separate drain valve installed on the system side of each control valve.

Exception: Open sprinkler-top fed systems arranged to facilitate drainage.

3-7.4.2 Check Valves. Where sprinklers are installed on two adjacent sides of a building, protecting against two separate and distinct exposures, with separate control valves for each side, the end lines shall be connected with check valves located so that one sprinkler around the corner will operate. (*See Figure 3-7.4.2.*) The intermediate pipe between the two check valves shall be arranged to drain. As an alternate solution, an additional sprinkler shall be installed on each system located around the corner from the system involved.

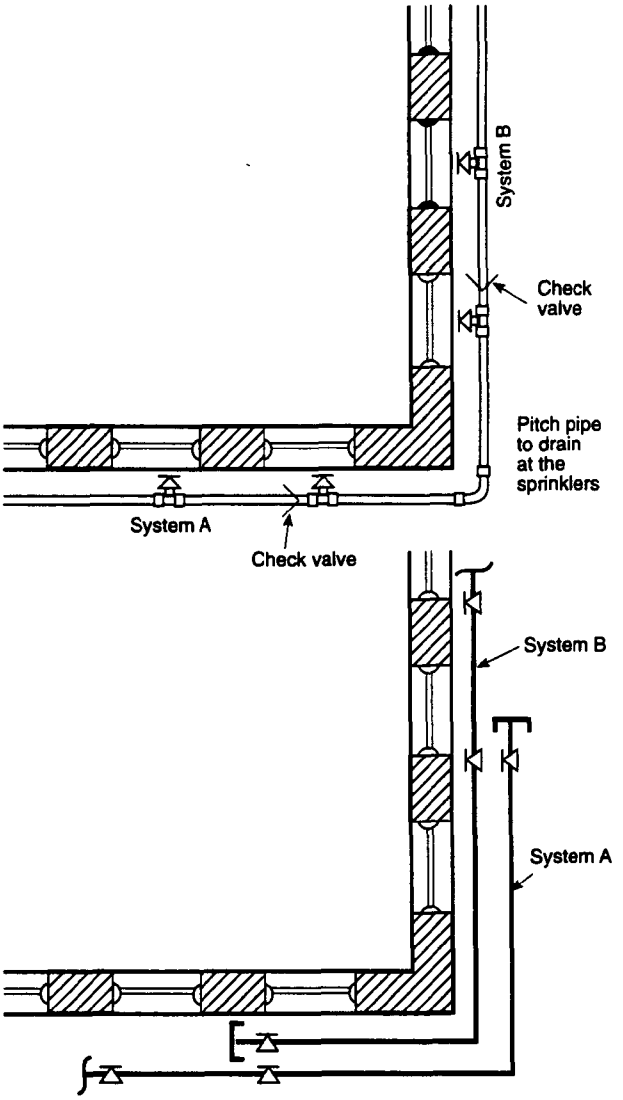


Figure 3-7.4.2 Arrangement of check valves. Top: typical. Bottom: alternate.

3-7.4.3 System Arrangement. Where one exposure affects two sides of the protected structure, the system shall not be subdivided between the two sides, but rather shall be arranged to operate as a single system.

3-7.5 Pipe and Fittings. Pipe and fittings installed on the exterior of the building shall be corrosion resistant.

3-7.6 Strainers. A listed strainer shall be provided in the riser or feed main that supplies sprinklers having nominal orifice sizes smaller than 3/8 in. (9.5 mm).

3-7.7 Gauge Connections. A listed pressure gauge conforming with 4-15.3.2 shall be installed immediately below the control valve of each system.

3-7.8 Sprinklers. Only sprinklers of such type as are listed for window, cornice, sidewall, or ridge pole service shall be installed for such use except where adequate coverage by use of other types of listed sprinklers and/or nozzles has been demonstrated. Small-orifice or large-orifice sprinklers shall be permitted.

3-8* Refrigerated Spaces.

3-8.1 Spaces Maintained at Temperatures Above 32°F (0°C). Where temperatures are maintained above 32°F (0°C) in refrigerated spaces, the requirements in this section shall not apply.

3-8.2* Spaces Maintained at Temperatures Below 32°F (0° C).

3-8.2.1 Where sprinkler pipe passes through a wall or floor into the refrigerated space, a section of pipe arranged for removal shall be provided immediately inside the space. The removable length of pipe shall be a minimum of 30 in. (762 mm).

3-8.2.2 A low air pressure alarm to a constantly attended location shall be installed.

Exception: Systems equipped with local low pressure alarms and an automatic air maintenance device.

3-8.2.3 Piping in refrigerated spaces shall be installed with pitch as outlined in 4-14.3.3

3-8.2.4* Air supply for systems shall be taken from the room of lowest temperature to reduce moisture content of the air.

Exception: Where compressed nitrogen gas from cylinders is used in lieu of compressed air.

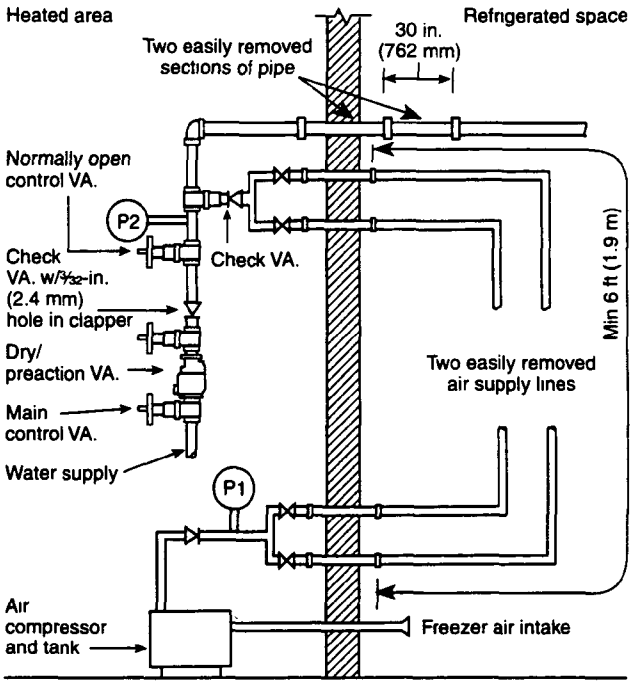
3-8.2.5* An indicating-type control valve for operational testing of the system shall be provided on each sprinkler riser outside of the refrigerated space.

3-8.2.6 A check valve with a 3/32-in. (24-mm) diameter hole in the clapper shall be installed in the system riser below the test valve required in 3-8.2.5. The check valve is to prevent evaporation of prime water into the system piping.

Exception: When system dry pipe or preaction valves, if designed to completely drain all water above the seat, and which are listed for installation without priming water remaining and where priming water is not used in the system riser.

3-8.2.7* The air supply piping entering the freezer area shall be equipped with two easily removable supply lines at least 6 ft (1.9 m) long and at least 1 in. (25.4 mm) in diameter as shown in Figure 3-8.2.7. Each supply line shall be equipped with control valves located in the warm area. Only one air supply line shall be open to supply the system air at any one time.

Exception: Where compressed nitrogen gas from cylinders is used in lieu of compressed air.



1. Check valve with 3/32-in. (2.4-mm) hole in clapper not required if prime water not used.
2. Supply air to be connection to top or side of system pipe.
3. Each removable air line shall be a minimum of 1 in. (25 mm) diameter and minimum of 6 ft (1.9 m) long.

Figure 3-8.2.7 Refrigerator area sprinkler systems to minimize the chances of developing ice-plugs.

3-9 Commercial-Type Cooking Equipment and Ventilation.

3-9.1 In cooking areas protected by automatic sprinklers, additional sprinklers or automatic spray nozzles shall be provided to protect commercial-type cooking equipment and ventilation systems that are designed to carry away grease-laden vapors unless otherwise protected. (*See NFPA 96, Standard on Ventilation Control and Fire Protection of Commercial Cooking Operations.*)

3-9.2* Standard sprinklers or automatic spray nozzles shall be so located as to provide for the protection of exhaust ducts, hood exhaust duct collars, and hood exhaust plenum chambers.

Exception: Sprinklers or automatic spray nozzles in ducts, duct collars, and plenum chambers shall not be required where all cooking equipment is served by listed grease extractors.

3-9.3 Exhaust ducts shall have one sprinkler or automatic spray nozzle located at the top of each vertical riser and at the midpoint of each offset. The first sprinkler or automatic spray nozzle in a horizontal duct shall be installed at the duct entrance. Horizontal exhaust ducts shall have such devices located on 10-ft (3-m) centers beginning no more than 5 ft (1.5 m) from the duct entrance. Sprinkler(s) or automatic spray nozzle(s) in exhaust ducts subject to freezing shall be properly protected against freezing by approved means. (*See 4-14.4.1.*)

Exception No. 1: Sprinklers or automatic spray nozzles shall not be required in a vertical riser located outside of a building provided the riser does not expose combustible material or provided the interior of a building and the horizontal distance between the hood outlet and the vertical riser is at least 25 ft (7.6 m).

Exception No. 2: Sprinklers or automatic spray nozzles shall not be required where the entire exhaust duct is connected to a listed exhaust hood incorporating a specific duct collar and sprinkler (or automatic spray nozzle) assembly investigated for protection of unlimited length of duct in accordance with the Standard for Fire Testing of Fire Extinguishing Systems for Protection of Restaurant Cooking Areas, UL 300.

3-9.4 Each hood exhaust duct collar shall have one sprinkler or automatic spray nozzle located 1 in. minimum to 12 in. maximum (25.4 mm min. to 305 mm max.) above the point of duct collar connection in the hood plenum. Hoods that have listed fire dampers located in the duct collar shall be protected with a sprinkler or automatic spray nozzle located on the discharge side of the damper and be so positioned as not to interfere with damper operation.

3-9.5 Hood exhaust plenum chambers shall have one sprinkler or automatic spray nozzle centered in each chamber not exceeding 10 ft (3 m) in length. Plenum chambers greater than 10 ft (3 m) in length shall have two sprinklers or automatic spray nozzles evenly spaced with the maximum distance between the two sprinklers not to exceed 10 ft (3 m).

3-9.6 Sprinklers or automatic spray nozzles being used in duct, duct collar, and plenum areas shall be of the extra high temperature classification [325 to 375°F (163 to 191°C)] and shall have orifice sizes not less than 1/4 in. (6.4 mm) and not more than 1/2 in. (13 mm).

Exception: When use of a temperature measuring device indicates temperatures above 300°F (149°C), a sprinkler or automatic spray nozzle of higher classification shall be used.

3-9.7 Access must be provided to all sprinklers or automatic spray nozzles for examination and replacement.

3-9.8 Cooking Equipment.

3-9.8.1 Cooking equipment (such as deep fat fryers, ranges, griddles, and broilers) that is considered to be a source of ignition shall be protected in accordance with the provisions of 3-9.1.

3-9.8.2 A sprinkler or automatic spray nozzle used for protection of deep fat fryers shall be listed for that application. The position, arrangement, location, and water supply for each sprinkler or automatic spray nozzle shall be in accordance with its listing.

3-9.8.3 The operation of any cooking equipment sprinkler or automatic spray nozzle shall automatically shut off all sources of fuel and heat to all equipment requiring protection. Any gas appliance not requiring protection but located under ventilating equipment shall also be shut off. All shutdown devices shall be of the type that requires manual resetting prior to fuel or power being restored.

3-9.9 A listed indicating valve shall be installed in the water supply line to the sprinklers and spray nozzles protecting the cooking and ventilating system.

3-9.10 A listed line strainer shall be installed in the main water supply preceding sprinklers or automatic spray nozzles having nominal orifice sizes smaller than 3/8 in. (9.5 mm).

3-9.11 A system test connection shall be provided to verify proper operation of equipment specified in 3-9.8.3.

3-9.12 Sprinklers and automatic spray nozzles used for protecting commercial-type cooking equipment and ventilating systems shall be replaced annually.

Exception: Where automatic bulb-type sprinklers or spray nozzles are used and annual examination shows no build-up of grease or other material on the sprinklers or spray nozzles.

Chapter 4 Installation Requirements

4-1* Basic Requirements.

4-1.1* The requirements for spacing, location, and position of sprinklers are based on the following principles:

(a) Sprinklers installed throughout the premises,

(b) Sprinklers located so as not to exceed maximum protection area per sprinkler,

(c) Sprinklers positioned and located so as to provide satisfactory performance with respect to activation time and distribution.

Exception No. 1: For locations permitting omission of sprinklers, see 4-13.1, 4-13.2, and 4-13.8.

Exception No. 2: When sprinklers are specifically tested and test results demonstrate that deviations from clearance requirements to structural members do not impair the ability of the sprinkler to control or suppress a fire, their positioning and locating in accordance with the test results shall be permitted.

Exception No. 3: Clearance between sprinklers and ceilings exceeding the maximum specified in 4-6.4.1, 4-7.4.1, 4-8.4.1, 4-9.4.1, 4-10.4.1, and 4-11.4.1 shall be permitted provided that tests or calculations demonstrate comparable sensitivity and performance of the sprinklers to those installed in conformance with these sections.

4-1.2* System valves and gauges shall be accessible for operation, inspection, tests, and maintenance.

4-2 System Protection Area Limitations. The maximum floor area on any one floor to be protected by sprinklers supplied by any one sprinkler system riser or combined system riser shall be as follows:

Light Hazard	52,000 sq ft (4831 m^2)
Ordinary Hazard	52,000 sq ft (4831 m^2)
Extra Hazard	
Pipe Schedule	25,000 sq ft (2323 m^2)
Hydraulically Calculated	40,000 sq ft (3716 m^2)
Storage — High-piled storage (as defined in 1-4.2) and storage covered by other NFPA standards	40,000 sq ft (3716 m^2)

Exception No. 1: The floor area occupied by mezzanines shall not be included in the above area.

Exception No. 2: Where single systems protect extra hazard, high-piled storage, or storage covered by other NFPA standards, and ordinary or light hazard areas, the extra hazard or storage area coverage shall not exceed the floor area specified for that hazard and the total area coverage shall not exceed 52,000 sq ft (4831 m^2).

4-3 Use of Sprinklers.

4-3.1 General.

4-3.1.1* Sprinklers shall be installed in accordance with their listing.

Exception: Where construction features or other special situations require unusual water distribution, listed sprinklers shall be permitted to be installed in positions other than anticipated by their listing to achieve specific results.

4-3.1.2* Upright sprinklers shall be installed with the frame arms parallel to the branch line.

4-3.1.3 Temperature Ratings.

4-3.1.3.1 Ordinary-temperature-rated sprinklers shall be used throughout buildings.

Exception No. 1: Where maximum ceiling temperatures exceed 100°F (38°C), sprinklers with temperature ratings in accordance with the maximum ceiling temperatures of Table 2-2.4.1 shall be used.

Exception No. 2: Intermediate- and high-temperature sprinklers shall be permitted to be used throughout Ordinary and Extra Hazard Occupancies.

Exception No. 3: Sprinklers of intermediate and high temperature classifications shall be installed in specific locations as required by 4-3.1.3.2.

4-3.1.3.2 The following practices shall be observed to provide sprinklers of other than ordinary temperature classification unless other temperatures are determined or unless high-temperature sprinklers are used throughout [*see Tables 4-3.1.3.2(a) and (b) and Figure 4-3.1.3.2*].

(a) Sprinklers in the high temperature zone shall be of the high temperature classification, and sprinklers in the intermediate temperature zone of the intermediate temperature classification.

(b) Sprinklers located within 12 in. (305 mm) to one side or 30 in. (762 mm) above an uncovered steam main, heating coil, or radiator shall be of the intermediate temperature classification.

(c) Sprinklers within 7 ft (2.1 m) of a low-pressure blowoff valve that discharges free in a large room shall be of the high temperature classification.

(d) Sprinklers under glass or plastic skylights exposed to the direct rays of the sun shall be of the intermediate temperature classification.

(e) Sprinklers in an unventilated, concealed space, under an uninsulated roof, or in an unventilated attic shall be of the intermediate temperature classification.

(f) Sprinklers in unventilated show windows having high-powered electric lights near the ceiling shall be of the intermediate temperature classification.

(g) Sprinklers protecting commercial-type cooking equipment and ventilation systems shall be of the high or extra high temperature classification as determined by use of a temperature measuring device. (*See 3-9.6.*)

4-3.1.3.3 In case of occupancy change involving temperature change, the sprinklers shall be changed accordingly.

Table 4-3.1.3.2(a) Temperature Ratings of Sprinklers Based on Distance from Heat Sources

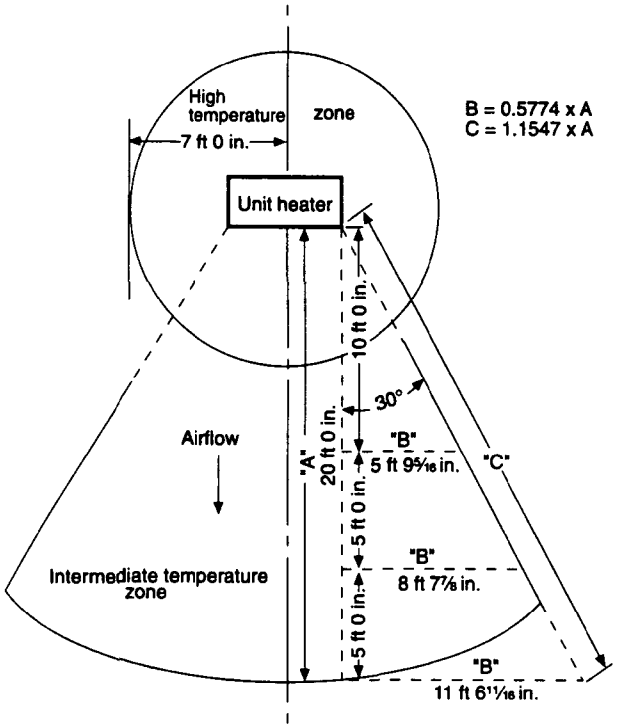
Type of Heat Condition	Ordinary Degree Rating	Intermediate Degree Rating	High Degree Rating
1. Heating ducts (a) Above	More than 2 ft 6 in.	2 ft 6 in. or less	—
(b) Side and below	More than 1 ft 0 in.	1 ft 0 in. or less	—
(c) Diffuser	Any distance except as shown under Intermediate Degree Rating column	*Downward Discharge:* Cylinder with 1 ft 0 in. radius from edge, extending 1 ft 0 in. below and 2 ft 6 in. above *Horizontal Discharge:* Semi-cylinder with 2 ft 6 in. radius in direction of flow, extending 1 ft 0 in. below and 2 ft 6 in. above	—
2. Unit heater (a) Horizontal discharge	—	*Discharge Side:* 7 ft 0 in. to 20 ft 0 in. radius pie-shaped cylinder [see Figure 4-3.1.3.2] extending 7 ft 0 in. above and 2 ft 0 in. below heater; also 7 ft 0 in. radius cylinder more than 7 ft 0 in. above unit heater	7 ft 0 in. radius cylinder extending 7 ft 0 in. above and 2 ft 0 in. below unit heater
(b) Vertical downward discharge [Note: For sprinklers below unit heater, see Figure 4-3.1.3.2.]	—	7 ft 0 in. radius cylinder extending upward from an elevation 7 ft 0 in. above unit heater	7 ft 0 in. radius cylinder extending from the top of the unit heater to an elevation 7 ft 0 in. above unit heater
3. Steam mains (uncovered) (a) Above	More than 2 ft 6 in.	2 ft 6 in. or less	—
(b) Side and below	More than 1 ft 0 in.	1 ft 0 in. or less	—
(c) Blowoff valve	More than 7 ft 0 in.	—	7 ft 0 in. or less

For SI Units: 1 in. = 25.4 mm; 1 ft = 0.3048 m.

Table 4-3.1.3.2(b) Ratings of Sprinklers in Specified Locations

Location	Ordinary Degree Rating	Intermediate Degree Rating	High Degree Rating
Skylights	—	Glass or plastic	—
Attics	Ventilated	Unventilated	—
Peaked roof: Metal or thin boards, concealed or not concealed, insulated or uninsulated	Ventilated	Unventilated	—
Flat roof: Metal, not concealed; insulated or uninsulated	Ventilated or unventilated	Note: For uninsulated roof, climate and occupancy may necessitate intermediate sprinklers. Check on job.	—
Flat roof: Metal, concealed, insulated or uninsulated	Ventilated	Unventilated	—
Show windows	Ventilated	Unventilated	—

Note: A check of job condition by means of thermometers may be necessary.



SI units: 1 in. = 25.4 mm; 1 ft = 0.31 m.

Figure 4-3.1.3.2 High temperature and intermediate temperature zones at unit heaters.

4-4* Application of Sprinkler Types. Sprinklers shall be selected for use as indicated in this section. Sprinklers shall be positioned and spaced as described in Section 4-5.

4-4.1 Upright and Pendent Spray Sprinklers. Upright and pendent spray sprinklers shall be permitted in all occupancy hazard classifications and building construction types.

Exception: Quick-response sprinklers are not permitted for use in extra hazard occupancies under the area-density design method. (See 5-2.3.2.3, Exception No. 1.)

4-4.2 Sidewall Spray Sprinklers. Sidewall sprinklers shall be installed only in light hazard occupancies with smooth, flat ceilings.

Exception: Sidewall sprinklers shall be permitted to be used in Ordinary Hazard Occupancies with smooth, flat ceilings where specifically listed for such use.

4-4.3 Extended Coverage Sprinklers. Extended coverage sprinklers shall be limited to a type of unobstructed construction consisting of flat, smooth ceilings with a slope not exceeding 2 in. per ft. (158 mm/m)

Exception No. 1: Where sprinklers are specifically listed for unobstructed or noncombustible obstructed construction, they shall be permitted for such use.

Exception No. 2: Extended coverage upright and pendent spray sprinklers shall be permitted within trusses or bar joists having web members not greater than 1-in. (25.4-mm) maximum dimension.

Exception No. 3: Where specifically listed for use under smooth, flat ceilings that have slopes not exceeding 4 in. per ft (316 mm/m).

4-4.4 Open Sprinklers. Open sprinklers shall be permitted to be used in deluge systems to protect special hazards or exposures, or in other special locations. Open sprinklers shall be installed in accordance with all applicable requirements of this standard for their automatic counterpart.

4-4.5 Residential Sprinklers.

4-4.5.1* Residential sprinklers shall be permitted in dwelling units and their adjoining corridors provided they are installed in conformance with their listing and the positioning requirements of NFPA 13D, *Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes*, or NFPA 13R, *Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height.*

4-4.5.2 Residential sprinklers shall be used only in wet systems.

Exception: Residential sprinklers shall be permitted for use in dry systems if specifically listed for such service.

4-4.5.3 Where residential sprinklers are installed in a compartment as defined in 1-4.2, all sprinklers within the compartment shall be of the fast-response type that meets the criteria of 1-4.5.1(a)1.

4-4.6 Early Suppression Fast-Response (ESFR) Sprinklers.

4-4.6.1 ESFR sprinklers shall be used only in wet pipe systems.

Exception: ESFR sprinklers shall be permitted for use in dry systems if specifically listed for such service.

4-4.6.2 ESFR sprinklers shall be installed only in buildings where roof or ceiling slope above the sprinklers does not exceed 2 in. per ft (158 mm/m).

4-4.6.3 ESFR sprinklers shall be permitted for use only in buildings with the following types of construction:

(a) Smooth ceiling, joists consisting of steel truss-shaped members, or wood truss-shaped members that consist of wood top or bottom chord members not exceeding 4 in. (102 mm) in depth with steel tube or bar web.

(b) Wood beams of 4 in. by 4 in. (102 mm by 102 mm) or greater nominal dimension, concrete or steel beams spaced 3 1/2 to 7 1/2 ft (0.9 to 2.3 m) on centers and either supported on or framed into girders.

(c) Paragraphs (a) and (b) apply to construction with noncombustible or combustible roof or decks.

(d) Construction with ceiling panels formed by members capable of trapping heat to aid the operation of sprinklers with members spaced greater than 7 1/2 ft (2.3 m) and limited to a maximum of 300 sq ft (27.9 m^2) in area.

4-4.6.4 Temperature Rating. Sprinkler temperature ratings shall be ordinary.

Exception: Sprinklers of intermediate and high temperature ratings shall be installed in locations as required by Section 4-3.

4-4.7 Large-Drop Sprinklers.

4-4.7.1 Large-drop sprinklers shall be permitted to be used in wet, dry, or preaction systems.

4-4.7.2* Where steel pipe is used in preaction and dry pipe systems, piping materials shall be limited to internally galvanized steel.

Exception: Nongalvanized fittings shall be permitted.

4-4.7.3 Sprinkler temperature ratings shall be the same as those indicated in Tables 4-3.1.3.2(a) and (b) or those used in large-scale fire testing to determine the protection requirements for the hazard involved.

Exception: Sprinklers of intermediate and high temperature ratings shall be installed in specific locations as required by 4-3.1.3.

4-4.8 QRES. (Reserved)

4-4.9 Special Sprinklers.

4-4.9.1* Special sprinklers that are intended for the protection of specific hazards or construction features shall be permitted where such devices have been evaluated and listed for performance under the following conditions:

(a) Fire tests related to the intended hazard.

(b) Distribution of the spray pattern with respect to wetting of floors and walls.

(c) Distribution of the spray pattern with respect to obstructions.

(d) Evaluation of the thermal sensitivity of the sprinkler.

(e) Performance under horizontal or sloped ceilings.

(f) Area of design.

4-4.9.2 Special sprinklers shall maintain the following characteristics:

(a) Orifice size shall be in accordance with Section 2-2.3.

(b) Temperature ratings shall be in accordance with Table 2-2.4.1.

(c) The protection area of coverage shall not exceed 400 ft^2 (36 m^2) for light hazard and ordinary hazard occupancies.

(d) The protection area of coverage shall not exceed 196 ft^2 (17 m^2) for extra hazard and high pile storage occupancies.

4-5 Position, Location, Spacing, and Use of Sprinklers.

4-5.1 General. Sprinklers shall be located, spaced, and positioned in accordance with the requirements of this section. Sprinklers shall be positioned to provide protection of the area consistent with the overall objectives of this standard by controlling the positioning and allowable area of coverage for each sprinkler. The requirements of 4-5.2 through 4-5.6 shall apply to all sprinkler types unless modified by more restrictive rules in Sections 4-6 through 4-11.

4-5.2 Protection Areas per Sprinkler.

4-5.2.1 Determination of the Protection Area of Coverage. The protection area of coverage per sprinkler (A_s) shall be determined as follows:

(a) *Along Branch Lines.* Determine distance between sprinklers (or to wall or obstruction in the case of the end sprinkler on the branch line) upstream and downstream. Choose the larger of either twice the distance to the wall or the distance to the next sprinkler. This dimension will be defined as S.

(b) *Between Branch Lines.* Determine perpendicular distance to the sprinkler on the adjacent branch line (or to a wall or obstruction in the case of the last branch line) on each side of the branch line on which the subject sprinkler is positioned. Choose the larger of either twice the distance to the wall or obstruction or the distance to the next sprinkler. This dimension will be defined as L.

4-5.2.1.1 The protection area of coverage of the sprinkler shall be established by multiplying the S dimension by the L dimension. ($A_s = S \times L$)

4-5.2.2 Maximum Protection Area of Coverage. The maximum allowable protection area of coverage for a sprinkler (A_s) shall be in accordance with the value indicated in the section for each type or style of sprinkler. The maximum area of coverage of any sprinkler shall not exceed 400 ft^2 (36 m^2).

4-5.3 Sprinkler Spacing.

4-5.3.1 Maximum Distance Between Sprinklers. The maximum distance permitted between sprinklers shall be based on the centerline distance between sprinklers on the branch line or on adjacent branch lines. The maximum distance shall be measured along the slope of the ceiling. The maximum distance permitted between sprinklers shall comply with the value indicated in the section for each type or style of sprinkler.

4-5.3.2 Maximum Distance From Walls. The distance from sprinklers to walls shall not exceed one-half of the allowable maximum distance between sprinklers. The distance from the wall to the sprinkler shall be measured perpendicular to the wall.

4-5.3.3 Minimum Distance from Walls. The minimum distance permitted between a sprinkler and the wall shall comply with the value indicated in the section for each type or style of sprinkler. The distance from the wall to the sprinkler shall be measured perpendicular to the wall.

4-5.3.4 Minimum Distance Between Sprinklers. A minimum distance shall be maintained between sprinklers to prevent operating sprinklers from wetting adjacent sprinklers and to prevent skipping of sprinklers. The minimum distance permitted between sprinklers shall comply with the value indicated in the section for each type or style of sprinkler.

4-5.4 Deflector Position.

4-5.4.1 Distance Below Ceilings. The distances between the sprinkler deflector and the ceiling above shall be selected based on the type of sprinkler and the type of construction.

4-5.4.2 Deflector Orientation. Deflectors of sprinklers shall be aligned parallel to ceilings, roofs, or the incline of stairs.

4-5.5 Obstructions to Sprinkler Discharge.

4-5.5.1 Performance Objective.

4-5.5.1.1 Sprinklers shall be located so as to minimize obstructions to discharge as defined in 4-5.5.2 and 4-5.5.3 or additional sprinklers shall be provided to ensure adequate coverage of the hazard. (*See Figure 4-5.5.1.1.*)

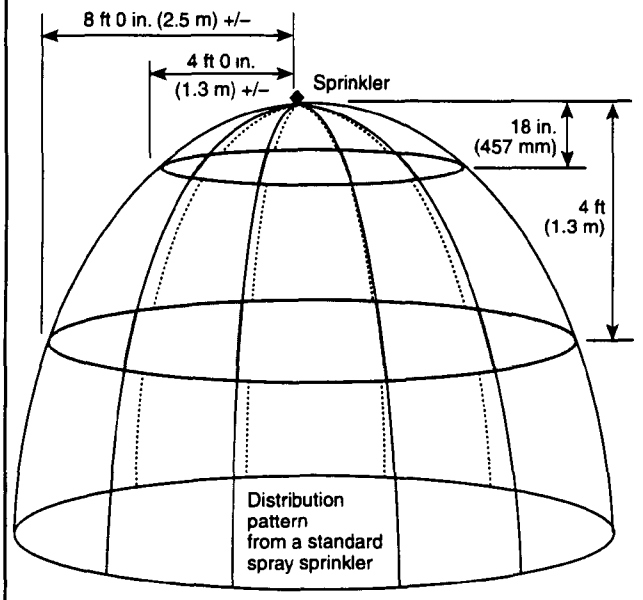


Figure 4-5.5.1.1 Typical distribution pattern from a standard spray sprinkler.

4-5.5.2* Obstructions to Sprinkler Discharge Pattern Development.

4-5.5.2.1 Continuous or noncontinuous obstructions less than 18 in. (457 mm) below the sprinkler deflector that prevent the pattern from fully developing shall comply with this section.

4-5.5.2.2 Sprinklers shall be positioned such that they are located at a distance three times greater than the maximum dimension of an obstruction up to a maximum of 24 in. (609 mm) (e.g., truss webs and chords, pipe, columns, and fixtures).

Exception No. 1: Continuous solid obstructions, such as beams, top chord members, and ducts, that are tight to the ceiling shall comply with 4-6.5.1, 4-7.5.1, 4-8.5.1, 4-9.5.1, 4-10.5.1 and 4-11.5.1.

Exception No. 2: Piping to which an upright sprinkler is directly attached less than 3 in. (75 mm) in diameter.

Exception No. 3: Piping to which pendent and sidewall sprinklers are directly attached.

4-5.5.3* Obstructions that Prevent Sprinkler Discharge from Reaching the Hazard. Continuous or noncontinuous obstructions that interrupt the water discharge in a horizontal plane more than 18 in. (457 mm) below the sprinkler deflector in a manner to limit the distribution from reaching the protected hazard shall comply with this section.

4-5.5.3.1 Sprinklers shall be installed under fixed obstructions over 4 ft (1.2 m) wide such as ducts, decks, cutting tables, and overhead doors.

Exception: Obstructions that are not fixed in place such as conference tables.

4-5.5.3.2 Sprinklers installed under open gratings shall be of the intermediate level/rack storage type or otherwise shielded from the discharge of overhead sprinklers.

4-5.6 Clearance to Storage. The clearance between the deflector and the top of storage shall be 18 in. (457 mm) or greater.

Exception No. 1: Where other standards specify greater minimums, they shall be followed.

Exception No. 2: A minimum clearance of 36 in. (.91 m) shall be permitted for special sprinklers.

Exception No. 3: A minimum clearance of less than 18 in. (457 mm) between the top of storage and ceiling sprinkler deflectors shall be permitted where proven by successful large-scale fire tests for the particular hazard.

4-6 Standard Pendent and Upright Spray Sprinklers.

4-6.1 General. All requirements of Section 4-5 shall apply to standard pendent and upright spray sprinklers except as modified below.

4-6.2 Protection Areas per Sprinkler (Standard Pendent and Upright Spray Sprinklers).

4-6.2.1 Determination of the Protection Area of Coverage. The protection area of coverage per sprinkler (A_s) shall be determined in accordance with 4-5.2.1.

Exception: In a small room as defined in 1-4.2, the protection area of coverage for each sprinkler in the small room shall be the area of the room divided by the number of sprinklers in the room.

4-6.2.2 Maximum Protection Area of Coverage. The maximum allowable protection area of coverage for a sprinkler (A_s) shall be in accordance with the value indicated in Table 4-6.2. In any case, the maximum area of coverage of a sprinkler shall not exceed 225 ft^2 (21 m^2).

Exception No. 1: The following maximum protection areas of coverage shall apply for pipe schedule systems:

Light Hazard— 200 ft^2 (18.6 m^2)

Extra Hazard— 90 ft^2 (8.4 m^2)

Exception No. 2: The maximum protection area of coverage for light hazard systems installed in configurations utilizing combustible construction members spaced less than 3 ft (.91 m) on center shall not exceed 130 ft^2 (12 m^2).

Table 4-6.2 Protection Areas and Maximum Spacing (SSU/SSP)

	Light Hazard		Ordinary Hazard		Extra Hazard		High-Piled Storage	
Construction Type	Protection Area ft^2	Spacing (max.) ft	Protection Area ft^2	Spacing (max.) ft	Protection Area ft^2	Spacing (max.) ft	Protection Area ft^2	Spacing (max.) ft
Noncombustible obstructed and unobstructed and combustible unobstructed	225	15	130	15	100	12	100	12
Combustible obstructed	168	15	130	15	100	12	100	12

For SI units: 1 ft^2 = 0.0929 m^2; 1 ft = 0.3048 m.

Exception No. 3: Where densities for extra hazard and high piled storage occupancies are less than 0.25 gpm/ft^2 (10.2 Lpm/m^2), the maximum protection area of coverage shall be permitted to be increased to 130 ft^2 (.91 m^2).

4-6.3 Sprinkler Spacing (Standard Pendent and Upright Spray Sprinklers).

4-6.3.1 Maximum Distance Between Sprinklers. The maximum distance permitted between sprinklers shall comply with Table 4-6.2.

Exception No. 1: For extra hazard occupancies and high piled storage in bays 25 ft (7.6m) wide, a spacing of 12 ft 6 in (3.8 m) shall be permitted.

Exception No. 2: For densities less than 0.25 gpm/ft^2 (10.2 Lpm/m^2), a spacing of 15 ft (4.6 m) shall be permitted.

4-6.3.2* Maximum Distance from Walls. The distance from sprinklers to walls shall not exceed one-half of the allowable distance between sprinklers as indicated in Table 4-6.2. The distance from the wall to the sprinkler shall be measured perpendicular to the wall. Where walls are angled or irregular, the maximum horizontal distance between a sprinkler and any point of floor area protected by that sprinkler shall not exceed 0.75 times the allowable distance permitted between sprinklers, provided the maximum perpendicular distance is not exceeded.

4-6.3.2.1 Under curved surfaces, the horizontal distance shall be measured at the floor level from the wall, or the intersection of the curved surface and the floor to the nearest sprinkler shall not be greater than one-half the allowable distance between sprinklers.

Exception: Within small rooms as defined in 1-4.2, sprinklers shall be permitted to be located not more than 9 ft (2.7 m) from any single wall. Sprinkler spacing limitations of 4-6.3 and area limitations of Table 4-6.2 shall not be exceeded.*

4-6.3.3 Minimum Distance from Walls. Sprinklers shall be located a minimum of 4 in. (102 mm) from a wall.

4-6.3.4 Minimum Distance Between Sprinklers. Sprinklers shall be spaced not less than 6 ft (1.8 m) on center.

Exception No. 1: Sprinklers shall be permitted to be placed less than 6 ft (1.8 m) on center where the following conditions are satisfied:

(a) Baffles shall be installed and located midway between sprinklers and arranged to protect the actuating elements.

(b) Baffles shall be of noncombustible or limited-combustible material that will stay in place before and during sprinkler operation.

(c) Baffles shall be not less than 8 in. (203 mm) wide and 6 in. (152 mm) high. The tops of baffles shall extend between 2 in. to 3 in. (51 to 76 mm) above the deflectors of upright sprinklers. The bottoms of baffles shall extend downward to a level at least even with the deflectors of pendent sprinklers.

Exception No. 2: In-rack sprinklers.

Exception No. 3: Old-style sprinklers protecting fur storage vaults.

4-6.4 Deflector Position (Standard Pendent and Upright Spray Sprinklers).

4-6.4.1 Distance Below Ceilings.

4-6.4.1.1 Under unobstructed construction, the distance between the sprinkler deflector and the ceiling shall be a minimum of 1 in. (25.4 mm) and a maximum of 12 in. (305 mm).

Exception: Ceiling-type sprinklers (concealed, recessed, and flush types) shall be permitted to have the operating element above the ceiling and the deflector located nearer to the ceiling where installed in accordance with their listing.

4-6.4.1.2 Under obstructed construction, the sprinkler deflector shall be located 1 to 6 in. (25.4 to 152 mm) below the structural members and a maximum distance of 22 in. (559 mm) below the ceiling/roof deck.

Exception No. 1: Sprinklers shall be permitted to be installed with the deflector at or above the bottom of the structural member to a maximum of 22 in. (559 mm) below the ceiling/roof deck where the sprinkler is installed in conformance with 4-6.5.1.2.

Exception No. 2: Where sprinklers are installed in each bay of obstructed construction, deflectors shall be a minimum of 1 in. (25.4 mm) and a maximum of 12 in. (305 mm) below the ceiling.

Exception No. 3: Sprinklers shall only be permitted below composite wood joists where joist channels are fire-stopped to the full depth of the joists with material equivalent to the web construction so that individual channel areas do not exceed 300 ft^2 (27.9 m^2).

Exception No. 4: Deflectors of sprinklers under concrete tee construction with stems spaced less than 7 1/2 ft (2.3 m) but more than 3 ft (0.9 m) on centers shall, regardless of the depth of the tee, be permitted to be located at or above a horizontal plane 1 in. (25.4 mm) below the bottom of the stems of the tees and shall comply with Table 4-6.5.1.2.*

4-6.4.1.3* Sprinklers under or near the peak of a roof or ceiling shall have deflectors located not more than 3 ft (0.9 m) vertically down from the peak. [*See Figures 4-6.4.1.3(a) and 4-6.4.1.3(b).*]

Exception No. 1: Under saw-toothed roofs, sprinklers at the highest elevation shall not exceed a distance of 3 ft (0.9 m) measured down the slope from the peak.

Exception No. 2: Under a steeply pitched surface, the distance from the peak to the deflectors shall be permitted to be increased to maintain a horizontal clearance of not less than 2 ft (0.6 m) from other structural members. [See Figure 4-6.4.1.3(c).]

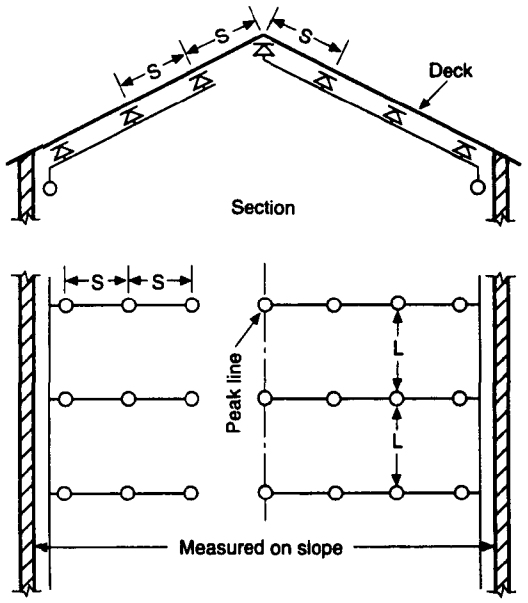


Figure 4-6.4.1.3(a) Sprinklers at pitched roofs; branch lines run up the slope.

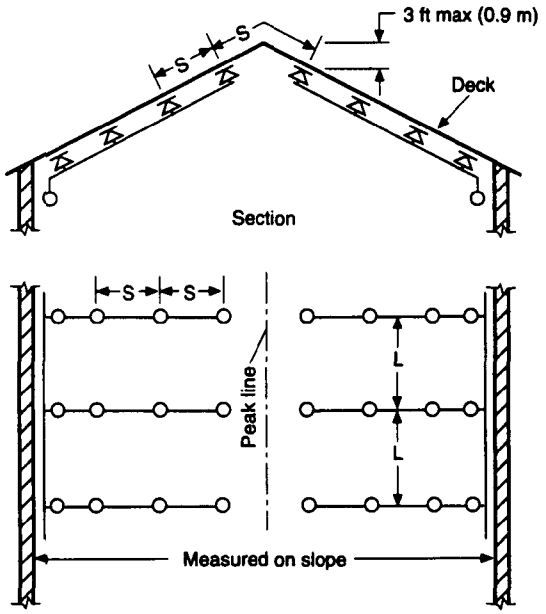


Figure 4-6.4.1.3(b) Sprinklers at pitched roofs; branch lines run up the slope.

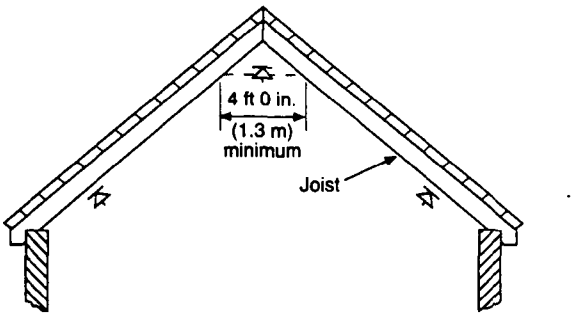


Figure 4-6.4.1.3(c) Horizontal clearance for sprinklers at peak of pitched roof.

4-6.4.1.4 Double Joist Obstructions. Where there are two sets of joists under a roof or ceiling, and there is no flooring over the lower set, sprinklers shall be installed above and below the lower set of joists where there is a clearance of 6 in. (152 mm) or more between the top of the lower joist and the bottom of the upper joist. (*See Figure 4-6.4.1.4.*)

Exception: Sprinklers are permitted to be omitted from below the lower set of joists where at least 18 in. (457 mm) is maintained between the sprinkler deflector and the top of the lower joist.

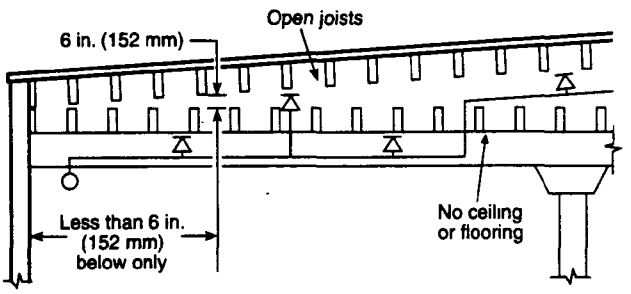


Figure 4-6.4.1.4 Arrangement of sprinklers under two sets of open joists — no sheathing on lower joists.

4-6.4.2* Deflector Orientation. Deflectors of sprinklers shall be aligned parallel to ceilings, roofs, or the incline of stairs.

Exception: Where sprinklers are installed in the peak below a sloped ceiling or roof surface, the sprinkler shall be installed with the deflector horizontal.

4-6.5 Obstructions to Sprinkler Discharge (Standard Pendent and Upright Spray Sprinklers).

4-6.5.1 Performance Objective.

4-6.5.1.1 Sprinklers shall be located so as to minimize obstructions to discharge as defined in 4-6.5.2 and 4-6.5.3 or additional sprinklers shall be provided to ensure adequate coverage of the hazard.

4-6.5.1.2 Sprinklers shall be arranged to comply with 4-5.5.2, Table 4-6.5.1.2, and Figure 4-6.5.1.2(a).

Exception No. 1: Sprinklers shall be permitted to be spaced on opposite sides of obstructions not exceeding 4 ft (1.3 m) in width provided the distance from the centerline of the obstruction to the sprinklers does not exceed one-half the allowable distance permitted between sprinklers.

Exception No. 2 Obstructions located against the wall and that are not over 30 in.(762 mm) in width shall be permitted to be protected in accordance with Figure 4-6.5.1.2(b).

Table 4-6.5.1.2 Positioning of Sprinklers to Avoid Obstructions to Discharge (SSU/SSP)

Distance from Sprinklers to Side of Obstruction (a)	Maximum Allowable Distance of Deflector above Bottom of Obstruction (in.) (b)
Less than 1 ft	0
One ft to less than 1 ft 6 in.	2½
1 ft 6 in. to less than 2 ft	3½
2 ft to less than 2 ft 6 in.	5½
2 ft 6 in. to less than 3 ft	7½
3 ft to less than 3 ft 6 in.	9½
3 ft 6 in. to less than 4 ft	12
4 ft to less than 4 ft 6 in.	14
4 ft 6 in. to less than 5 ft	16½
5 ft and greater	18

For SI Units: 1 in. = 25.4 mm; 1 ft = 0.3048 m.

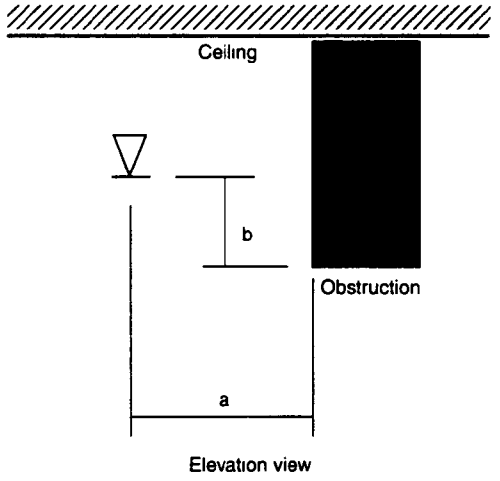


Figure 4-6.5.1.2(a) Positioning of sprinklers to avoid obstructions to discharge (SSU/SSP).

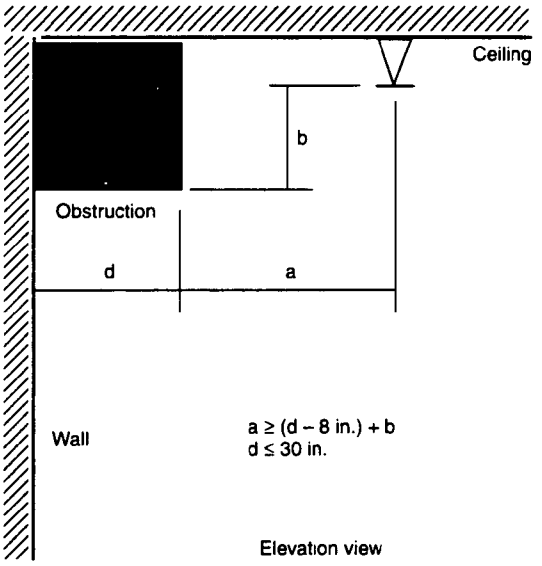


Figure 4-6.5.1.2(b) Obstructions against walls (SSU/SSP).

4-6.5.2 Obstructions to Sprinkler Discharge Pattern Development.

4-6.5.2.1 Continuous or noncontinuous obstructions less than 18 in. (457 mm) below the sprinkler deflector that prevent the pattern from fully developing shall comply with this section.

4-6.5.2.2 Sprinklers shall be positioned such that they are located at a distance three times greater than the maximum dimension of an obstruction up to a maximum of 24 in. (609 mm) (e.g., structural members, pipe, columns, and fixtures). *(See Figure 4-6.5.2.2.)*

Exception No. 1: Sprinklers shall be permitted to be spaced on opposite sides of the obstruction provided the distance from the centerline of the obstruction to the sprinklers does not exceed one-half the allowable distance between sprinklers.

Exception No. 2: Where the obstruction consists of open trusses 20 in. (.51 m) or greater apart [24 in. (.61 m) on center], sprinklers shall be permitted to be located one-half the distance between the obstruction created by the truss provided that all truss members are not greater than 4 in. (102 mm) (nominal) in width.

Exception No. 3: Where the sprinklers are installed in the centerline of bar joists or a truss.

Exception No. 4: Piping to which an upright sprinkler is directly attached less than 3 in. (75 mm) in diameter.

Exception No. 5: Piping to which pendent sprinklers are directly attached.

4-6.5.3* Obstructions that Prevent Sprinkler Discharge from Reaching the Hazard. Continuous or noncontinuous obstructions that interrupt the water discharge in a horizontal plane more than 18 in. (457 mm) below the sprinkler deflector in a manner to limit the distribution from reaching the protected hazard shall comply with this section.

4-6.5.3.1 Sprinklers shall be installed under fixed obstructions over 4 ft (1.2 m) wide such as ducts, decks, cutting tables, and overhead doors.

Exception: Obstructions that are not fixed in place, such as conference tables.

4-6.5.3.2 Sprinklers installed under open gratings shall be of the intermediate level/rack storage type or otherwise shielded from the discharge of overhead sprinklers.

4-6.5.4* Suspended or Floor-Mounted Vertical Obstructions. The distance from sprinklers to privacy curtains, free standing partitions, room dividers, and similar obstructions in light hazard occupancies shall be in accordance with Table 4-6.5.4 and Figure 4-6.5.4.

4-6.6* Clearance to Storage (Standard Pendent and Upright Spray Sprinklers). The clearance between the deflector and the top of storage shall be 18 in. (457 mm) or greater.

Exception: Where other standards specify greater minimums, they shall be followed.

4-7 Sidewall Standard Spray Sprinklers.

4-7.1 General. All requirements of Section 4-5 shall apply to sidewall standard spray sprinklers except as modified below.

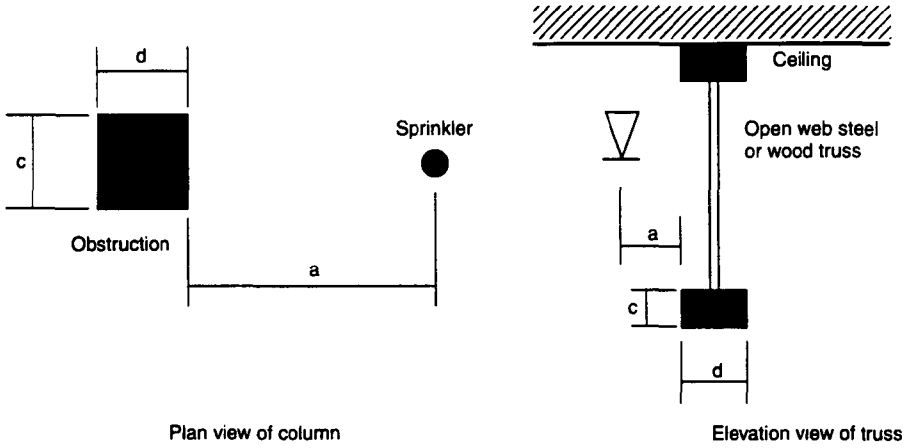


Figure 4-6.5.2.2 Minimum distance from obstruction (SSU/SSP).

Table 4-6.5.4 Suspended or Floor Mounted Obstructions (SSU/SSP)

Horizontal Distance (a)	Minimum Vertical Distance below Deflector (b)
6 in. or less	3 in.
More than 6 in. to 9 in.	4 in.
More than 9 in. to 12 in.	6 in.
More than 12 in. to 15 in.	8 in.
More than 15 in. to 18 in.	9½ in.
More than 18 in to 24 in.	12 ½ in.
More than 24 in. to 30 in.	15 ½ in.
More than 30 in.	18 in.

For SI Units. 1 in. = 25.4 mm.

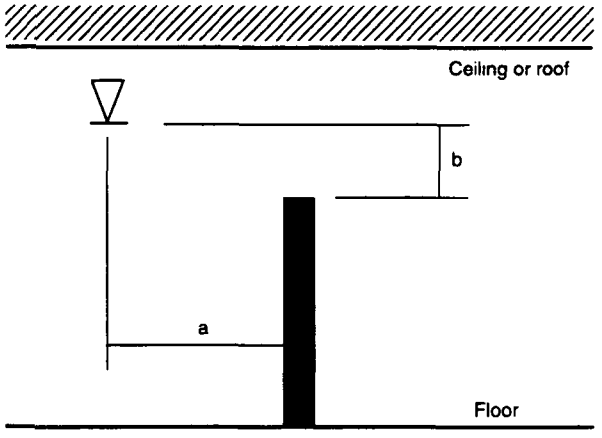


Figure 4-6.5.4 Suspended or floor-mounted obstructions (SSU/SSP).

4-7.2 Protection Areas per Sprinkler (Standard Sidewall Spray Sprinklers).

4-7.2.1 Determination of the Protection Area of Coverage. The protection area of coverage per sprinkler (A_s) shall be determined as follows:

(a) *Along the Wall.* Determine the distance between sprinklers along the wall (or to the end wall or obstruction in the case of the end sprinkler on the branch line) upstream and downstream. Choose the larger of either twice the distance to the end wall or the distance to the next sprinkler. This dimension will be defined as S.

(b) *Across the Room.* Determine the distance from the sprinkler to the wall opposite the sprinklers or to the midpoint of the room where sprinklers are installed on two opposite walls (*see 4-7.3.1*). This dimension will be defined as L.

4-7.2.1.1 The protection area of the sprinkler shall be established by multiplying the S dimension by the L dimension. (A_s = S × L)

4-7.2.2 Maximum Protection Area of Coverage. The maximum allowable protection area of coverage for a sprinkler (A_s) shall be in accordance with the value indicated in Table 4-7.2. In any case, the maximum area of coverage of a sprinkler shall not exceed 196 ft² (59.7 m²).

4-7.3 Sprinkler Spacing (Standard Sidewall Spray Sprinklers).

4-7.3.1 Maximum Distance Between Sprinklers. The maximum distance permitted between sprinklers shall be based on the centerline distance between sprinklers on the branch line. The maximum distance shall be measured along the slope of the ceiling.

4-7.3.1.1 Sidewall spray sprinklers shall be installed along the length of a single wall of rooms or bays in accordance with the maximum spacing provisions of Table 4-7.2.

Exception No 1: Sidewall sprinklers shall not be installed back-to-back without being separated by a continuous lintel or soffit.

Exception No 2: Where the width of the room or bay exceeds the maximum allowed, up to 24 ft (9.1 m) for Light Hazard Occupancy, or 20 ft (6.1 m) for Ordinary Hazard Occupancy, sidewall sprinklers shall be provided on two opposite walls or sides of bays with spacing as required by Table 4-7.2.

Exception No 3: Sidewall sprinklers shall be permitted to be installed on opposing or adjacent walls provided no sprinkler is located within the maximum protection area of another sprinkler.

Table 4-7.2 Protection Areas and Maximum Spacing (Standard Sidewall Spray Sprinkler)

	Light Hazard		Ordinary Hazard	
	Combustible Finish	Noncombustible or Limited-Combustible Finish	Combustible Finish	Noncombustible or Limited-Combustible Finish
Maximum distance along the wall (S)	14 ft	14 ft	10 ft	10 ft
Maximum room width (L)	12 ft	14 ft	10 ft	10 ft
Maximum protection area	120 ft^2	196 ft^2	80 ft^2	100 ft^2

For SI units: 1 ft = 0.3048 m; 1 sq ft = 0.0929 m^2.

4-7.3.2 Maximum Distance from Walls. The distance from sprinklers to the end walls shall not exceed one-half of the allowable distance permitted between sprinklers as indicated in Table 4-7.2.

4-7.3.3 Minimum Distance from Walls. Sprinklers shall be located a minimum of 4 in. (102 mm) from a wall. The distance from the wall to the sprinkler shall be measured perpendicular to the wall.

Exception: Horizontal and vertical sidewall sprinklers are permitted to be located with their deflectors less than 4 in. (102 mm) from the wall on which they are mounted.

4-7.3.4 Minimum Distance Between Sprinklers. Sprinklers shall be spaced not less than 6 ft (1.8 m) on center.

4-7.4 Deflector Position from Ceilings and Walls (Standard Sidewall Spray Sprinklers).

4-7.4.1 Distance Below Ceilings and from Walls.

4-7.4.1.1 Sidewall sprinkler deflectors (vertical type) shall be located not more than 6 in. (152 mm) nor less than 4 in. (102 mm) from ceilings.

Exception: Horizontal sidewall sprinklers are permitted to be located in a zone 6 to 12 in. (152 to 305 mm) or 12 to 18 in. (305 mm to 457 mm) below noncombustible ceilings where listed for such use.

4-7.4.1.2 Sidewall sprinkler deflectors shall be located not more than 6 in. (152 mm) nor less than 4 in. (102 mm) from walls.

4-7.4.1.3 Sidewall sprinklers shall only be installed along walls, lintels, or soffits where the distance from the ceiling to the bottom of the lintel or soffit is at least 2 in. (51 mm) greater than the distances from the ceiling to sidewall sprinkler deflectors.

4-7.4.1.3.1 Where soffits are used for the installation of sidewall sprinklers, they shall not exceed 8 in. (203 mm) in width or projection from the wall.

Exception: Soffits shall be permitted to exceed 8 in. (203 mm) where additional sprinklers are installed below the soffit.

4-7.4.2 Deflector Orientation. Deflectors of sprinklers shall be aligned parallel to ceilings or roofs.

4-7.4.2.1 Sidewall sprinklers, where installed under a sloped ceiling, shall be located at the high point of the slope and positioned to discharge downward along the slope.

4-7.5 Obstructions to Sprinkler Discharge (Standard Sidewall Spray Sprinklers).

4-7.5.1 Performance Objective.

4-7.5.1.1 Sprinklers shall be located so as to minimize obstructions to discharge as defined in 4-5.5.2 and 4-5.5.3 or additional sprinklers shall be provided to ensure adequate coverage of the hazard.

4-7.5.1.2 Sidewall sprinklers shall be installed no closer than 4 ft (2.3 m) from light fixtures or similar obstructions. The distance between light fixtures or similar obstructions located more than 4 ft (2.3 m) from the sprinkler shall be in conformity with Table 4-7.5.1.2 and Figure 4-7.5.1.2.

Table 4-7.5.1.2 Positioning of Sprinklers to Avoid Obstructions (Standard Sidewall Spray Sprinklers)

Distance from Sidewall Sprinkler to Side of Obstruction (a)	Maximum Allowable Distance of Deflector above Bottom of Obstruction (in.) (b)
Less than 4 ft	0
4 ft to less than 5 ft	1
5 ft to less than 5 ft 6 in.	2
5 ft 6 in. to less than 6 ft 6 in.	3
6 ft to less than 6 ft 6 in.	4
6 ft to less than 7 ft	6
7 ft to less than 7 ft 6 in.	7
7 ft 6 in. to less than 8 ft	9
8 ft to less than 8 ft 6 in.	11
8 ft 6 in. or greater	14

For SI Units: 1 in. = 25.4 mm; 1 ft = 0.3048 m.

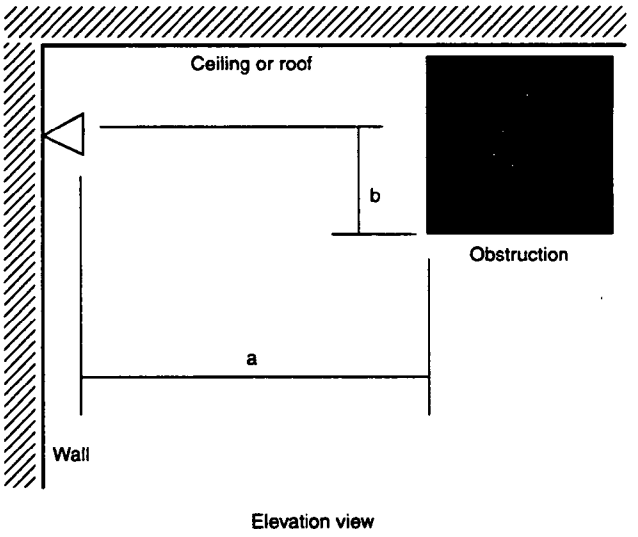


Figure 4-7.5.1.2 Positioning of sprinklers to avoid obstructions (standard sidewall spray sprinklers).

4-7.5.1.3 Obstructions projecting from the same wall as the sidewall sprinkler is mounted shall be in accordance with Table 4-7.5.1.3 and Figure 4-7.5.1.3.

4-7.5.2 Obstructions to Sprinkler Discharge Pattern Development.

4-7.5.2.1 Continuous or noncontinuous obstructions less than 18 in. (457 mm) below the sprinkler deflector that prevent the pattern from fully developing shall comply with this section.

4-7.5.2.2 Sprinklers shall be positioned such that they are located at a distance three times greater than the maximum dimension of an obstruction up to a maximum of 24 in. (609 mm) (e.g., truss webs and chords, pipe, columns, and fixtures). Sidewall sprinklers shall be positioned in accordance with Figure 4-7.5.2.2 where obstructions are present.

Exception: Piping to which sidewall sprinklers are directly attached.

4-7.5.3* Obstructions that Prevent Sprinkler Discharge from Reaching the Hazard. Continuous or noncontinuous obstructions that interrupt the water discharge in a horizontal plane more than 18 in. (457 mm) below the sprinkler deflector in a manner to limit the distribution from reaching the protected hazard shall comply with this section.

4-7.5.3.1 Sprinklers shall be installed under fixed obstructions over 4 ft (1.2 m) wide such as ducts, decks, cutting tables, and overhead doors.

Exception: Obstructions that are not fixed in place such as conference tables.

Table 4-7.5.1.3 Positioning of Sprinklers to Avoid Obstructions Along the Wall (Standard Sidewall Spray Sprinklers)

Distance from Sidewall Sprinkler to Side of Obstruction (a)	Maximum Allowable Distance of Deflector above Bottom of Obstruction (in.) (b)
Less than 6 in.	1
6 in. to less than 1 ft	2
1 ft to less than 1 ft 6 in.	3
1 ft 6 in. to less than 2 ft	4 1/2
2 ft to less than 2 ft 6 in.	5 3/5
2 ft 6 in. to less than 3 ft	7
3 ft to less than 3 ft 6 in.	8
3 ft 6 in. to less than 4 ft	9 1/4
4 ft to less than 4 ft 6 in.	10
4 ft 6 in. to less than 5 ft	11 1/2
5 ft to less than 5 ft 6 in.	12 3/4
5 ft 6 in. to less than 6 ft	14
6 ft to less than 6 ft 6 in.	15
6 ft 6 in. to less than 7 ft.	16 1/4
7 ft to less than 7 ft 6 in.	17 1/2

For SI Units: 1 in. = 25.4 mm; 1 ft = 0.3048 m.

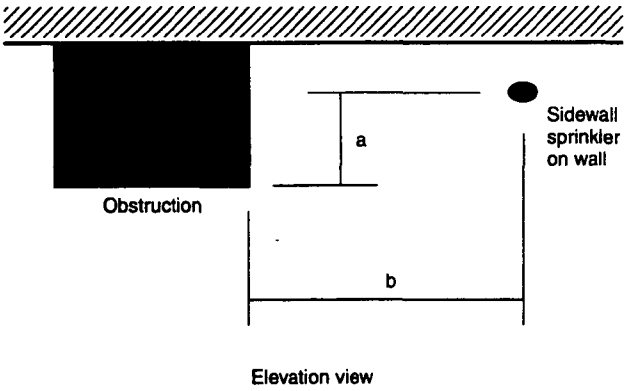


Figure 4-7.5.1.3 Positioning of sprinklers to avoid obstructions along the wall (standard sidewall spray sprinklers).

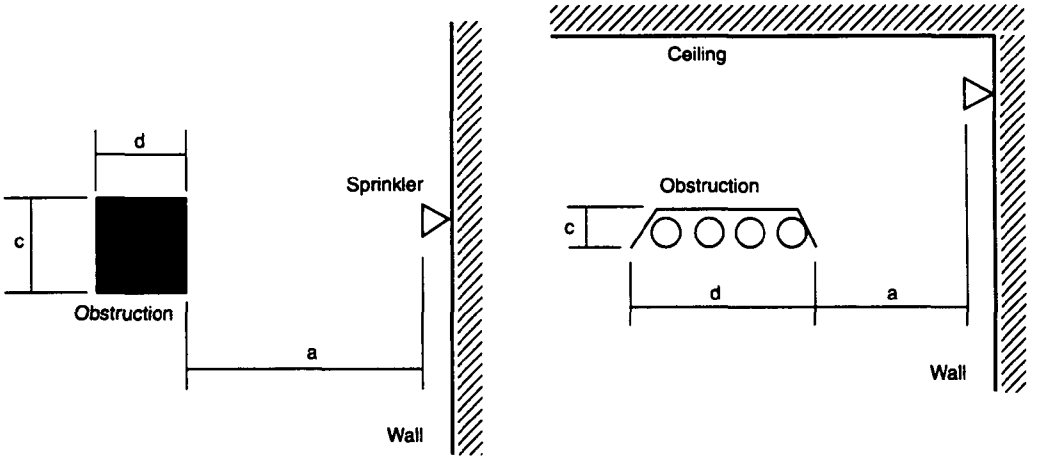


Figure 4-7.5.2.2 Minimum distance from obstruction (standard sidewall spray sprinkler).

4-7.5.4 Suspended or Floor-Mounted Vertical Obstructions. The distance from sprinklers to privacy curtains, free-standing partitions, room dividers, and similar obstructions in light hazard occupancies shall be in accordance with Table 4-7.5.4 and Figure 4-7.5.4.

Table 4-7.5.4 Suspended or Floor Mounted Obstructions (Standard Sidewall Spray Sprinklers)

Horizontal Distance (a)	Maximum Vertical Distance below Deflector (b)
6 in. or less	3 in.
More than 6 in. to 9 in.	4 in.
More than 9 in. to 12 in.	6 in.
More than 12 in. to 15 in.	8 in.
More than 15 in. to 18 in.	9½ in.
More than 18 in. to 24 in.	12½ in.
More than 24 in. to 30 in.	15½ in.
More than 30 in.	18 in.

For SI Units: 1 in. = 25.4 mm.

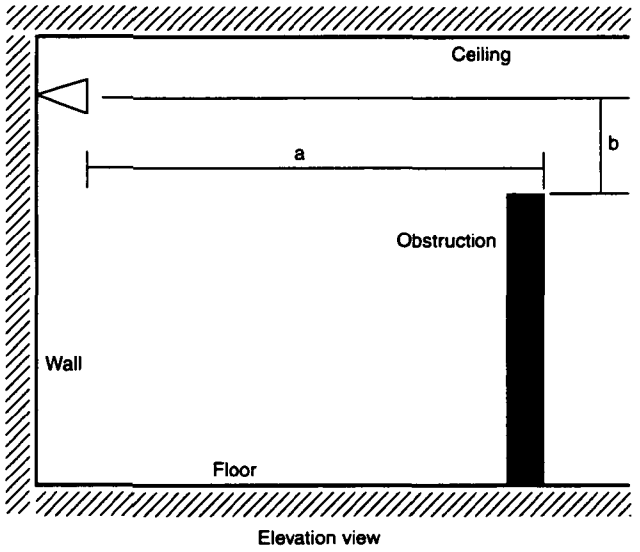


Figure 4-7.5.4 Suspended or floor-mounted obstructions (standard sidewall spray sprinklers).

4-7.6 Clearance to Storage (Standard Sidewall Spray Sprinklers). The clearance between the deflector and the top of storage shall be 18 in. (457 mm) or greater.

4-8 Extended Coverage Upright and Pendent Spray Sprinklers.

4-8.1 General. All requirements of Section 4-5 shall apply to extended coverage upright and pendent sprinklers except as modified below.

4-8.2 Protection Areas per Sprinkler (Extended Coverage Upright and Pendent Spray Sprinklers).

4-8.2.1* Determination of the Protection Area of Coverage. The protection area of coverage (A_s) for extended coverage sprinklers shall be not less than that prescribed by the listing. Listing dimensions shall be even-numbered square protection areas as shown in Table 4-8.2.

4-8.2.2 Maximum Protection Area of Coverage. The maximum allowable area of coverage for a sprinkler (A_s) shall be in accordance with the value indicated in Table 4-8.2. In any case, the maximum area of coverage of a sprinkler shall not exceed 400 sq ft.

4-8.3 Sprinkler Spacing (Extended Coverage Upright and Pendent Spray Sprinklers).

4-8.3.1 Maximum Distance Between Sprinklers. The maximum distance permitted between sprinklers shall be based on the centerline distance between sprinklers on the branch line or on adjacent branch lines. The maximum distance shall be measured along the slope of the ceiling. The maximum distance permitted between sprinklers shall comply with Table 4-8.2.

4-8.3.2 Maximum Distance From Walls. The distance from sprinklers to walls shall not exceed one-half of the allowable distance permitted between sprinklers as indicated in Table 4-8.2. The distance from the wall to the sprinkler shall be measured perpendicular to the wall. Where walls are angled or irregular, the maximum horizontal distance between a sprinkler and any point of floor area protected by that sprinkler shall not exceed 0.75 times the allowable distance permitted between sprinklers.

4-8.3.3 Minimum Distance from Walls. Sprinklers shall be located a minimum of 4 in. (102 mm) from a wall.

Exception: Where sprinklers have been listed for distances less than this, they shall be permitted.

4-8.3.4 Minimum Distance Between Sprinklers. Sprinklers shall be spaced not less than 8 ft (2.4 m) on center.

Exception: Sprinklers shall be permitted to be placed less than 8 ft (2.4 m) on center where the following conditions are satisfied:

(a) Baffles shall be installed and located midway between sprinklers and arranged to protect the actuating elements.

(b) Baffles shall be of noncombustible or limited-combustible material that will stay in place before and during sprinkler operation.

(c) Baffles shall be not less than 8 in. (203 mm) wide and 6 in. (152 mm) high. The tops of baffles shall extend between 2 to 3 in. (51 to 76 mm) above the deflectors of upright sprinklers. The bottoms of baffles shall extend downward to a level at least even with the deflectors of pendent sprinklers. (See A-4-13.3.4.)

4-8.4 Deflector Position (Extended Coverage Upright and Pendent Spray Sprinklers).

4-8.4.1 Distance Below Ceilings.

4-8.4.1.1 Under unobstructed construction, the distance between the sprinkler deflector and the ceiling shall be a minimum of 1 in. (25.4 mm) and a maximum of 12 in. (305 mm).

Exception No. 1. Ceiling-type sprinklers (concealed, recessed, and flush types) shall be permitted to have the operating element above the ceiling and the deflector located nearer to the ceiling where installed in accordance with their listing.

Exception No. 2: Where sprinklers are listed for use under other ceiling construction features or for different distances, they shall be permitted to be installed in accordance with their listing.

4-8.4.1.2 Under obstructed construction, the sprinkler deflector shall be located 1 to 6 in. (25.4 to 152 mm) below the structural members and a maximum distance of 22 in. (559 mm) below the ceiling/roof deck.

Table 4-8.2 Protection Areas and Maximum Spacing (Extended Coverage Upright and Pendent Spray Sprinklers)

	Light Hazard		Ordinary Hazard		Extra Hazard		High Pile Storage	
Construction Type	Protection Area (ft^2)	Spacing (ft)	Protection Area (ft^2)	Spacing (ft)	Protection Area (ft^2)	Spacing (ft)	Protection Area (ft^2)	Spacing (ft)
			400	20				
			324	18				
	400	20	256	16				
	324	18	196	14	196	14	196	14
Unobstructed	256	16	144	12	144	12	144	12
			400	20				
Obstructed			324	18				
noncombustible	400	20	256	16				
(when specifically	324	18	196	14	196	14	196	14
listed for such use)	256	16	144	12	144	12	144	12
Obstructed combustible	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

For SI Units: 1 ft = 0.3048 m; 1 ft^2 = 0.0929 m^2.

Exception No. 1: Sprinklers shall be permitted to be installed with the deflector at or above the bottom of the structural member to a maximum of 22 in. (559 mm) below the ceiling/roof deck where the sprinkler is installed in conformance with 4-6.5.1.2.

Exception No. 2: Where sprinklers are installed in each bay of obstructed construction, deflectors shall be a minimum of 1 in. (25.4 mm) and a maximum of 12 in. (305 mm) below the ceiling.

Exception No. 3: Where sprinklers are listed for use under other ceiling construction features or for different distances, they shall be permitted to be installed in accordance with their listing.

4-8.4.1.3* Sprinklers under or near the peak of a roof or ceiling shall have deflectors located not more than 3 ft (0.9 m) vertically down from the peak. [*See Figures 4-6.4.1.3(a) and 4-6.4.1.3(b).*]

4-8.4.2 Deflector Orientation. Deflectors of sprinklers shall be aligned parallel to ceilings or roofs.

4-8.5 Obstructions to Sprinkler Discharge (Extended Coverage Upright and Pendent Spray Sprinklers).

4-8.5.1 Performance Objective.

4-8.5.1.1 Sprinklers shall be located so as to minimize obstructions to discharge as defined in 4-8.5.2 and 4-8.5.3 or additional sprinklers shall be provided to ensure adequate coverage of the hazard.

4-8.5.1.2 Sprinklers shall be arranged to comply with Paragraph 4-5.5.2, Table 4-8.5.1.2, and Figure 4-8.5.1.2(a).

Exception No. 1: Sprinklers shall be permitted to be spaced on opposite sides of obstructions not exceeding 4 ft (1.3 m) in width provided the distance from the centerline of the obstruction to the sprinklers does not exceed one-half the allowable distance permitted between sprinklers.

Exception No. 2: Obstructions located against the wall and that are not over 30 in. (762 mm) in width shall be permitted to be protected in accordance with Figure 4-8.5.1.2(b).

Table 4-8.5.1.2(a) Position of Sprinklers to Avoid Obstructions to Discharge (Extended Coverage Upright and Pendent Spray Sprinklers)

Distance from Sprinklers to Side of Obstruction (a)	Maximum Allowable Distance of Deflector above Bottom of Obstruction (in.) (b)
Less than 1 ft	0
1 ft to less than 1 ft 6 in.	0
1 ft 6 in. to less than 2 ft	1
2 ft to less than 2 ft 6 in.	1
2 ft 6 in. to less than 3 ft	1
3 ft to less than 3 ft 6 in.	3
3 ft 6 in. to less than 4 ft	3
4 ft to less than 4 ft 6 in.	5
4 ft 6 in. to less than 5 ft	7
5 ft to less than 5 ft 6 in.	7
5 ft 6 in. to less than 6 ft	7
6 ft to less than 6 ft 6 in.	9
6 ft 6 in. to less than 7 ft	11
7 ft and greater	14

For SI Units: 1 in. = 25.4 mm, 1 ft = 0.3048 m.

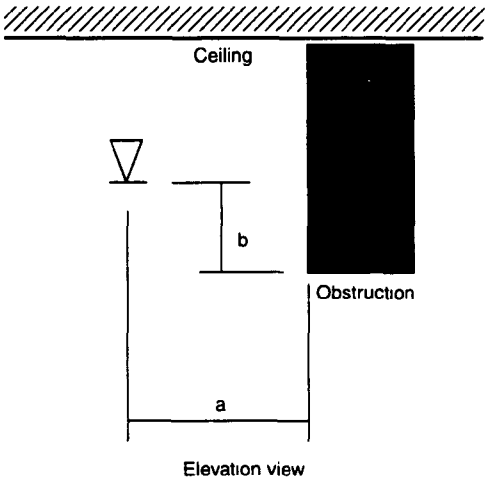


Figure 4-8.5.1.2(a) Position of sprinklers to avoid obstructions to discharge (extended coverage upright and pendent spray sprinklers).

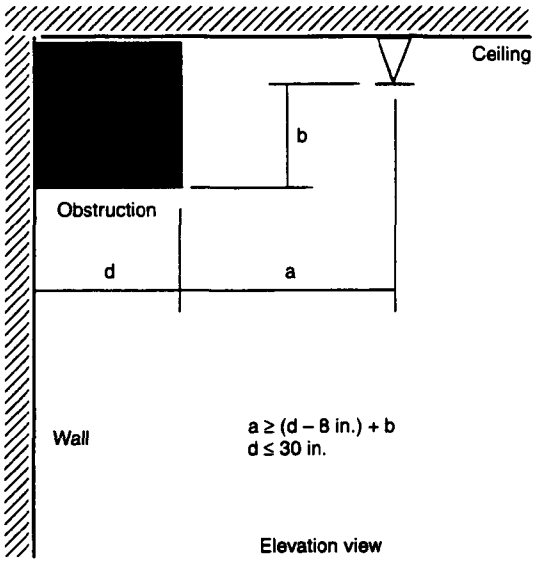


Figure 4-8.5.1.2(b) Obstructions against walls (SSU/SSP).

4-8.5.2 Obstructions to Sprinkler Discharge Pattern Development.

4-8.5.2.1 Continuous or noncontinuous obstructions less than 18 in. (457 mm) below the sprinkler deflector that prevent the pattern from fully developing shall comply with this section.

4-8.5.2.2 Sprinklers shall be positioned such that they are located at a distance four times greater than the maximum dimension of an obstruction up to a maximum of 36 in. (.91 m) (e.g., truss webs and chords, pipe, columns, and fixtures). (*See Figure 4-8.5.2.2.*)

Exception No. 1: Sprinklers shall be permitted to be spaced on opposite sides of the obstruction provided the distance from the centerline of the obstruction to the sprinklers does not exceed one-half the allowable distance between sprinklers.

Exception No. 2: Where the obstruction consists of open trusses 20 in. (.51 m) or greater apart [24 in. (.61 m) on center], sprinklers shall be permitted to be located one-half the distance between the obstruction created by the truss provided that truss chords do not exceed 4 in. (101 mm) in width and web members do not exceed 1 in. (25.4 mm) in width.

Exception No .3: Where the sprinklers are installed in the centerline of bar joists or a truss.

Exception No. 4: Piping to which an upright sprinkler is directly attached less than 3 in. (75 mm) in diameter.

Exception No. 5: Piping to which pendent and sidewall sprinklers are directly attached.

4-8.5.3* Obstructions that Prevent Sprinkler Discharge from Reaching the Hazard. Continuous or noncontinuous obstructions that interrupt the water discharge in a horizontal plane more than 18 in. (457 mm) below the sprinkler deflector in a manner to limit the distribution from reaching the protected hazard shall comply with this section.

4-8.5.3.1 Sprinklers shall be installed under fixed obstructions over 4 ft (1.2 m) wide such as ducts, decks, cutting tables, and overhead doors.

Exception: Obstructions that are not fixed in place such as conference tables.

4-8.5.3.2 Sprinklers installed under open gratings shall be of the intermediate level/rack storage type or otherwise shielded from the discharge of overhead sprinklers.

4-8.5.4 Suspended or Floor-Mounted Vertical Obstructions. The distance from sprinklers to privacy curtains, free standing partitions, room dividers, and similar obstructions in light hazard occupancies shall be in accordance with Table 4-8.5.4 and Figure 4-8.5.4.

4-8.6 Clearance to Storage (Extended Coverage Upright and Pendent Spray Sprinklers). The clearance between the deflector and the top of storage shall be 18 in. (457 mm) or greater.

Exception: Where other standards specify greater minimums, they shall be followed.

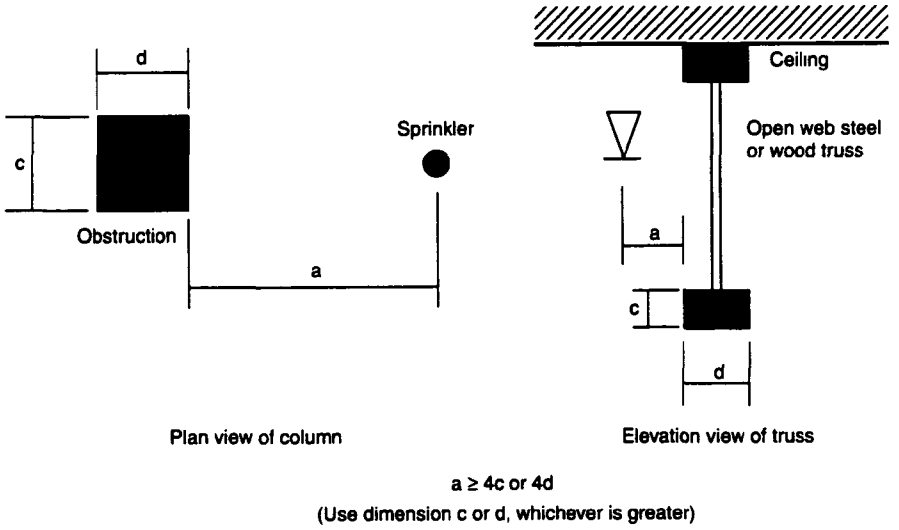


Figure 4-8.5.2.2 Minimum distance from obstruction (extended coverage upright and pendent spray sprinklers).

Table 4-8.5.4 Suspended or Floor Mounted Obstructions (Extended Coverage Upright and Pendent Spray Sprinklers)

Horizontal Distance (a)	Maximum Vertical Distance below Deflector (b)
6 in. or less	3 in.
More than 6 in. to 9 in.	4 in.
More than 9 in. to 12 in.	6 in.
More than 12 in. to 15 in.	8 in.
More than 15 in. to 18 in.	9½ in.
More than 18 in. to 24 in.	12½ in.
More than 24 in. to 30 in.	15½ in.
More than 30 in.	18 in.

For SI Units. 1 in. = 25 4 mm

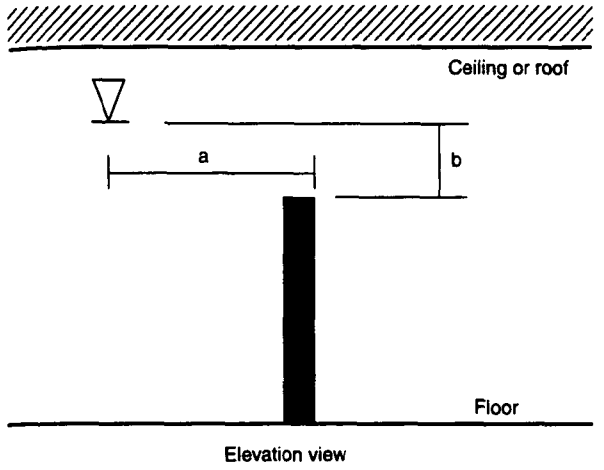


Figure 4-8.5.4 Suspended or floor-mounted obstructions (extended coverage upright and pendent spray sprinklers).

4-9 Extended Coverage Sidewall Spray Sprinklers.

4-9.1 General. All requirements of Section 4-5 shall apply to extended coverage sidewall spray sprinklers except as modified below.

4-9.2 Protection Areas per Sprinkler (Extended Coverage Sidewall Spray Sprinklers).

4-9.2.1* Determination of the Protection Area of Coverage. The protection area of coverage per sprinkler (A_s) for extended coverage sidewall sprinklers shall be not less than that prescribed by the listing. Listing dimensions shall be in 2-ft (.61-m) increments up to 28 ft (8.5 m).

4-9.2.2 Maximum Protection Area of Coverage. The maximum allowable protection area of coverage for a sprinkler (A_s) shall be in accordance with the value indicated in Table 4-9.2. In any case, the maximum area of coverage of a sprinkler shall not exceed 400 sq ft (37.1 m^2).

4-9.3 Sprinkler Spacing (Extended Coverage Sidewall Spray Sprinklers).

4-9.3.1 Maximum Distance Between Sprinklers. The maximum distance permitted between sprinklers shall be based on the centerline distance between sprinklers on the branch line along the wall.

Table 4-9.2 Protection Area and Maximum Spacing for Extended Coverage Sidewall Sprinklers

	Light Hazard		Ordinary Hazard	
Construction Type	Protection Area (ft^2)	Spacing (ft)	Protection Area (ft^2)	Spacing (ft)
Unobstructed, smooth, flat	400	28	400	24

4-9.3.1.1 Sidewall spray sprinklers shall be installed along the length of a single wall of a room.

Exception No 1: Sidewall sprinklers shall not be installed back-to-back without being separated by a continuous lintel soffit or baffle.

Exception No 2: Sidewall sprinklers shall be permitted to be installed on opposing or adjacent walls provided no sprinkler is located within the maximum protection area of another sprinkler.

4-9.3.2 Maximum Distance from Walls. The distance from sprinklers to the end walls shall not exceed one-half of the allowable distance permitted between sprinklers as indicated in Table 4-9.2.

4-9.3.3 Minimum Distance from Walls. Sprinklers shall be located a minimum of 4 in. (102 mm) from a wall. The distance from the wall to the sprinkler shall be measured perpendicular to the wall.

Exception: Horizontal sidewall sprinklers are permitted to be located with their deflectors less than 4 in. (102 mm) from the wall on which they are mounted.

4-9.3.4 Minimum Distance Between Sprinklers. No sprinklers shall be located within the maximum protection area of any other sprinkler.

4-9.4 Deflector Position from Ceilings and Walls (Extended Coverage Sidewall Spray Sprinklers).

4-9.4.1 Distance Below Ceilings and from Walls.

4-9.4.1.1 Sidewall sprinkler deflectors shall be located not more than 6 in. (152 mm) nor less than 4 in. (102 mm) from ceilings.

Exception: Horizontal sidewall sprinklers are permitted to be located in a zone 6 to 12 in. (152 to 305 mm) or 12 to 18 in. (305 to 457 mm) below noncombustible ceilings where listed for such use.

4-9.4.1.2 Sidewall sprinkler deflectors shall be located not more than 6 in. (229 mm) nor less than 4 in. (102 mm) from walls.

4-9.4.1.3 Sidewall sprinklers shall only be installed along walls, lintels, or soffits where the distance from the ceiling to the bottom of the lintel or soffit is at least 2 in. (51 mm) greater than the distances from the ceiling to sidewall sprinkler deflectors.

4-9.4.1.3.1 Where soffits are used for the installation of sidewall sprinklers, they shall not exceed 8 in. (203 mm) in width or projection from the wall.

Exception: Soffits shall be permitted to exceed 8 in. (203 mm) where additional sprinklers are installed below the soffit.

4-9.4.2 Deflector Orientation. Deflectors of sprinklers shall be aligned parallel to ceilings or roofs.

4-9.4.2.1 Sidewall sprinklers, where installed under a sloped ceiling, shall be located at the high point of the slope and positioned to discharge downward along the slope.

4-9.5 Obstructions to Sprinkler Discharge (Extended Coverage Sidewall Spray Sprinklers).

4-9.5.1 Performance Objective.

4-9.5.1.1 Sprinklers shall be located so as to minimize obstructions to discharge as defined in 4-5.5.2 and 4-5.5.3 or additional sprinklers shall be provided to ensure adequate coverage of the hazard.

4-9.5.1.2 Sidewall sprinklers shall be installed no closer than 8 ft (2.3 m) from light fixtures or similar obstructions. The distance between light fixtures or similar obstructions located more than 8 ft (4.6 m) from the sprinkler shall be in conformity with Figure 4-9.5.1.2 and Table 4-9.5.1.2.

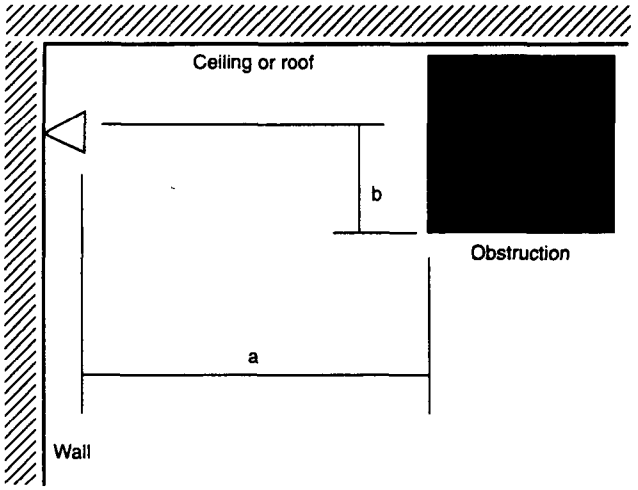


Figure 4-9.5.1.2 Positioning of sprinklers to avoid obstructions (extended coverage sidewall sprinklers).

Table 4-9.5.1.2 Positioning of Sprinklers to Avoid Obstructions (Extended Coverage Sidewall Sprinklers)

Distance from Sidewall Sprinkler to Side of Obstruction (a)	Maximum Allowable Distance of Deflector above Bottom of Obstruction (in.) (b)
8 ft to less than 10 ft	1
10 ft to less than 11 ft	2
11 ft to less than 12 ft	3
12 ft to less than 13 ft	4
13 ft to less than 14 ft	6
14 ft to less than 15 ft	7
15 ft to less than 16 ft	9
16 ft to less than 17 ft	11
17 ft or greater	14

For SI Units: 1 in. = 25.4 mm; 1 ft = 0.3048 m.

4-9.5.2 Obstructions to Sprinkler Discharge Pattern Development.

4-9.5.2.1 Continuous or noncontinuous obstructions less than 18 in. (457 mm) below the sprinkler deflector that prevent the pattern from fully developing shall comply with this section.

4-9.5.2.2 Sprinklers shall be positioned such that they are located at a distance four times greater than the maximum dimension of the obstruction to a maximum of 36 in. (.91 m) from the sprinkler (e.g., truss webs and chords, pipe, columns, and fixtures). Sidewall sprinklers shall be positioned in accordance with Figure 4-9.5.2.2 when obstructions are present.

4-9.5.3* Obstructions that Prevent Sprinkler Discharge from Reaching the Hazard. Continuous or noncontinuous obstructions that interrupt the water discharge in a horizontal plane more than 18 in. (457 mm) below the sprinkler deflector in a manner to limit the distribution from reaching the protected hazard shall comply with this section.

4-9.5.3.1 Sprinklers shall be installed under fixed obstructions over 4 ft (1.2 m) wide such as ducts, decks, cutting tables, and overhead doors.

Exception: Obstructions that are not fixed in place such as conference tables.

4-9.5.4 Suspended or Floor-Mounted Vertical Obstructions. The distance from sprinklers to privacy curtains, free-standing partitions, room dividers, and similar obstructions in light hazard occupancies shall be in accordance with Table 4-9.5.4 and Figure 4-9.5.4.

4-10 Large-Drop Sprinklers.

4-10.1 General. All requirements of Section 4-5 shall apply to large-drop sprinklers except as modified below.

4-10.2* Protection Areas per Sprinkler (Large-Drop Sprinklers).

4-10.2.1 Determination of the Protection Area of Coverage. The protection area of coverage per sprinkler (A_s) shall be determined in accordance with 4-5.2.1.

4-10.2.2 Maximum Protection Area of Coverage. The maximum allowable protection area of coverage for a sprinkler (A_s) shall be in accordance with the value indicated in Table 4-10.2. In any case, the maximum area of coverage of any sprinkler shall not exceed 130 ft^2 (12.9 m^2).

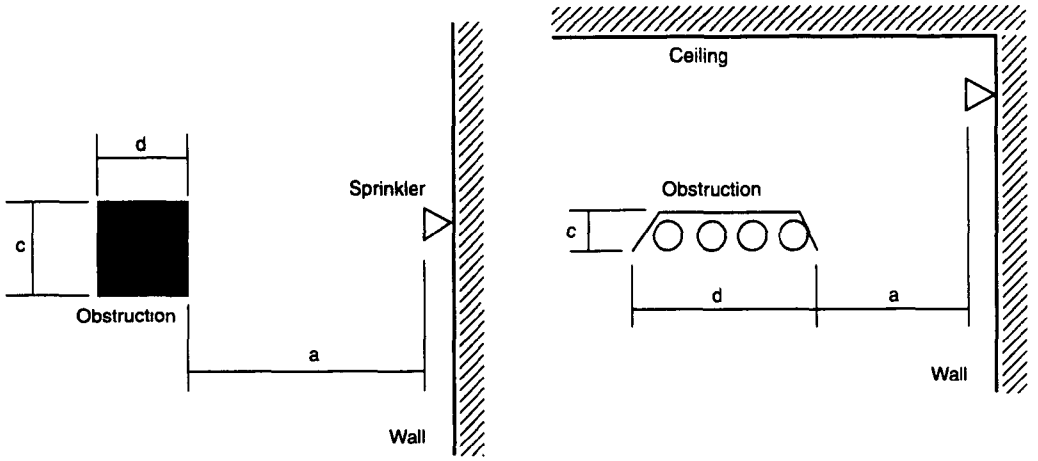
4-10.2.3 Minimum Protection Area of Coverage. The minimum allowable protection area of coverage for a sprinkler (A_s) shall be not less than 80 ft^2 (7.4 m^2).

4-10.3 Sprinkler Spacing (Large-Drop Sprinklers).

4-10.3.1* Maximum Distance Between Sprinklers. The distance between sprinklers shall be limited to not more than 12 ft (3.7 m) between sprinklers as shown in Table 4-10.2.

Exception: Under obstructed combustible construction, the maximum distance shall be limited to 10 ft (3.0 m).

4-10.3.2 Maximum Distance from Walls. The distance from sprinklers to walls shall not exceed one-half of the allowable distance permitted between sprinklers as indicated in Table 4-10.2.

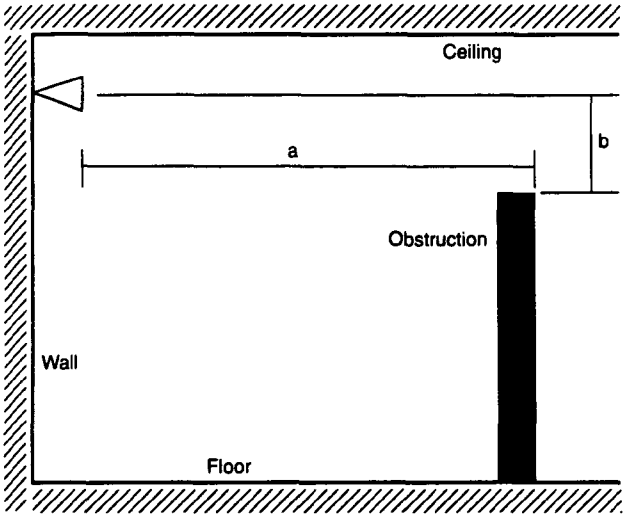


Plan view of column

Elevation view of pipe conduit or light fixture (See Table 4-9.5.4)

$a \geq 4c$ or $4d$
$a \leq 36$ in.
(Use dimension c or d, whichever is greater)

Figure 4-9.5.2.2 Minimum distance from obstruction (extended coverage sidewall).



Elevation view

Figure 4-9.5.4 Suspended or floor-mounted obstructions (extended coverage sidewall sprinklers).

Table 4-9.5.4 Suspended or Floor Mounted Obstructions (Extended Coverage Sidewall Sprinklers)

Horizonal Distance (a)	Minimum Allowable Distance below Deflector (b)
6 in. or less	3 in.
More than 6 in. to 9 in.	4 in.
More than 9 in. to 12 in.	6 in.
More than 12 in. to 15 in.	8 in.
More than 15 in. to 18 in.	9½ in.
More than 18 in. to 24 in.	12½ in.
More than 24 in. to 30 in.	15½ in.
More than 30 in.	18 in.

For SI Units: 1 in. = 25.4 mm.

Table 4-10.2 Protection Areas and Maximum Spacing for Large-Drop Sprinklers

Construction Type	Protection Area (ft^2)	Maximum Spacing (ft)
Noncombustible unobstructed	130	12
Noncombustible obstructed	130	12
Combustible unobstructed	130	12
Combustible obstructed	100	10

For SI Units: 1 ft = 0.3048 m; 1 ft^2 = 0.0929 m^2.

4-10.3.3 Minimum Distance from Walls. Sprinklers shall be located a minimum of 4 in. (102 mm) from a wall.

4-10.3.4 Minimum Distance Between Sprinklers. Sprinklers shall be spaced not less than 8 ft (2.4 m) on center.

4-10.4 Deflector Position (Large-Drop Sprinklers).

4-10.4.1* Distance Below Ceilings.

4-10.4.1.1 Under unobstructed construction, the distance between the sprinkler deflector and the ceiling shall be a minimum of 6 in. (152 mm) and a maximum of 8 in. (203 mm).

4-10.4.1.2 Under obstructed construction, the distance between the sprinkler deflector and the ceiling shall be a minimum of 6 in. (152 mm) and a maximum of 12 in. (305 mm).

Exception: Under wood joist or composite wood joist construction, the sprinklers shall be located 1 to 6 in. (25.4 to 152 mm) below the structural members to a maximum distance of 22 in. (559 mm) below the ceiling/roof or deck.

4-10.4.2 Deflector Orientation. Deflectors of sprinklers shall be aligned parallel to ceilings or roofs.

4-10.5* Obstructions to Sprinkler Discharge (Large-Drop Sprinklers).

4-10.5.1 Performance Objective.

4-10.5.1.1 Sprinklers shall be located so as to minimize obstructions to discharge as defined in 4-5.5.2 and 4-5.5.3 or additional sprinklers shall be provided to ensure adequate coverage of the hazard.

4-10.5.1.2 Sprinklers shall be arranged to comply with Paragraph 4-5.5.2, Table 4-10.5.1.2, and Figure 4-10.5.1.2.

4-10.5.2 Obstructions to Sprinkler Discharge Pattern Development.

4-10.5.2.1 Continuous or noncontinuous obstructions less than 36 in. (914 mm) below the sprinkler deflector that prevent the pattern from fully developing shall comply with this section.

4-10.5.2.2 Sprinklers shall be positioned such that they are located at a distance three times greater than the maximum dimension of the obstruction to a maximum of 24 in. (610 mm) from the sprinkler (e.g., webs and chord members, pipe, columns, and fixtures). Sprinklers shall be positioned in accordance with Figure 4-10.5.2.2 when obstructions are present.

4-10.5.2.3 Where branch lines are larger than 2 in. (51 mm), the sprinkler shall be supplied by a riser nipple to elevate the sprinkler 13 in. (330 mm) for 2½-in. (64-mm) pipe and 15 in. (380 mm) for 3-in. (76-mm) pipe. These dimensions shall be measured from the centerline of the pipe to the deflector.

Exception No. 1: This provision shall not apply where the sprinklers are offset horizontally a minimum of 12 in. (305 mm) from the pipe.

Exception No. 2: Piping to which the sprinkler is directly attached less than 2 in. (51 mm) in diameter.

4-10.5.3* Obstructions that Prevent Sprinkler Discharge from Reaching the Hazard. Continuous or noncontinuous obstructions that interrupt the water discharge in a horizontal plane more than 36 in. (914 mm) below the sprinkler deflector in a manner to limit the distribution from reaching the protected hazard shall comply with this section.

Table 4-10.5.1.2 Positioning of Sprinklers to Avoid Obstructions to Discharge (Large Drop Sprinkler)

Distance from Sprinkler to Side of Obstruction (a)	Maximum Allowable Distance of Deflector above Bottom of Obstruction (in.) (b)
Less than 1 ft	0
1 ft to less than 1 ft 6 in.	1½
1 ft 6 in. to less than 2 ft	3
2 ft to less than 2 ft 6 in.	5½
2 ft 6 in. to less than 3 ft	8
3 ft to less than 3 ft 6 in.	10
3 ft 6 in. to less than 4 ft	12
4 ft to less than 4 ft 6 in.	15
4 ft 6 in. to less than 5 ft	18
5 ft to less than 5 ft 6 in.	22
5 ft 6 in. to less than 6 ft	26
6 ft	31

For SI Units: 1 in. = 25.4 mm; 1 ft = 0.3048 m.

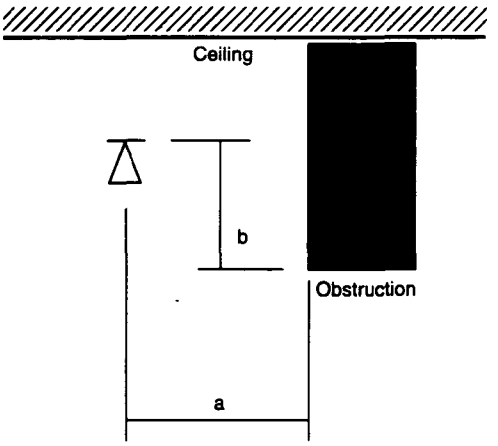
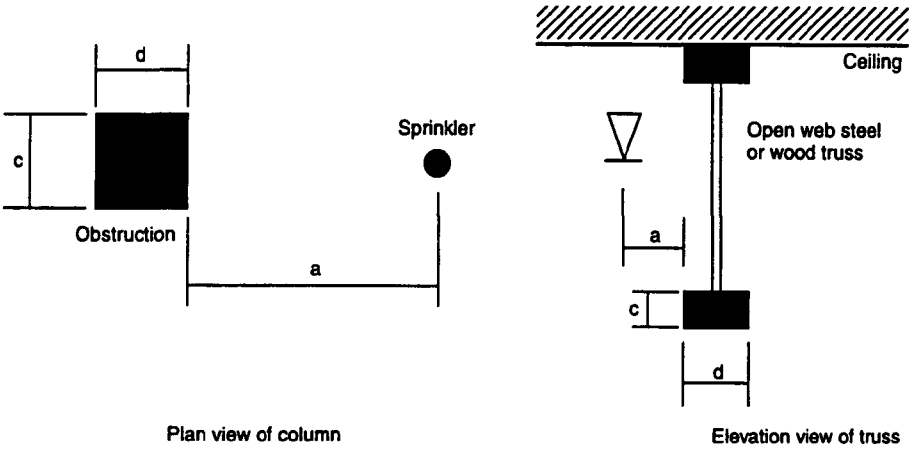


Figure 4-10.5.1.2 Positioning of sprinklers to avoid obstructions to discharge (large-drop sprinkler).



a ≥ 3c or 3d
(Use dimension c or d, whichever is greater)

Figure 4-10.5.2.2 Minimum distance from obstruction (large-drop sprinkler).

4-10.5.3.1 Sprinklers shall be positioned with respect to fluorescent lighting fixtures, ducts, and obstructions more than 24 in. (610 mm) wide and located entirely below the sprinklers so that the minimum horizontal distance from the near side of the obstruction to the center of the sprinkler is not less than the value specified in Table 4-10.5.3.1. (*See Figure 4-10.5.3.1.*)

Table 4-10.5.3.1 Obstruction Entirely Below the Sprinkler (Large Drop Sprinkler)

Distance of Deflector above Bottom of Obstruction (b)	Minimum Distance to Side of Obstruction (ft) (a)
Less than 6 in.	1½
6 in. to less than 12 in.	3
12 in. to less than 18 in.	4
18 in. to less than 24 in.	5
24 in. to less than 30 in.	5½
30 in. less than 36 in.	6

For SI Units: 1 in. = 25.4 mm; 1 ft = 0.3048 m.

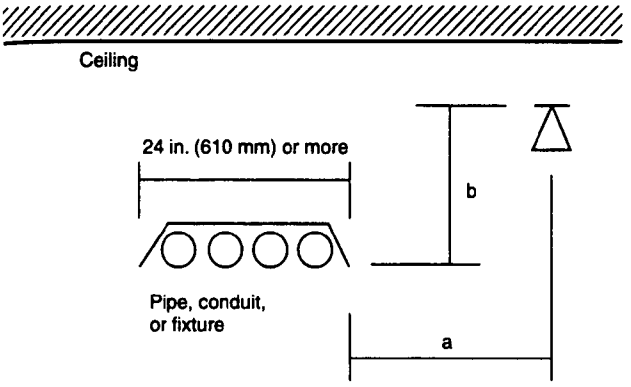


Figure 4-10.5.3.1 Obstruction entirely below the sprinkler (large-drop sprinkler).

4-10.5.3.2 Sprinklers installed under open gratings shall be of the intermediate level/rack storage type or otherwise shielded from the discharge of overhead sprinklers.

4-10.5.3.3 Where the bottom of the obstruction is located 24 in. (610 mm) or more below the sprinkler deflectors:

(a) Sprinklers shall be positioned so that the obstruction is centered between adjacent sprinklers. (*See Figure 4-10.5.3.3.*)

(b) The obstruction shall be limited to a maximum width of 24 in. (610 mm). (*See Figure 4-10.5.3.3.*)

Exception: Where the obstruction is greater than 24 in. (610 mm) wide, one or more lines of sprinklers shall be installed below the obstruction.

(c) The obstruction shall not extend more than 12 in. (305 mm) to either side of the midpoint between sprinklers. (*See Figure 4-10.5.3.3.*)

Exception: Where the extensions of the obstruction exceed 12 in. (305 mm), one or more lines of sprinklers shall be installed below the obstruction.

(d) At least 18 in. (457 mm) clearance shall be maintained between the top of storage and the bottom of the obstruction. (*See Figure 4-10.5.3.3.*)

4-10.5.3.4 In the special case of an obstruction running parallel to and directly below a branch line:

(a) The sprinkler shall be located at least 36 in. (914 mm) above the top of the obstruction. (*See Figure 4-10.5.3.4.*)

(b) The obstruction shall be limited to a maximum width of 12 in. (305 mm). (*See Figure 4-10.5.3.4.*)

(c) The obstruction shall be limited to a maximum extension of 6 in. (152 mm) to either side of the centerline of the branch line. (*See Figure 4-10.5.3.4.*)

4-10.6 Clearance to Storage (Large-Drop Sprinklers). The clearance between the deflector and the top of storage shall be 36 in. (914 mm) or greater.

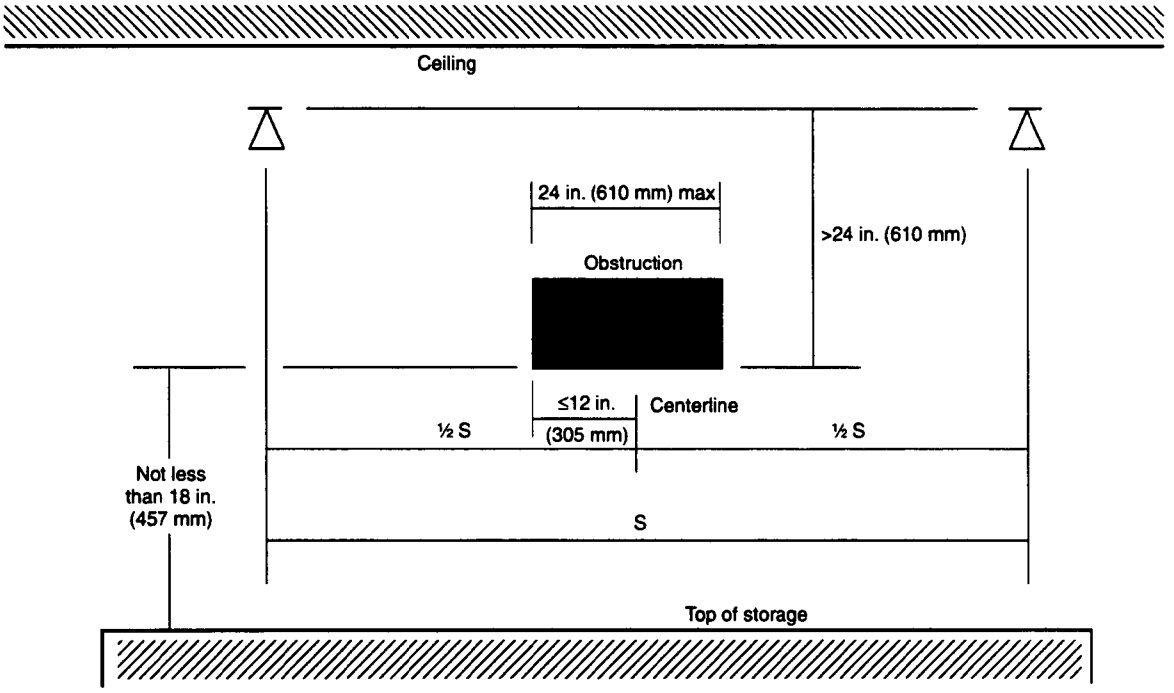


Figure 4-10.5.3.3 Obstruction more than 24 in. (610 mm) below the sprinkler (large-drop sprinkler).

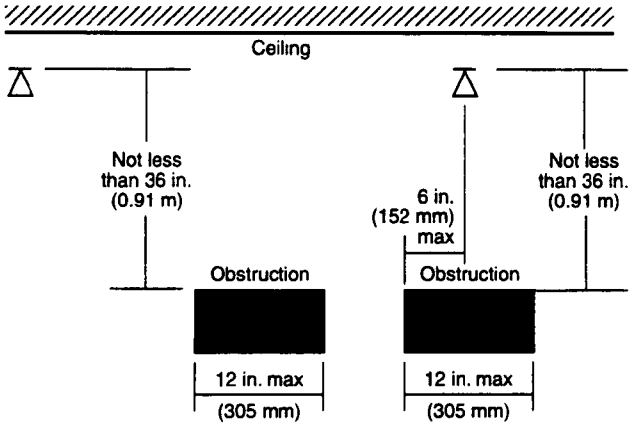


Figure 4-10.5.3.4 Obstruction more than 36 in. (914 mm) below the sprinkler (large-drop sprinkler).

4-11 Early Suppression Fast-Response Sprinklers.

4-11.1 General. All requirements of Section 4-5 shall apply except as modified below.

4-11.2 Protection Areas per Sprinkler (Early Suppression Fast-Response Sprinklers).

4-11.2.1 Determination of the Protection Area of Coverage. The protection area of coverage per sprinkler (A_s) shall be determined in accordance with 4-5.2.1.

4-11.2.2 Maximum Protection Area of Coverage. The maximum allowable protection area of coverage for a sprinkler (A_s) shall be in accordance with the value indicated in Table 4-11.2. In any case, the maximum area of coverage of any sprinkler shall not exceed 100 ft^2 (9.3 m^2).

4-11.2.3 Minimum Protection Area of Coverage. The minimum allowable protection area of coverage for a sprinkler (A_s) shall be not less than 80 ft^2 (7.4 m^2).

4-11.3 Sprinkler Spacing (Early Suppression Fast-Response Sprinklers).

4-11.3.1 Maximum Distance Between Sprinklers. The distance between sprinklers shall be limited to not more than 12 ft (3.7 m) between sprinklers as shown in Table 4-11.2.

Exception: ESFR sprinklers used in buildings with storage heights greater than 25 ft (7.6 m) and ceiling heights greater than 30 ft (9.1 m) shall not be spaced more than 10 ft (3.0 m) between sprinklers.

4-11.3.2 Maximum Distance from Walls. The distance from sprinklers to walls shall not exceed one-half of the allowable distance permitted between sprinklers as indicated in Table 4-11.2.

4-11.3.3 Minimum Distance from Walls. Sprinklers shall be located a minimum of 4 in. (102 mm) from a wall.

4-11.3.4 Minimum Distance Between Sprinklers. Sprinklers shall be spaced not less than 8 ft (2.4 m) on center.

4-11.4 Deflector Position (Early Suppression Fast-Response Sprinklers).

4-11.4.1 Distance Below Ceilings.

4-11.4.1.1 Pendent sprinklers shall be positioned so that deflectors are a maximum 14 in. (356 mm) and a minimum 6 in. (152 mm) below the ceiling. Upright sprinklers shall be positioned so that the deflector is 3 to 5 in. (76.2 to 127 mm) below the ceiling. With obstructed construction, the branch lines shall be permitted to be installed across the beams, but sprinklers shall be located in the bays and not under the beams.

4-11.4.2 Deflector Orientation. Deflectors of sprinklers shall be aligned parallel to ceilings or roofs. Pendent sprinklers shall be positioned so that deflectors are a maximum 14 in. (356 mm) and a minimum 6 in. (152 mm) below the ceiling.

4-11.5 Obstructions to Sprinkler Discharge (Early Suppression Fast-Response Sprinklers).

4-11.5.1 Performance Objective.

4-11.5.1.1 Sprinklers shall be located so as to minimize obstructions to discharge as defined in 4-5.5.2 and 4-5.5.3 or additional sprinklers shall be provided to ensure adequate coverage of the hazard.

4-11.5.1.2 Sprinklers shall be arranged to comply with Paragraph 4-5.5.2, Table 4-11.5.1.2, and Figure 4-11.5.1.2.

4-11.5.2 Obstructions to Sprinkler Discharge Pattern Development. Sprinklers shall be positioned such that they are located at a distance three times greater than the maximum dimension of an obstruction up to a maximum of 24 in. (609 mm) (e.g., structural members, pipe, columns, and fixtures). Sprinklers shall be positioned in accordance with Figure 4-11.5.2 where obstructions are present.

Table 4-11.2 Protection Areas and Maximum Spacing of ESFR Sprinklers

	ESFR Sprinkler up to 30 ft in Height		ESFR Sprinkler up to 40 ft in Height	
Construction Type	Protection Area (ft^2)	Spacing (ft)	Protection Area (ft^2)	Spacing (ft)
Noncombustible unobstructed	100	12	100	10
Noncombustible obstructed	100	12	100	10
Combustible unobstructed	100	12	100	10
Combustible obstructed	N/A	N/A	N/A	N/A

For SI units: 1 ft = 0.3048 m, 1 ft^2 = 0.0929 m^2

Table 4-11.5.1.2 Positioning of Sprinklers to Avoid Obstructions to Discharge (ESFR Sprinkler)

Distance from Sprinkler to Side of Obstruction (a)	Maximum Allowable Distance of Deflector above Bottom of Obstruction (in.) (b)
Less than 1 ft	0
1 ft to less than 1 ft 6 in.	1½
1 ft 6 in. to less than 2 ft	3
2 ft to less than 2 ft 6 in.	5½
2 ft 6 in. to less than 3 ft	8
3 ft to less than 3 ft 6 in.	10
3 ft 6 in. to less than 4 ft	12
4 ft to less than 4 ft 6 in.	15
4 ft 6 in. to less than 5 ft	18
5 ft to less than 5 ft 6 in.	22
5 ft 6 in. to less than 6 ft	26
6 ft	31

For SI Units: 1 in. = 25.4 mm, 1 ft = 0.3048 m.

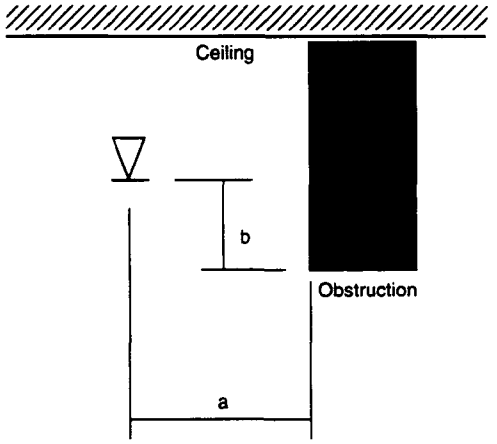


Figure 4-11.5.1.2 Positioning of sprinklers to avoid obstructions to discharge (ESFR sprinkler).

4-11.5.3* Obstructions that Prevent Sprinkler Discharge from Reaching the Hazard.

4-11.5.3.1 Continuous or noncontinuous obstructions that interrupt the water discharge in a horizontal plane more than 36 in. (914 mm) below the sprinkler deflector in a manner to limit the distribution from reaching the protected hazard shall comply with this section.

4-11.5.3.2 Where sprinklers are located entirely above obstructions such as the bottom chords of trusses or joists, ducts, piping, fluorescent lighting fixtures, conveyors, or similar obstructions, the sprinklers shall be positioned so that the maximum distance from the bottom of the obstruction to the deflector does not exceed the values specified in Table 4-11.5.1.2. Upright sprinklers shall also be positioned so that the deflector is a minimum of 7 in. (178 mm) above the top of the sprinkler pipe.

Exception No. 1: ESFR sprinklers shall be positioned so that the deflectors are at least 1 ft (305 mm) horizontally from the nearest edge of any bottom chords at open trusses or open bar joists.

Exception No. 2: Sprinklers shall not be required to meet Table 4-11.5.1.2 where additional sprinklers are located beneath the obstruction and are added to the water demand. If the obstruction is not solid (such as a group of closely spaced pipes or conduit) a barrier shall be placed under the obstruction and above the sprinklers. Sprinklers installed under the barrier or obstruction shall be positioned in accordance with 4-11.4 as if the obstruction or barrier were a ceiling. Paragraph 4-11.6 shall apply to sprinklers located below obstructions.

Exception No. 3: Sprinklers shall not be required to meet Table 4-11.5.1.2 where the sprinkler deflector is at least 1 ft (305 mm) horizontally from the nearest edge of any obstructions up to 2 ft (610 mm) wide and located below a single sprinkler, but not below two or more adjacent sprinklers, including diagonally.

Exception No. 4: Sprinklers shall not be required to meet Table 4-11.5.1.2 where the sprinkler deflectors are at least 1 ft (305 mm) horizontally from the nearest edge of any obstructions up to 1 ft (305 mm) wide that are located below two or more adjacent sprinklers, including diagonally.

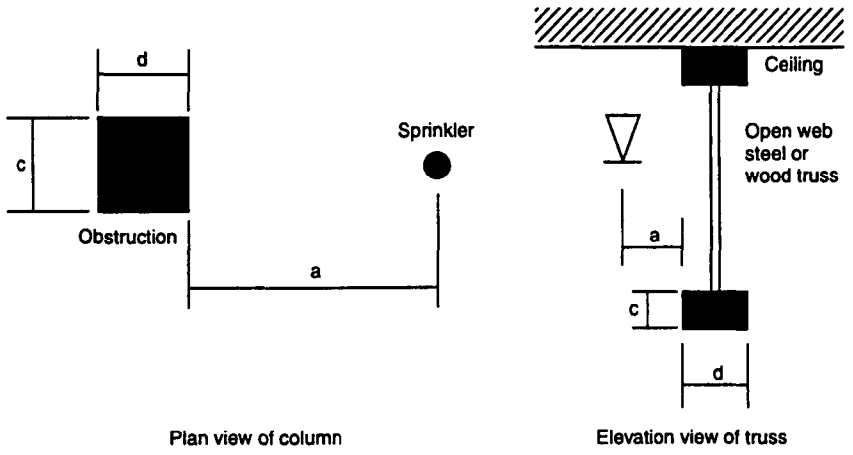


Figure 4-11.5.2 Minimum distance from obstruction (ESFR sprinkler).

Exception No. 5: Sprinklers shall not be required to meet Table 4-11.5.1.2 where the sprinkler deflectors are least 2 ft (610 mm) horizontally from the nearest edge of any obstructions up to 2 ft (610 mm) wide that are located below two or more adjacent sprinklers, including diagonally.

4-11.5.3.3 Sprinklers installed under open gratings shall be of the intermediate level/rack storage type or otherwise shielded from the discharge of overhead sprinklers.

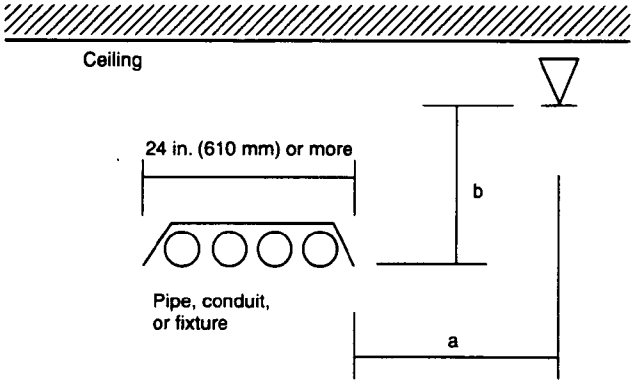


Figure 4-11.5.3.3 Obstruction entirely below the sprinkler (ESFR sprinkler).

4-11.6 Clearance to Storage (Early Suppression Fast-Response Sprinklers). The clearance between the deflector and the top of storage shall be 36 in. (914 mm) or greater.

4-12 In-Rack Sprinklers.

4-12.1 System Size. The area protected by a single system of sprinklers in racks shall not exceed 40,000 ft^2 (3716 m^2) of floor area occupied by the racks, including aisles, regardless of the number of levels of in-rack sprinklers.

4-12.2 Control Valves. Where sprinklers are installed in racks, separate indicating control valves and drains shall be provided for ceiling sprinklers and sprinklers in racks.

Exception No. 1: In-rack installations of 20 or fewer sprinklers.

Exception No. 2: The separate indicating valve shall be permitted to be arranged as sectional control valves where the racks occupy only a portion of the area protected by ceiling sprinklers.

4-12.3 Type of Sprinklers. In-rack sprinklers shall be ordinary temperature $^1/_2$- or $^{17}/_{32}$-in. (12.7- or 13.5-mm) sprinklers.

4-12.4 Location of In-Rack Sprinklers.

4-12.4.1 A minimum 6-in. (152-mm) vertical clear space shall be maintained between the sprinkler deflector and the top tier of storage.

4-12.4.2 The maximum spacing between sprinklers shall be 10 ft (3.05 m).

4-12.4.3 Sprinklers shall be located in transverse flue spaces.

4-12.4.4 In-rack sprinklers shall be located at the first tier level at or above one-half of the storage height.

4-12.4.5 Where sprinklers are installed in racks, different distances of deflectors above the bottom of horizontal rack supports shall be permitted when water distribution tests complete with storage commodity above the sprinklers demonstrate essentially equivalent distribution to that obtained with distances as specified in Table 4-6.5.1.2.

4-13 Special Situations.

4-13.1 Concealed Spaces.

4-13.1.1* All concealed spaces enclosed wholly or partly by exposed combustible construction shall be protected by sprinklers.

Exception No. 1: Concealed spaces formed by studs or joists with less than 6 in. (152 mm) between the inside or near edges of the studs or joists. (See Figure 4-6.4.1.4.)

Exception No. 2: Concealed spaces formed by bar joists with less than 6 in. (152 mm) between the roof or floor deck and ceiling.

Exception No. 3: Concealed spaces formed by ceilings attached directly to or within 6 in. (152 mm) of wood joist construction.

Exception No. 4: Concealed spaces formed by ceilings attached directly to the underside of composite wood joist construction, provided the joist channels are firestopped into volumes each not exceeding 160 ft^3 (4.53 m^3) using materials equivalent to the web construction.

Exception No. 5: Concealed spaces entirely filled with noncombustible insulation.

Exception No. 6: Concealed spaces within wood joist construction and composite wood joist construction having noncombustible insulation filling the space from the ceiling up to the bottom edge of the joist of the roof or floor deck, provided that in composite wood joist construction the joist channels are firestopped into volumes each not exceeding 160 ft^3 (4.53 m^3). The joists shall be firestopped to the full depth of the joist with material equivalent to the web construction.

Exception No. 7: Concealed spaces over isolated small rooms not exceeding 55 ft^2 (4.6 m^2) in area.

Exception No. 8: Where rigid materials are used and the exposed surfaces have a flame spread rating of 25 or less and the materials have been demonstrated not to propagate fire in the form in which they are installed in the space.

Exception No. 9: Concealed spaces in which the exposed materials are constructed entirely of fire-retardant treated wood as defined by NFPA 703, Standard for Fire Retardant Impregnated Wood and Fire Retardant Coatings for Building Materials.

Exception No. 10: Noncombustible concealed spaces having exposed combustible insulation where the heat content of the facing and substrate of the insulation material does not exceed 1000 Btu per ft^2 (11 356 kJ/m^2).

4-13.1.2 Sprinklers in concealed spaces having no access for storage or other use shall be installed in accordance with the requirements for Light Hazard Occupancy.

4-13.1.3 Where heat-producing devices such as furnaces or process equipment are located in the joist channels above a ceiling attached directly to the underside of composite wood joist construction that would not otherwise require sprinkler protection of the spaces, the joist channel containing the heat-producing devices shall be sprinklered by installing sprinklers in each joist channel, on each side, adjacent to the heat-producing device.

4-13.2 Vertical Shafts.

4-13.2.1 One sprinkler shall be installed at the top of shafts.

Exception No. 1: Noncombustible or limited-combustible, nonaccessible vertical duct shafts.

Exception No. 2: Noncombustible or limited-combustible, nonaccessible vertical electrical or mechanical shafts.

4-13.2.2* Where vertical shafts have combustible surfaces, one sprinkler shall be installed at each alternate floor level. Where a shaft having combustible surfaces is trapped, an additional sprinkler shall be installed at the top of each trapped section.

4-13.2.3 Where accessible vertical shafts have noncombustible surfaces, one sprinkler shall be installed near the bottom.

4-13.2.4 Where vertical openings are not protected by fire-rated enclosures, sprinklers shall be placed so as to fully protect the openings.

4-13.3 Stairways.

4-13.3.1 Sprinklers shall be installed beneath all stairways of combustible construction.

4-13.3.2 In noncombustible stair shafts with noncombustible stairs, sprinklers shall be installed at the top of the shaft and under the first landing above the bottom of the shaft.

Exception: Sprinklers shall be installed beneath landings or stairways where the area beneath is used for storage.

4-13.3.3* Sprinklers shall be installed in the stair shaft at each floor landing where two or more doors open from that landing into separate fire divisions.

4-13.3.4* Where moving stairways, staircases, or similar floor openings are unenclosed, the floor openings involved shall be protected by closely spaced sprinklers in combination with draft stops.

The draft stops shall be located immediately adjacent to the opening, shall be at least 18 in. (457 mm) deep, and shall be of noncombustible or limited-combustible material that will stay in place before and during sprinkler operation. Sprinklers shall be spaced not more than 6 ft (1.8 m) apart and placed 6 to 12 in. (152 to 305 mm) from the draft stop on the side away from the opening. Where sprinklers are closer than 6 ft (1.8 m), cross baffles shall be provided in accordance with 4-6.3.4.

Exception: Closely spaced sprinklers and draft stops are not required around large openings such as those found in shopping malls, atrium buildings, and similar structures where all adjoining levels and spaces are protected by automatic sprinklers in accordance with this standard and where the openings have all horizontal dimensions between opposite edges of 20 ft (6 m) or greater and an area of 1000 ft^2 (93 m^2) or greater.

4-13.4* Building Service Chutes. Building service chutes (linen, rubbish, etc.) shall be protected internally by automatic sprinklers. A sprinkler shall be provided above the top service opening of the chute, above the lowest service opening, and above service openings at alternate levels in buildings over two stories in height. The room or area into which the chute discharges shall also be protected by automatic sprinklers.

4-13.5 Elevator Hoistways and Machine Rooms.

4-13.5.1* Sidewall spray sprinklers shall be installed at the bottom of each elevator hoistway, not more than 2 ft (0.61 m) above the floor of the pit.

Exception: For enclosed, noncombustible elevator shafts that do not contain combustible hydraulic fluids, the sprinklers at the bottom of the shaft are not required.

4-13.5.2* Automatic sprinklers in elevator machine rooms or at the tops of hoistways shall be of ordinary or intermediate temperature rating.

4-13.5.3* Upright or pendent spray sprinklers shall be installed at the top of elevator hoistways.

Exception: Sprinklers are not required at the tops of noncombustible hoistways of passenger elevators whose car enclosure materials meet the requirements of ASME A17.1, Safety Code for Elevators and Escalators.

4-13.6 Spaces under Ground Floors, Exterior Docks, and Platforms. Sprinklers shall be installed in spaces under all combustible ground floors, exterior docks, and platforms.

Exception: Sprinklers shall be permitted to be omitted where all of the following conditions prevail:

(a) The space is not accessible for storage purposes and is protected against accumulation of wind-borne debris;

(b) The space contains no equipment such as conveyors or fuel-fired heating units;

(c) The floor over the space is of tight construction;

(d) No combustible or flammable liquids or materials that under fire conditions would convert into combustible or flammable liquids are processed, handled, or stored on the floor above the space.

4-13.7* Exterior Roofs or Canopies.

4-13.7.1 Sprinklers shall be installed under roofs or canopies over areas where combustibles are stored or handled.

Exception: Sprinklers are permitted to be omitted where construction is noncombustible or limited combustible and areas under the roofs or canopies are not used for storage or handling of combustibles.

4-13.7.2 Sprinklers shall be installed under exterior combustible roofs or canopies exceeding 4 ft (1.2 m) in width.

4-13.8 Dwelling Units.

4-13.8.1 Sprinklers are not required in bathrooms that are located within dwelling units, that do not exceed 55 ft^2 (5.1 m^2) in area, and that have walls and ceilings of noncombustible or limited-combustible materials with a 15-min thermal barrier rating including the walls and ceilings behind fixtures.

Exception: Sprinklers are required in bathrooms of nursing homes and in bathrooms opening directly onto public corridors or exitways.

4-13.8.2* Sprinklers are not required in clothes closets, linen closets, and pantries within dwelling units in hotels and motels where the area of the space does not exceed 24 ft^2 (2.2 m^2), the least dimension does not exceed 3 ft (0.9 m), and the walls and ceilings are surfaced with noncombustible or limited-combustible materials.

4-13.9 Library Stack Rooms. Sprinklers shall be installed in every aisle and at every tier of stacks with distance between sprinklers along aisles not to exceed 12 ft (3.6 m). [*See Figure 4-13.9(a).*]

Exception No. 1: Where vertical shelf dividers are incomplete and allow water distribution to adjacent aisles, sprinklers are permitted to be omitted in alternate aisles on each tier. Where ventilation openings are also provided in tier floors, sprinklers shall be staggered vertically. [See Figure 4-13.9(b).]

Exception No. 2: Sprinklers are permitted to be installed without regard to aisles where there is 18 in. (457 mm) or more clearance between sprinkler deflectors and tops of racks.

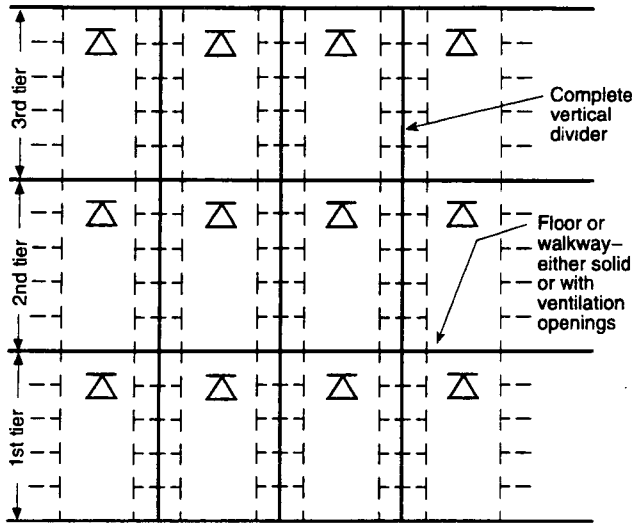


Figure 4-13.9(a) Sprinklers in multitier library bookstacks with complete vertical dividers.

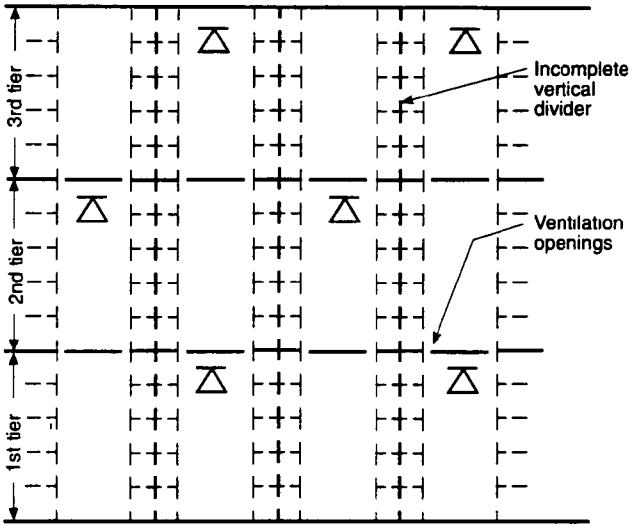


Figure 4-13.9(b) Sprinklers in multitier library bookstacks with incomplete vertical dividers.

4-13.10 Electrical Equipment. Sprinkler protection shall be required in electrical equipment rooms. Hoods or shields installed to protect important electrical equipment from sprinkler discharge shall be noncombustible.

Exception: Sprinklers shall not be required where all of the following conditions are met:

(a) The room is dedicated to electrical equipment only.

(b) Only dry-type electrical equipment is used.

(c) Equipment is installed in a 2-hr fire-rated enclosure including protection for penetrations.

(d) No combustible storage is permitted to be stored in the room.

4-13.11* Open-Grid Ceilings. Open-grid ceilings shall not be installed beneath sprinklers.

Exception No. 1: Open-grid ceilings in which the openings are 1/4 in. (6.4 mm) or larger in the least dimension, where the thickness or depth of the material does not exceed the least dimension of the opening, and where such openings constitute 70 percent of the area of the ceiling material. The spacing of the sprinklers over the open-grid ceiling shall then comply with the following:

(a) In Light Hazard Occupancies where sprinkler spacing (either spray or old-style sprinklers) is less than 10 ft by 10 ft (3 m by 3 m), a minimum clearance of at least 18 in. (457 mm) shall be provided between the sprinkler deflectors and the upper surface of the open-grid ceiling. Where spacing is greater than 10 ft by 10 ft (3 m by 3 m) but less than 10 ft by 12 ft (3 m by 3.7 m), a clearance of at least 24 in. (610 mm) shall be provided from spray sprinklers and at least 36 in. (914 mm) from old-style sprinklers. Where spacing is greater than 10 ft by 12 ft (3 m by 3.7 m), a clearance of at least 48 in. (1219 mm) shall be provided.

(b) In Ordinary Hazard Occupancies, open-grid ceilings shall be permitted to be installed beneath spray sprinklers only. Where sprinkler spacing is less than 10 ft by 10 ft (3 m by 3 m), a minimum clearance of at least 24 in. (610 mm) shall be provided between the sprinkler deflectors and the upper surface of the open-grid ceiling. Where spacing is greater than 10 ft by 10 ft (3 m by 3 m), a clearance of at least 36 in. (914 mm) shall be provided.

Exception No. 2: Other types of open-grid ceilings shall not be installed beneath sprinklers unless they are listed for such service and are installed in accordance with instructions contained in each package of ceiling material.

4-13.12 Drop-Out Ceilings.

4-13.12.1 Drop-out ceilings shall be permitted to be installed beneath sprinklers where ceilings are listed for that service and are installed in accordance with their listings.

Exception: Special sprinklers shall not be installed above drop-out ceilings unless specifically listed for this purpose.

4-13.12.2 Drop-out ceilings shall not be considered ceilings within the context of this standard.

4-13.12.3* Piping installed above drop-out ceilings shall not be considered concealed piping (*see 2-5.4, Exception No. 2*).

4-13.12.4* Sprinklers shall not be installed beneath drop-out ceilings.

4-13.13 Old-Style Sprinklers. Old-style sprinklers shall not be used in a new installation.

Exception No. 1: Old-style sprinklers shall be installed in fur storage vaults. See A-4-13.13 Exception No. 1.*

Exception No. 2: Use of old-style sprinklers shall be permitted where construction features or other special situations require unique water distribution.

4-13.14 Stages.

4-13.14.1 Sprinklers shall be installed under the roof at the ceiling, in spaces under the stage either containing combustible materials or constructed of combustible materials, and in all adjacent spaces and dressing rooms, storerooms, and workshops.

4-13.14.2 Where proscenium opening protection is required, a deluge system shall be provided with open sprinklers located not more than 3 ft (0.9 m) away from the stage side of the proscenium arch and spaced up to a maximum of 6 ft (1.8 m) on center. (*See Chapter 5 for design criteria.*)

4-13.15 Provision for Flushing Systems. All sprinkler systems shall be arranged for flushing. Readily removable fittings shall be provided at the end of all cross mains. All cross

mains shall terminate in 1 ¼-in. (33-mm) or larger pipe. All branch lines on gridded systems shall be arranged to facilitate flushing.

4-13.16 Stair Towers. Stairs, towers, or other construction with incomplete floors, if piped on independent risers, shall be treated as one area with reference to pipe sizes.

4-13.17 Return Bends. Return bends shall be used where pendent sprinklers are supplied from a raw water source, mill pond, or from open-top reservoirs. Return bends shall be connected to the top of branch lines in order to avoid accumulation of sediment in the drop nipples. (*See Figure 4-13.17.*)

Exception No. 1: Return bends are not required for deluge systems.

Exception No. 2: Return bends are not required where drypendent sprinklers are used.

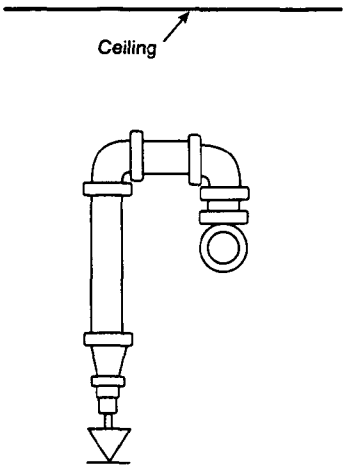


Figure 4-13.17 Return bend arrangement.

4-13.18 Piping to Sprinklers below Ceilings.

4-13.18.1 In new installations expected to supply sprinklers below a ceiling, minimum 1-in. (25-mm) outlets shall be provided.

Exception: Hexagonal bushings shall be permitted to accommodate temporary sprinklers and shall be removed with the temporary sprinklers when the permanent ceiling sprinklers are installed.

4-13.18.2 When pipe schedule systems are revamped, a nipple not exceeding 4 in. (102 mm) in length shall be permitted to be installed in the branch line fitting. All other piping shall be 1 in. (25.4 mm) where it supplies a single sprinkler in an area. [*See Figure 4-13.18.2(a).*]

Exception No. 1: When it is necessary to pipe 2 new ceiling sprinklers from an existing outlet in an overhead system, the use of a nipple not exceeding 4 in. (102 mm) in length and of the same pipe thread size as the existing outlet shall be permitted, provided that a hydraulic calculation verifies that the design flow rate will be achieved. [See Figure 4-13.18.2(b).]

Exception No. 2: The use of pipe nipples less than 1 in. (25.4 mm) in diameter is not permitted in areas subject to earthquakes.

4-13.18.3 When hydraulically designed systems are revamped, any existing bushing shall be removed and a nipple not exceeding 4 in. (102 mm) in length shall be permitted to be installed in the branch line fitting. Calculations shall be provided to verify that the system design flow rate will be achieved.

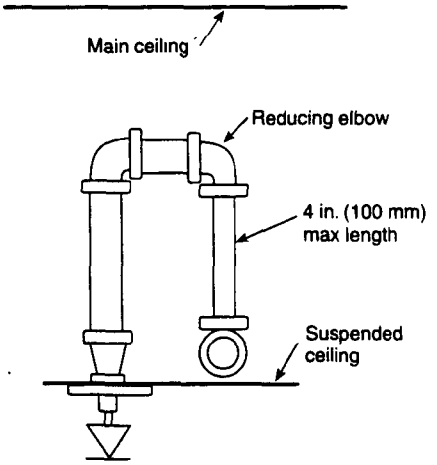


Figure 4-13.18.2(a) Nipple and reducing elbow supplying sprinkler below ceiling.

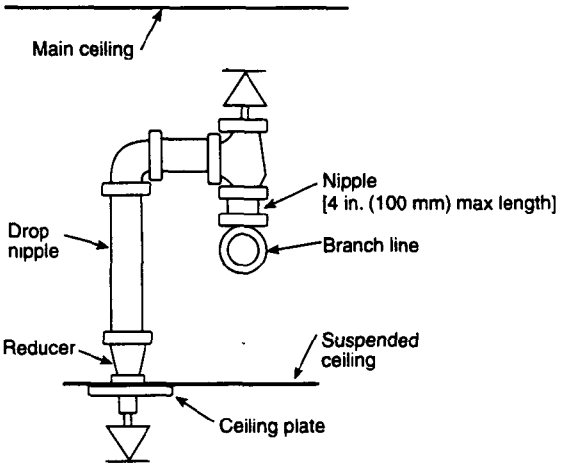


Figure 4-13.18.2(b) Sprinklers in concealed space and below ceiling.

Exception No. 1: When it is necessary to pipe 2 new ceiling sprinklers from an existing outlet in an overhead system, any bushings shall be removed and the use of a nipple not exceeding 4 in. (102 mm) in length and of the same pipe thread size as the existing outlet shall be permitted, provided that a hydraulic calculation verifies that the design flow rate will be achieved.

Exception No. 2: The use of pipe nipples less than 1 in. (25.4 mm) in diameter is not permitted in areas subject to earthquakes.

4-13.19 Dry Pipe Underground. Where necessary to place pipe that will be under air pressure underground, the pipe shall be protected against corrosion (*see 4-14.4.2*).

Exception: Unprotected cast or ductile iron pipe shall be permitted where joined with a gasketed joint listed for air service underground.

4-13.20* One-and-One-Half-Inch Hose Connections. One- and-one-half-inch [1½-in. (38-mm)] hose used for fire purposes only shall be permitted to be connected to wet sprinkler systems only, subject to the following restrictions:

(a) Hose station's supply pipes shall not be connected to any pipe smaller than 2½ in. (64 mm).

Exception: For hydraulically designed loops and grids, the minimum size pipe between the hose station's supply pipe and the source shall be permitted to be 2 in. (51 mm).

(b) For piping serving a single hose station, pipe shall be minimum 1 in. (25.4 mm) for horizontal runs up to 20 ft (6.1 m), minimum 1¼ in. (33 mm) for the entire run for runs between 20 and 80 ft (6.1 and 24.4 m), and minimum 1½ in. (38 mm) for the entire run for runs greater than 80 ft (24.4 m). For piping serving multiple hose stations, runs shall be a minimum of 1½ in. (38 mm) throughout.

(c) Piping shall be at least 1 in. (25 mm) for vertical runs.

(d) When the pressure at any hose station outlet exceeds 100 psi (6.9 bars), an approved device shall be installed at the outlet to reduce the pressure at the outlet to 100 psi (6.9 bars).

4-13.21* Hose Connections for Fire Department Use. In buildings of Light or Ordinary Hazard Occupancy, 2½-in. (64-mm) hose valves for fire department use are permitted to be attached to wet pipe sprinkler system risers. [*See 5-2.3.1.3(d).*] The following restrictions shall apply:

(a) Sprinklers shall be under separate floor control valves.

(b) The minimum size of the riser shall be 4 in. (102 mm) unless hydraulic calculations indicate that a smaller size riser will satisfy sprinkler and hose stream demands.

(c) Each combined sprinkler and standpipe riser shall be equipped with a riser control valve to permit isolating a riser without interrupting the supply to other risers from the same source of supply.

(d) For fire department connections serving standpipe and sprinkler systems, refer to Section 2-8.

4-13.22* System Subdivision. Where individual floor/zone control valves are not provided, a flanged joint or mechanical coupling shall be used at the riser at each floor for connections to piping serving floor areas in excess of 5,000 ft² (465 m²).

4-14 Piping Installation.

4-14.1 Valves.

4-14.1.1* Valves Controlling Sprinkler Systems. (*See 2-7.1.*)

4-14.1.1.1* Each system shall be provided with a listed indicating valve in an accessible location, so located as to control all automatic sources of water supply.

4-14.1.1.2 At least one listed indicating valve shall be installed in each source of water supply.

Exception: There shall be no shutoff valve in the fire department connection.

4-14.1.1.3 Valves on connections to water supplies, sectional control valves, and other valves in supply pipes to sprinklers shall be supervised open by one of the following methods:

(a) Central station, proprietary, or remote station signaling service.

(b) Local signaling service that will cause the sounding of an audible signal at a constantly attended point.

(c) Valves locked in the open position.

(d) Valves located within fenced enclosures under the control of the owner, sealed in the open position, and inspected weekly as part of an approved procedure.

Floor control valves in high-rise buildings and valves controlling flow to sprinklers in circulating closed loop systems shall comply with (a) or (b) above.

Exception: Supervision of underground gate valves with roadway boxes shall not be required.

4-14.1.1.4 Where control valves are installed overhead, they shall be positioned so that the indicating feature is visible from the floor below.

4-14.1.1.5 Where there is more than one source of water supply, a check valve shall be installed in each connection.

4-14.1.1.6 Check valves shall be installed in a vertical or horizontal position in accordance with their listing.

4-14.1.1.7* Where a single wet pipe sprinkler system is equipped with a fire department connection, the alarm valve is considered a check valve and an additional check valve shall not be required.

4-14.1.1.8* In a city connection serving as one source of supply, listed indicating valves or indicator post valves shall be installed on both sides of the check valve required in 4-14.1.1.5.

Exception No. 1: There shall be no control valves in the fire department connection piping. (See 4-14.1.1.2).

Exception No. 2: Where the city connection serves as the only automatic source of supply to a wet pipe sprinkler system, a control valve is not required on the system side of the check valve or the alarm check valve.

4-14.1.2 Pressure-Reducing Valves.

4-14.1.2.1 In portions of systems where all components are not listed for pressure greater than 175 psi (12.1 bars) and the potential exists for normal (nonfire condition) water pressure in excess of 175 psi (12.1 bars), a listed pressure-reducing valve shall be installed and set for an outlet pressure not exceeding 165 psi (2.4 bars) at the maximum inlet pressure.

4-14.1.2.2 Pressure gauges shall be installed on the inlet and outlet sides of each pressure-reducing valve.

4-14.1.2.3* A relief valve of not less than ½ in. (13 mm) in size shall be provided on the discharge side of the pressure-reducing valve set to operate at a pressure not exceeding 175 psi (12.1 bars).

4-14.1.2.4 A listed indicating valve shall be provided on the inlet side of each pressure-reducing valve.

Exception: A listed indicating valve is not required where the pressure-reducing valve meets the listing requirements for use as an indicating valve.

4-14.2 Pipe Support.

4-14.2.1 General.

4-14.2.1.1 Sprinkler piping shall be supported independently of the ceiling sheathing.

Exception: Toggle hangers shall be permitted only for the support of pipe 1½ in. (38 mm) or smaller in size under ceilings of hollow tile or metal lath and plaster.

4-14.2.1.2 Where sprinkler piping is installed in storage racks as defined in NFPA 231C, *Standard for Rack Storage of Materials*, piping shall be supported from the storage rack structure or building in accordance with all applicable provisions of 4-14.2 and 4-14.4.3.

4-14.2.2 Maximum Distance between Hangers.

4-14.2.2.1* The maximum distance between hangers shall not exceed that in Table 4-14.2.2.1.

Exception No. 1: The maximum distance between hangers for steel pipe and copper tube shall be modified as specified in 4-14.2.1 and 4-14.2.2.

Exception No. 2: The maximum distance between hangers for CPVC pipe and polybutylene pipe shall be modified as specified in the individual product listings.

Exception No. 3: Holes through concrete beams shall be acceptable for the support of steel pipe as a substitute for hangers.

4-14.2.3 Location of Hangers on Branch Lines. This subsection applies to the support of steel pipe or copper tube as specified in 2-3.1 and subject to the provisions of 4-14.2.2.

4-14.2.3.1 There shall be not less than one hanger for each section of pipe.

Exception No. 1: Where sprinklers are spaced less than 6 ft (1.8 m) apart, hangers spaced up to a maximum of 12 ft (3.7 m) shall be permitted.*

Exception No. 2: Starter lengths less than 6 ft (1.8 m) shall not require a hanger, unless on the end line of a sidefeed system or where an intermediate cross main hanger has been omitted.

4-14.2.3.2 The distance between a hanger and the centerline of an upright sprinkler shall not be less than 3 in. (76 mm).

4-14.2.3.3* The unsupported length between the end sprinkler and the last hanger on the line shall not be greater than 36 in. (914 mm) for 1-in. (2.5-cm) pipe or 48 in. (1219 mm) for 1¼-in. (3.2-cm) pipe, and 60 in. (15.2 cm) for 1½-in. (3.8-cm) or larger pipe. Where any of these limits is exceeded, the pipe shall be extended beyond the end sprinkler and shall be supported by an additional hanger.

Exception No. 1: When the maximum pressure at the sprinkler exceeds 100 psi (6.9 bars), and a branch line above a ceiling supplies sprinklers in a pendent position below the ceiling, the hanger assembly supporting the pipe supplying an end sprinkler in a pendent position shall be of a type that prevents upward movement of the pipe.*

Exception No. 2: When the maximum pressure at the sprinkler exceeds 100 psi (6.9 bars), the unsupported length between the end sprinkler in a pendent position or drop nipple and the last hanger on the branch line shall not be greater than 12 in. (305 mm) for steel pipe or 6 in. (152 mm) for copper pipe. When this limit is exceeded, the pipe shall be extended beyond the end sprinkler and supported by an additional hanger. The hanger closest to the sprinkler shall be of a type that prevents upward movement of the piping.*

4-14.2.3.4* The length of an unsupported armover to a sprinkler shall not exceed 24 in. (610 mm) for steel pipe or 12 in. (305 mm) for copper tube.

Exception: Where the maximum pressure at the sprinkler exceeds 100 psi (6.9 bars) and a branch line above a ceiling supplies sprinklers in a pendent position below the ceiling, the length of an unsupported armover to a sprinkler and drop nipple shall not exceed 12 in. (305 mm) for steel pipe and 6 in. (152 mm) for copper tube.*

Where the limits of the unsupported armover lengths of 4-14.2.3.4 or this Exception are exceeded, the hanger closest to the sprinkler shall be of a type that prevents upward movement of the piping.

4-14.2.3.5 Wall-mounted sidewall sprinklers shall be restrained to prevent movement.

4-14.2.4 Location of Hangers on Cross Mains. This subsection applies to the support of steel pipe only as specified in 4-14.2.3, subject to the provisions of 4-14.2.2.

4-14.2.4.1 On cross mains there shall be at least one hanger between each two branch lines.

Exception No. 1: In bays having two branch lines, the intermediate hanger shall be permitted to be omitted provided that a hanger attached to a purlin is installed on each branch line located as near to the cross main as the location of the purlin permits. Remaining branch line hangers shall be installed in accordance with 4-14.2.3.

Exception No. 2: In bays having three branch lines, either side or center feed, one (only) intermediate hanger shall be permitted to be omitted provided that a hanger attached to a purlin is installed on each branch line located as near to the cross main as the location of the purlin permits. Remaining branch line hangers shall be installed in accordance with 4-14.2.3.

Exception No. 3: In bays having four or more branch lines, either side or center feed, two intermediate hangers shall be permitted to be omitted provided the maximum distance between hangers does not exceed the distances specified in 4-14.2.2.1 and a hanger attached to a purlin on each branch line is located as near to the cross main as the purlin permits.

4-14.2.4.2 Intermediate hangers shall not be omitted for copper tube.

4-14.2.4.3 At the end of the cross main, intermediate trapeze hangers shall be installed unless the cross main is extended to the next framing member with a hanger installed at this point, in which event an intermediate hanger shall be permitted to be omitted in accordance with 4-14.2.4.1, Exceptions No. 1, No. 2, and No. 3.

Table 4-14.2.2.1 Maximum Distance between Hangers (ft - in.)

Nominal Pipe Size (in.)	¾	1	1¼	1½	2	2½	3	3½	4	5	6	8
Steel pipe except threaded light-wall	N/A	12-0	12-0	15-0	15-0	15-0	15-0	15-0	15-0	15-0	15-0	15-0
Threaded lightwall steel pipe	N/A	12-0	12-0	12-0	12-0	12-0	12-0	N/A	N/A	N/A	N/A	N/A
Copper tube	8-0	8-0	10-0	10-0	12-0	12-0	12-0	15-0	15-0	15-0	15-0	15-0
CPVC	5-6	6-0	6-6	7-0	8-0	9-0	10-0	N/A	N/A	N/A	N/A	N/A
Polybutylene (IPS)	N/A	3-9	4-7	5-0	5-11	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Polybutylene (CTS)	2-11	3-4	3-11	4-5	5-5	N/A	N/A	N/A	N/A	N/A	N/A	N/A

For SI Units: 1 in. = 25.4 mm; 1 ft = 0.3048 m.
NOTE: (IPS) Iron Pipe Size
(CTS) Copper Tube Size

4-14.2.5 Support of Risers.

4-14.2.5.1 Risers shall be supported by pipe clamps or by hangers located on the horizontal connections close to the riser.

4-14.2.5.2 Clamps supporting pipe by means of setscrews shall not be used.

4-14.2.5.3 In multistory buildings, riser supports shall be provided at the lowest level, at each alternate level above, above and below offsets, and at the top of the riser. Supports above the lowest level shall also restrain the pipe to prevent movement by an upward thrust where flexible fittings are used. Where risers are supported from the ground, the ground support constitutes the first level of riser support. Where risers are offset or do not rise from the ground, the first ceiling level above the offset constitutes the first level of riser support.

4-14.2.5.4 Risers in vertical shafts, or in buildings with ceilings over 25 ft (7.6 m) high, shall have at least one support for each riser pipe section.

4-14.3 Drainage.

4-14.3.1* All sprinkler pipe and fittings shall be so installed that the system can be drained.

4-14.3.2 On wet pipe systems, sprinkler pipes shall be permitted to be installed level. Trapped piping shall be drained in accordance with 4-14.3.5.

4-14.3.3 In dry pipe systems and portions of preaction systems subject to freezing, branch lines shall be pitched at least $\frac{1}{2}$ in. per 10 ft (4 mm/m) and mains shall be pitched at least $\frac{1}{4}$ in. per 10 ft (2 mm/m).

Exception: Mains shall be pitched at least $\frac{1}{2}$ in. per 10 ft (4 mm/m) in refrigerated areas.

4-14.3.4 System, Main Drain, or Sectional Drain Connections. [*See Figures 4-14.3.4 and A-4-15.4.2(b).*]

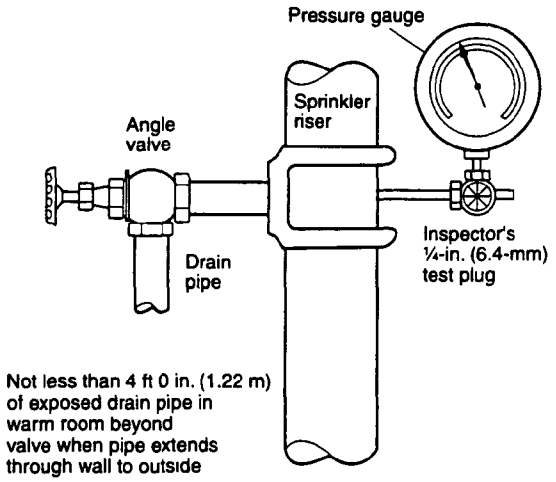


Figure 4-14.3.4 Drain connection for system riser.

4-14.3.4.1 Provisions shall be made to properly drain all parts of the system.

4-14.3.4.2 Drain connections for systems' supply risers and mains shall be sized as shown in Table 4-14.3.4.2.

Table 4-14.3.4.2 Drain Size

Riser or Main Size	Size of Drain Connection
Up to 2 in.	$\frac{3}{4}$ in. or larger
$2\frac{1}{2}$ in., 3 in., $3\frac{1}{2}$ in.	$1\frac{1}{4}$ in. or larger
4 in. and larger	2 in. only

For SI Units: 1 in. = 25.4 mm

4-14.3.4.3 Where interior sectional or floor control valve(s) are provided, they shall be provided with a drain connection sized as shown in Table 4-14.3.4.2 to drain that portion of the system controlled by the sectional valve. Drains shall discharge outside or to a drain connection. [*See Figure A-4-15.4.2(b).*]

Exception: For those drains serving pressure reducing valves, the drain, drain connection, and all other downstream drain piping shall be sized to permit a flow of at least the greatest system demand supplied by the pressure-reducing valve.

4-14.3.4.4 The test connections required by 4-15.4.1 shall be permitted to be used as main drain connections.

Exception: Where drain connections for floor control valves are tied into a common drain riser, the drain riser shall be one pipe size larger than the largest size drain connection tying into it.

4-14.3.5 Auxiliary Drains.

4-14.3.5.1 Auxiliary drains shall be provided where a change in piping direction prevents drainage of system piping through the main drain valve.

4-14.3.5.2 Auxiliary Drains for Wet Pipe Systems and Preaction Systems in Areas Not Subject to Freezing.

4-14.3.5.2.1 Where the capacity of trapped sections of pipes in wet systems is less than 5 gal (18.9 L), the auxiliary drain shall consist of a nipple and cap or plug not less than $\frac{1}{2}$ in. (12 mm) in size.

Exception No. 1: Auxiliary drains are not required for system piping that can be drained by removing a single pendent sprinkler.

Exception No. 2: Where flexible couplings or other easily separated connections are used, the nipple and cap or plug shall be permitted to be omitted.

4-14.3.5.2.2 Where the capacity of isolated trapped sections of pipe is more than 5 gal (18.9 L) and less than 50 gal (189 L), the auxiliary drain shall consist of a valve $\frac{3}{4}$ in. (19 mm) or larger and a plug or a nipple and cap.

4-14.3.5.2.3* Where the capacity of isolated trapped sections of pipe is 50 gal (18.9 L) or more, the auxiliary drain shall consist of a valve not smaller than 1 in. (25.4 mm), piped to an accessible location.

4-14.3.5.2.4 Tie-in drains are not required on wet pipe and preaction systems.

4-14.3.5.3 Auxiliary Drains for Dry Pipe Systems and Preaction Systems in Areas Subject to Freezing.

4-14.3.5.3.1 Where the capacity of trapped sections of pipe is less than 5 gal (18.9 L), the auxiliary drain shall consist of a valve not smaller than $\frac{1}{2}$ in. (12 mm) and a plug or a nipple and cap.

Exception: Auxiliary drains are not required for pipe drops supplying dry-pendent sprinklers installed in accordance with 3-2.2.

4-14.3.5.3.2 Where the capacity of isolated trapped sections of system piping is more than 5 gal (18.9 L), the auxiliary drain shall consist of two 1-in. (25.4-mm) valves and one 2-in. by 12-in. (50-mm by 300-mm) condensate nipple or equivalent, accessibly located. (*See Figure 4-14.3.5.3.2.*)

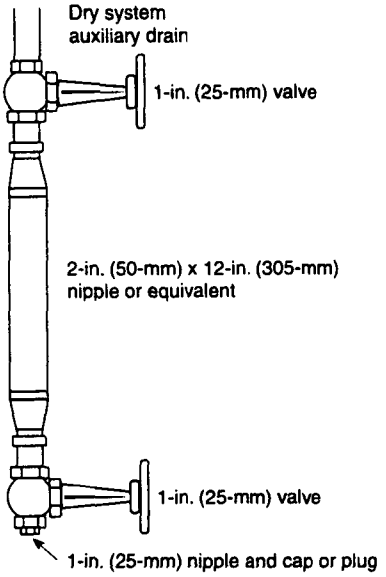


Figure 4-14.3.5.3.2 Dry system auxiliary drain.

4-14.3.5.3.3 Tie-in drains shall be provided for multiple adjacent trapped branch pipes and shall be only 1 in. (25.4 mm). Tie-in drain lines shall be pitched a minimum of ½ in. per 10 ft (4 mm/m).

4-14.3.6 Discharge of Drain Valves.

4-14.3.6.1* Direct interconnections shall not be made between sprinkler drains and sewers. The drain discharge shall conform to any health or water department regulations.

4-14.3.6.2 Where drain pipes are buried underground, approved corrosion-resistant pipe shall be used.

4-14.3.6.3 Drain pipes shall not terminate in blind spaces under the building.

4-14.3.6.4 Where exposed to the atmosphere, drain pipes shall be fitted with a turned down elbow.

4-14.3.6.5 Drain pipes shall be arranged to avoid exposing any part of the sprinkler system to freezing conditions.

4-14.4 Protection of Piping.

4-14.4.1 Protection of Piping against Freezing.

4-14.4.1.1 Where portions of systems are subject to freezing and temperatures cannot reliably be maintained at or above 40°F (4°C), sprinklers shall be installed as a dry pipe or preaction system.

Exception: Small unheated areas are permitted to be protected by antifreeze systems or by other systems specifically listed for this purpose. (See 3-5.2.)

4-14.4.1.2 Where water-filled supply pipes, risers, system risers, or feed mains pass through open areas, cold rooms, passageways, or other areas exposed to freezing, the pipe shall be protected against freezing by insulating coverings, frostproof casings, or other reliable means capable of maintaining a minimum temperature of 40°F (4°C).

4-14.4.2 Protection of Piping against Corrosion.

4-14.4.2.1* Where corrosive conditions are known to exist due to moisture or fumes from corrosive chemicals or both, special types of fittings, pipes, and hangers that resist corrosion shall be used or a protective coating shall be applied to all unprotected exposed surfaces of the sprinkler system. (*See 2-2.5.*)

4-14.4.2.2 Where water supplies are known to have unusual corrosive properties and threaded or cut-groove steel pipe is to be used, wall thickness shall be in accordance with Schedule 30 [in sizes 8 in. (200 mm) or larger] or Schedule 40 [in sizes less than 8 in. (200 mm)].

4-14.4.2.3 Steel pipe, where exposed to weather, shall be externally galvanized or otherwise protected against corrosion.

4-14.4.2.4 Where steel pipe is used underground, the pipe shall be protected against corrosion.

4-14.4.3 Protection of Piping against Damage Where Subject to Earthquakes.

4-14.4.3.1* General. Sprinkler systems shall be protected to prevent pipe breakage where subject to earthquakes in accordance with the requirements of 4-14.4.3.

Exception: Alternative methods of providing earthquake protection of sprinkler systems based on a dynamic seismic analysis certified by a registered professional engineer such that system performance will be at least equal to that of the building structure under expected seismic forces.

4-14.4.3.2* Couplings. Listed flexible pipe couplings joining grooved end pipe shall be provided as flexure joints to allow individual sections of piping 2½ in. (64 mm) or larger to move differentially with the individual sections of the building to which it is attached. Couplings shall be arranged to coincide with structural separations within a building. Systems having more flexible couplings than required here shall be provided with additional sway bracing as required in 4-14.4.3.5.10, Exception No. 4. The sway bracing shall be installed:

(a) Within 24 in. (610 mm) of the top and bottom of all risers.

Exception No. 1: In risers less than 3 ft (0.9 m) in length, flexible couplings are permitted to be omitted.

Exception No. 2: In risers 3 to 7 ft (0.9 to 2.1 m) in length, one flexible coupling is adequate.

(b) Within 12 in. (305 mm) above and below the floor in multistory buildings such that the flexible coupling below the floor is below the main supplying that floor.

(c) On one side of concrete or masonry walls within 3 ft (0.9 m) of the wall surface.

Exception: Flexible pipe couplings are not required where clearance around the pipe is provided in accordance with 4-14.4.3.4.

(d)* At or near building expansion joints.

(e) Within 24 in. (610 mm) of the top and bottom of drops to hose lines, rack sprinklers, and mezzanines, regardless of pipe size.

(f) Within 24 in. (610 mm) of the top of drops exceeding 15 ft (4.6 m) in length to portions of systems supplying more than one sprinkler, regardless of pipe size.

(g) Above and below any intermediate points of support for a riser or other vertical pipe.

4-14.4.3.3* Seismic Separation Assembly. Seismic separation assemblies with flexible fittings shall be installed where sprinkler piping, regardless of size, crosses building seismic separation joints above ground level.

4-14.4.3.4* Clearance. Clearance shall be provided around all piping extending through walls, floors, platforms, and foundations, including drains, fire department connections, and other auxiliary piping.

4-14.4.3.4.1 When sprinkler systems are to be protected against damage from earthquakes, the requirements of 4-14.3.4 shall apply. Where pipe passes through holes in platforms, foundations, walls or floors, the holes shall be sized such that the diameter of the holes is 2 in. (50 mm) larger than the pipe for 1 in. (25 mm) nominal to 3½ in. (89 mm) nominal and 4 in. (100 mm) larger than the pipe for pipe 4 in. (100 mm) nominal and larger. Clearance from structural members not penetrated or used, collectively or independently, to support the piping shall be at least 2 in. (51 mm).

Exception No. 1: Where clearance is provided by a pipe sleeve, a nominal diameter 2 in. (51 mm) larger than the nominal diameter of the pipe is acceptable for pipe sizes 1 in. (25.4 mm) through 3½ in. (89 mm), and the clearance provided by a pipe sleeve of nominal diameter 4 in. (102 mm) larger than the nominal diameter of the pipe is acceptable for pipe sizes 4 in. (102 mm) and larger.

Exception No. 2: No clearance is necessary for piping passing through gypsum board or equally frangible construction that is not required to have a fire resistance rating.

Exception No. 3: No clearance is necessary if flexible couplings are located within 1 ft (0.31 m) of each side of a wall, floor, platform, or foundation.

4-14.4.3.4.2 Where required, the clearance shall be filled with a flexible material such as mastic.

4-14.4.3.5 Sway Bracing.

4-14.4.3.5.1 The system piping shall be braced to resist both lateral and longitudinal horizontal seismic loads and to prevent vertical motion resulting from seismic loads. The structural components to which bracing is attached shall be determined to be capable of carrying the added applied seismic loads.

4-14.4.3.5.2 Sway braces shall be designed to withstand forces in tension and compression.

Exception: Tension only bracing systems shall be permitted for use where listed for this service and where installed in accordance with their listing limitations, including installation instructions.*

4-14.4.3.5.3* The assigned loads for both lateral and longitudinal sway bracing shall be determined using Table 4-14.4.3.5.3, based on a horizontal force of $F_p = 0.5\ W_p$, where F_p is the horizontal force factor and W_p is the weight of the water-filled piping.

Exception No. 1: In lieu of using Table 4-14.4.3.5.3, horizontal loads for braces shall be permitted to be determined by analysis. For lateral braces, the load shall include all branch lines and mains (unless the branch lines are provided with longitudinal bracing) within the zone of influence of the brace. For longitudinal braces, the load shall include all mains within the zone of influence of the brace.

Exception No. 2: Where the use of other horizontal force factors is required or permitted by the authority having jurisdiction, the loads of Table 4-14.4.3.5.3. or those determined in accordance with Exception No. 1 shall be adjusted by the following multipliers:

Horizontal Force Factor F_p	Multiplying Factor
$0.2\ W_p$	0.4
$0.4\ W_p$	0.8
$0.6\ W_p$	1.2
$0.8\ W_p$	1.6
$1.0\ W_p$	2.0
$1.2\ W_p$	2.4

Exception No. 3: Lateral braces shall only be permitted to be spaced up to 50 ft (16 m) as permitted only under Exception No. 4 to 4-14-4.3.5.10.

Exception No. 4: If branch lines are provided with lateral bracing or hung with U-hooks bent out at least 30 degrees from vertical, half the assigned load is permitted to be used for longitudinal braces.

4-14.4.3.5.4 Where the horizontal force factors used exceed $0.5\ W_p$ and the brace angle is less than 45° from vertical or where the horizontal force factor exceeds $1.0\ W_p$ and the brace angle is less than 60° from vertical, the braces shall be arranged to resist the net vertical reaction produced by the horizontal load.

Table 4-14.4.3.5.3 Assigned Load Table (Based on Half the Weight of the Water-Filled Pipe)

Spacing of Lateral Braces (ft)	Spacing of Longitudinal Braces (ft)	Assigned Load for Pipe Size to Be Braced (lb)						
		2	2½	3	4	5	6	8
10	20	380	395	410	435	470	655	915
20	40	760	785	815	870	940	1305	1830
25	50	950	980	1020	1090	1175	1630	2290
30	60	1140	1180	1225	1305	1410	1960	2745
40	80	1515	1570	1630	1740	1880	2610	3660
50		1895	1965	2035	2175	2350	3260	4575

For SI Units: 1 ft = 0.3048 m; 1 lb = 0.45 Kg

4-14.4.3.5.5* Sway bracing shall be tight and concentric. For individual braces, the slenderness ratio (l/r) shall not exceed 300 where l is the length of the brace and r is the least radius of gyration. Where threaded pipe is used as part of a sway brace assembly, it shall not be less than Schedule 30. All parts and fittings of a brace shall lie in a straight line to avoid eccentric loadings on fittings and fasteners. For longitudinal braces only, the brace shall be permitted to be connected to a tab welded to the pipe in conformance with 2-5.2. For individual braces, the slenderness ratio, l/r, shall not exceed 300 where l is the length of the brace and r is the least radius of gyration. For tension only braces, such as prestretched color-coded aircraft cable, two tension only brace components opposing each other must be installed at each lateral or longitudinal brace location. For all braces, whether or not listed, the maximum allowable horizontal load shall be based on the weakest component of the brace with safety factors. The loads determined in 4-14.4.3.5.3 shall not exceed the lesser of the maximum allowable loads provided in Table 4-14.4.3.5.5 or the manufacturer's certified maximum allowable horizontal loads for 30-44, 45-59, and 60-90 degree brace angles. These certified allowable horizontal loads must include a minimum safety factor of 1.5 against the ultimate break strength of the brace components and then be further reduced according to the brace angles.

Exception: Other pipe schedules and materials not specifically included in Table 4-14.4.3.5.5 are acceptable for use if certified by a registered professional engineer to support the loads determined in accordance with the above criteria. Calculations shall be submitted where required by the authority having jurisdiction.

4-14.4.3.5.6* For individual fasteners, the loads determined in 4-14.4.3.5.3 shall not exceed the allowable loads provided in Table 4-14.4.3.5.6.

The type of fasteners used to secure the bracing assembly to the structure shall be limited to those shown in Table 4-14.4.3.5.6. For connections to wood, through bolts with washers on each end shall be used. Holes for through bolts shall be 1/16 in. (1.6 mm) greater than the diameter of the bolt.

Exception: Where it is not practical to install through bolts due to the thickness of the member or inaccessibility, lag screws shall be permitted. Holes shall be pre-drilled 1/8 in. (3.2 mm) smaller than the maximum root diameter of the lag screw.

4-14.4.3.5.7 Sway brace assemblies shall be listed for a maximum allowable load. The loads shall be reduced as shown in Table 4-14.4.3.5.7 for loads that are less than 90° from vertical.

Exception: Where sway bracing utilizing pipe, angles, flats or rods as shown in Table 4-14.4.3.5.5 is used, the components do not require listing. Bracing fittings and connections used with those specific materials shall be listed.

4-14.4.3.5.8 Longitudinal sway bracing spaced at a maximum of 80 ft (24 m) on center shall be provided for feed and cross mains. Longitudinal braces shall be permitted to serve as lateral braces where they are installed within 24 in. (609 mm) of the piping which is braced laterally.

4-14.4.3.5.9* Tops of risers shall be secured against drifting in any direction, utilizing a four-way sway brace.

4-14.4.3.5.10 Lateral sway bracing spaced at a maximum interval of 40 ft (12.2 m) on center shall be provided for all feed mains, all cross mains, and branchlines with a diameter of 2 1/2 in. (76 mm) and larger. The last length of pipe at the end of a feed or cross main shall be provided with a lateral brace. Lateral braces shall be allowed to act as longitudinal braces if they are within 24 in. (610 mm) of the centerline of the piping braced longitudinally for lines that are 2 1/2 in. (76 mm) and greater in diameter. The distance between the last brace and the end of the pipe shall not exceed 20 ft (6.1 m). This shall not preclude the use of a lateral brace serving as a longitudinal brace as described in this paragraph.

Exception No. 1: Where the spacing of lateral braces is permitted to be up to 50 ft (7.6 m), the distance between the last brace and the end of the pipe is permitted to be extended to 25 ft (15.2 m).

Exception No. 2: Lateral sway bracing shall not be required on pipes individually supported by rods less than 6 in. (152 mm) long.

Exception No. 3: 'U'- type hooks of the wraparound type or those 'U'-type hooks arranged to keep the pipe tight to the underside of the structural element shall be permitted to be used to satisfy the requirements for lateral sway bracing provided the legs are bent out at least 30 degrees from the vertical and the maximum length of each leg and the rod size satisfies the conditions of Table 4-14.4.3.5.5.

Exception No. 4: Where flexible couplings are installed on mains other than as required in 4-14.4.3.2, a lateral brace shall be provided within 24 in. (610 mm) of every other coupling, but not more than 40 ft (12 m) on center.

Exception No. 5: Where building primary structural members exceed 40 ft (12 m) on center, lateral braces shall be permitted to be spaced up to 50 ft (15.2 m) on center.

4-14.4.3.5.11 Bracing shall be attached directly to feed and cross mains. Each run of pipe between a change in direction shall be provided with both lateral and longitudinal bracing.

Exception: Pipe runs less than 12 ft (3.6 m) in length shall be permitted to be supported by the braces on adjacent runs of pipe.

4-14.4.3.5.12 A length of pipe shall not be braced to sections of the building that will move differentially.

4-14.4.3.5.13* Sway bracing is not required for branch lines.

Exception No. 1: The end sprinkler on a line shall be restrained against excessive vertical and lateral movement by use of a wrap' around U-hook (see Figure A-2-6.1) or by other approved means.

Exception No. 2: Where upward or lateral movement of sprinklers would result in an impact against the building structure, equipment, or finish materials, branch lines shall be provided at intervals not exceeding 30 ft (9 m) with a wraparound U-hook, lateral sway brace, or #12, 440-lb (200-kg) splayed seismic brace wire installed at least 45 degrees from the vertical plane and anchored on both sides of the pipe. This bracing shall be located within 2 ft (610 mm) of a hanger. The hanger closest to a splayed wire restraint shall be of a type that resists upward movement of a branch line.*

4-14.4.3.5.14 Where ceilings are seismically braced to prevent horizontal and vertical movement, branch lines and armovers in excess of 2 ft (610 mm) horizontally, if provided, shall be restrained against upward movement and sprinklers shall be provided with a one-piece escutcheon.

Exception: Recessed, flush, and concealed sprinklers shall not be required to be provided with the escutcheon.

4-14.4.3.5.15* Sprig-ups 4 ft (1.2 m) or longer shall be restrained against lateral movement.

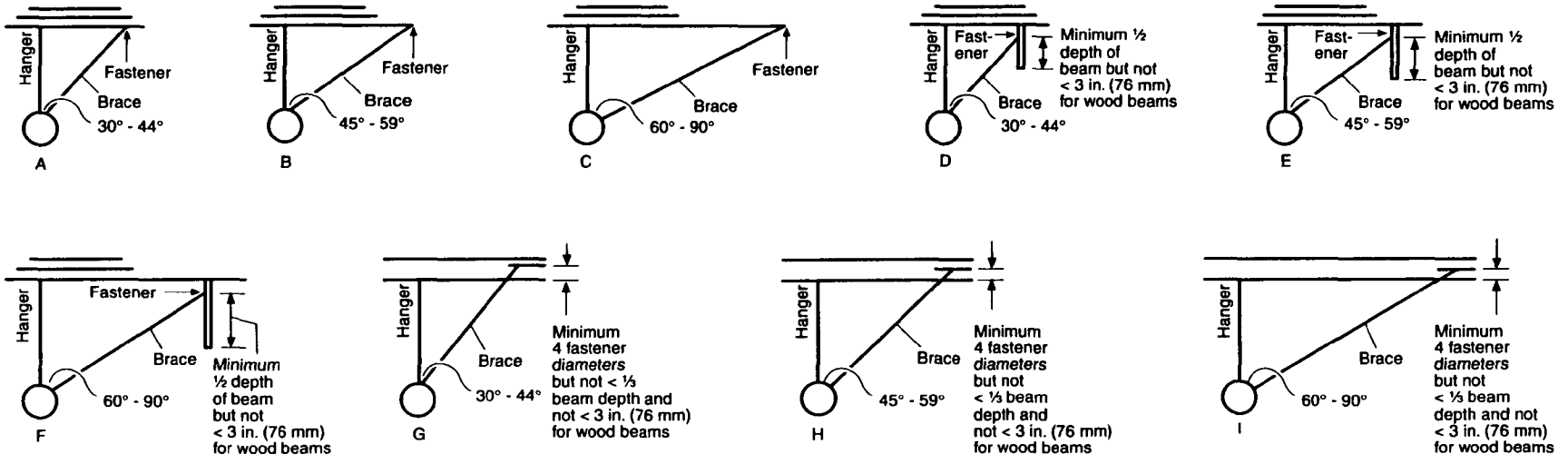
Table 4-14.4.3.5.5

Shape and Size	Least Radius of Gyration	Maximum Length for l/r = 200	Maximum Horizontal Load (lb) 30°–44° Angle from Vertical	45°–59° Angle from Vertical	60°–90° Angle from Vertical
Pipe (Schedule 40)	$= \frac{\sqrt{r_0^2 + r_i^2}}{2}$				
1 in.	.42	7 ft 0 in.	1767	2500	3061
1¼ in.	.54	9 ft 0 in.	2393	3385	4145
1½ in.	.623	10 ft 4 in.	2858	4043	4955
2 in.	.787	13 ft 1 in.	3828	5414	6630
Angles					
1½ × 1½ × ¼ in.	.292	4 ft 10 in.	2461	3481	4263
2 × 2 × ¼ in.	.391	6 ft 6 in.	3356	4746	5813
2½ × 2 × ¼ in.	.424	7 ft 0 in.	3792	5363	6569
2½ × 2½ × ¼ in.	.491	8 ft 2 in.	4257	6021	7374
3 × 2½ × ¼ in.	.528	8 ft 10 in.	4687	6628	8118
3 × 3 × ¼ in.	.592	9 ft 10 in.	5152	7286	8923
Rods	$= \frac{r}{2}$				
⅜ in.	.094	1 ft 6 in.	395	559	685
½ in.	.125	2 ft 6 in.	702	993	1217
⅝ in.	.156	2 ft 7 in.	1087	1537	1883
¾ in.	.188	3 ft 1 in.	1580	2235	2737
⅞ in.	.219	3 ft 7 in.	2151	3043	3726
Flats	= 0.29 h (where h is smaller of two side dimensions)				
1½ × ¼ in.	.0725	1 ft 2 in.	1118	1581	1936
2 × ¼ in.	.0725	1 ft 2 in.	1789	2530	3098
2 × ⅜ in.	.109	1 ft 9 in.	2683	3795	4648
Pipe (Schedule 40)	$= \frac{\sqrt{r_0^2 + r_i^2}}{2}$				
1 in.	.42	3 ft 6 in.	7068	9996	12242
1¼ in.	.54	4 ft 6 in.	9567	13530	16570
1½ in.	.623	5 ft 2 in.	11441	16181	19817
2 in.	.787	6 ft 6 in.	15377	21746	26634
Pipe (Schedule 10)	$= \frac{\sqrt{r_0^2 + r_i^2}}{2}$				
1 in.	.43	3 ft 7 in.	5910	8359	10237
1¼ in.	.55	4 ft 7 in.	7600	10749	13164
1½ in.	.634	5 ft 3 in.	8777	12412	15202
2 in.	.802	6 ft 8 in.	11105	15705	19235
Rods	$= \frac{r}{2}$				
⅜ in.	.094	0 ft 9 in.	1580	2234	2737
½ in	.125	1 ft 0 in.	2809	3972	4865
⅝ in.	.156	1 ft 3 in.	4390	6209	7605
¾ in.	.188	1 ft 6 in.	6322	8941	10951
⅞ in.	.219	1 ft 9 in.	8675	12169	14904
Pipe (Schedule 40)	$= \frac{\sqrt{r_0^2 + r_i^2}}{2}$	l/r = 300			
1 in.	.42	10 ft 6 in.	786	1111	1360
1½ in.	.54	13 ft 6 in.	1063	1503	1841
1½ in	.623	15 ft 7 in.	1272	1798	2202
2 in.	.787	19 ft 8 in.	1666	2355	2885
Rods	$= \frac{r}{2}$				
⅜ in.	.094	2 ft 4 in.	176	248	304
½ in.	.125	3 ft 1 in.	312	441	540
⅝ in	.156	3 ft 11 in.	488	690	845
¾ in.	.188	4 ft 8 in.	702	993	1217
⅞ in.	.219	5 ft 6 in.	956	1352	1656

For SI Units: 1 in. = 25.4 mm, 1 ft = 0.3048 m, 1 lb = 0.45 Kg.

Table 4-14.4.3.5.6 Maximum Loads for Various Types of Structure
Maximum Loads for Various Types of Fasteners to Structure

NOTE: Loads (given in pounds) are keyed to vertical angles of braces and orientation of connecting surface. These values are based on concentric loadings of the fastener. Use figures to determine proper reference within table. For angles between those shown, use most restrictive case. Braces should not be attached to light structure members.



Note: For wooden beams not less than 3 in. (76 mm).

Lag Screws and Lag Bolts in Wood (Load Perpendicular to Grain—Holes Predrilled Using Good Practice)

Shank Diameter of Lag (in.)

		3/8									1/2									5/8									7/8								
		A	B	C	D	E	F	G	H	I	A	B	C	D	E	F	G	H	I	A	B	C	D	E	F	G	H	I	A	B	C	D	E	F	G	H	I
Length Under Head (in.)	3	304	325	292	168	325	526	230	324	400	366	—	—	—	—	632	—	—	—	410	—	—	—	—	716	—	—	—	487	—	—	—	—	843	—	—	—
	4	392	354	317	183	354	678	250	352	435	473	509	456	264	509	818	360	507	626	538	—	—	—	—	929	—	—	—	548	—	—	—	—	1122	—	—	—
	5	476	375	336	194	375	824	265	373	461	582	545	488	282	545	1008	385	542	670	687	728	653	277	728	1154	515	725	896	813	—	—	—	—	1407	—	—	—
	6	564	382	342	196	382	976	270	380	470	689	559	501	288	559	1192	395	556	687	791	778	697	403	778	1360	550	775	957	971	—	—	—	—	1630	—	—	—
	8	—	—	—	—	—	—	—	—	—	905	573	513	296	573	1586	405	570	704	1044	806	723	416	806	1807	570	803	991	1297	1365	1223	685	1365	2244	965	1359	1678

For SI Units: 1 in = 25.4 mm; 1 ft = 0.3048 m; 1 lb = 0.45 Kg

Table 4-14.4.3.5.6 (cont.)

Through Bolts in Wood (Load Perpendicular to Grain)

Diameter of Bolt (in.)

		3/8						1/2						5/8						7/8					
		ABCE	D	F	G	H	I	ABCE	D	F	G	H	I	ABCE	D	F	G	H	I	ABCE	D	F	G	H	I
Length of Bolt in Timber (in.)	1 1/2	300	173	519	150	211	261	340	197	589	170	239	296	390	225	675	195	275	339	470	272	614	235	331	409
	2	370	214	641	185	261	322	420	243	727	210	296	365	470	272	814	235	331	409	580	335	1004	290	408	504
	2 1/2	460	266	796	230	324	400	550	318	952	275	387	478	620	358	1074	310	437	539	760	439	1316	380	535	661
	3	480	277	831	240	338	417	630	364	1091	315	444	548	710	410	1229	355	500	617	870	503	1506	435	613	757
	3 7/8	460	268	797	230	324	400	720	416	1247	360	507	626	850	491	1472	425	599	739	1050	607	1818	525	739	913
	5 1/2	—	—	—	—	—	—	680	393	1177	340	479	591	1020	590	1766	510	718	887	1580	913	2736	790	1113	1374

For SI Units: 1 in = 25.4 mm; 1 lb = 0.45 Kg.

Expansion Shields in Concrete

Diameter of Bolt (in.)

		3/8									1/2									5/8									7/8								
		A	B	C	D	E	F	G	H	I	A	B	C	D	E	F	G	H	I	A	B	C	D	E	F	G	H	I	A	B	C	D	E	F	G	H	I
Min. Depth of Hole (in.)	2 1/2	498	962	1173	678	668	860	925	1303	1609	—	—	—	—	—	—	1638	2306	2848	—	—	—	—	—	—	2080	2930	3617	—	—	—	—	—	—	2470	4113	5078
	3 1/4	—	—	—	—	—	—	925	1303	1609	923	1782	2076	1200	1782	1597	1638	2306	2848	—	—	—	—	—	—	2080	2930	3617	—	—	—	—	—	—	2970	4113	5078
	3 7/8	—	—	—	—	—	—	925	1303	1609	—	—	—	—	—	—	1638	2306	2848	1480	2857	2637	1524	2857	2581	2080	2930	3617	—	—	—	—	—	—	2970	4113	5078
	4 1/2	—	—	—	—	—	—	925	1303	1609	—	—	—	—	—	—	1638	2306	2848	—	—	—	—	—	—	2080	2930	3617	3070	4130	3702	2139	4130	5312	2970	4113	5078

For SI Units: 1 in. = 25.4 mm; 1 lb = 0.45 Kg.

Connections to Steel (Values Assume Bolt Perpendicular to Mounting Surface)

Diameter of Unfinished Steel Bolt (in.)

1/4									3/8									1/2									5/8								
A	B	C	D	E	F	G	H	I	A	B	C	D	E	F	G	H	I	A	B	C	D	E	F	G	H	I	A	B	C	D	E	F	G	H	I
400	500	600	300	500	650	325	458	565	900	1200	1400	800	1200	1550	735	1035	1278	1600	2050	2550	1450	2050	2850	1300	1830	2260	2500	3300	3950	2250	3300	4400	2045	2880	3557

For SI Units: 1 in. = 25.4 mm; 1 ft = 0.3048 m; 1 lb = 0.45 Kg.

Table 4-14.4.3.5.7 Allowable Horizontal Load on Brace Assemblies Based on the Weakest Component of the Brace Assembly

Brace Angle	Allowable Horizontal Load
30 degrees from vertical	Ultimate strength divided by safety factor divided by 2.000
45 degrees from vertical	Ultimate strength divided by safety factor divided by 1.414
60 degrees from vertical	Ultimate strength divided by safety factor divided by 1.155

4-14.4.3.5.16 The retaining strap shall be listed for use with a C-type clamp, or shall be a steel strap of not less than 16 gauge thickness and not less than 1 in. (25.4 mm) wide for pipe diameters 8 in. (203 mm) or less and 14 gauge thickness and not less than 1¼ in. (31.7 mm) wide for pipe diameters greater than 8 in. (203 mm). The retaining strap shall wrap around the beam flange not less than 1 in. (25.4 mm). A lock nut on a C-type clamp shall not be used as a method of restraint. A lip on a "C" or "Z" purlin shall not be used as a method of restraint.

Where purlins or beams do not provide an adequate lip to be secured by a retaining strap, the strap shall be through-bolted or secured by a self-tapping screw.

4-14.4.3.5.17 C-type clamps (including beam and large flange clamps), with or without retaining straps, shall not be used to attach braces to the building structure.

4-14.4.3.5.18 Powder-driven fasteners shall not be used to attach braces to the building structure.

Exception: Powder-driven fasteners shall be permitted where they are specifically listed for service in resisting lateral loads in areas subject to earthquakes.

4-15 System Attachments.

4-15.1 Sprinkler Alarms.

4-15.1.1* Waterflow Alarms.

4-15.1.1.1 Local waterflow alarms shall be provided on all sprinkler systems having more than 20 sprinklers.

4-15.1.1.2 On each alarm check valve used under conditions of variable water pressure, a retarding device shall be installed. Valves shall be provided in the connections to retarding devices to permit repair or removal without shutting off sprinklers; these valves shall be so arranged that they may be locked or sealed in the open position.

4-15.1.1.3 Alarm, dry pipe, preaction, and deluge valves shall be fitted with an alarm bypass test connection for an electric alarm switch, water motor gong, or both. This pipe connection shall be made on the water supply side of the system and provided with a control valve and drain for the alarm piping. A check valve shall be installed in the pipe connection from the intermediate chamber of a dry pipe valve.

Exception: The alarm test connection at the riser shall be permitted to be made on the system side of an alarm valve.

4-15.1.1.4 An indicating control valve shall be installed in the connection to pressure-type contactors or water-motor-operated alarm devices. Such valves shall be locked or sealed in the open position. The control valve for the retarding chamber on alarm check valves shall be accepted as complying with this paragraph.

4-15.1.1.5* Attachments — Mechanically Operated. For all types of sprinkler systems employing water-motor-operated alarms, a listed ¾-in. (19-mm) strainer shall be installed at the alarm outlet of the waterflow detecting device.

Exception: Where a retarding chamber is used in connection with an alarm valve, the strainer shall be located at the outlet of the retarding chamber unless the retarding chamber is provided with an approved integral strainer in its outlet.

4-15.1.1.6* Alarm Attachments — High-Rise Buildings. When a fire must be fought internally due to the height of a building, the following additional alarm apparatus shall be provided:

(a) Where each sprinkler system on each floor is equipped with a separate waterflow device, it shall be connected to an alarm system in such a manner that operation of one sprinkler will actuate the alarm system and the location of the operated flow device shall be indicated on an annunciator and/or register. The annunciator or register shall be located at grade level at the normal point of fire department access, at a constantly attended building security control center, or at both locations.

Exception: Where the location within the protected buildings where supervisory or alarm signals are received is not under constant supervision by qualified personnel in the employ of the owner, a connection shall be provided to transmit a signal to a remote central station.

(b) A distinct trouble signal shall be provided to indicate a condition that will impair the satisfactory operation of the sprinkler system.

4-15.2* Fire Department Connections.

4-15.2.1* A fire department connection shall be provided as described in this section. (*See Figure 4-15.2.1.*)

Exception No. 1: Buildings located in remote areas that are inaccessible for fire department support.

Exception No. 2: Large-capacity deluge systems exceeding the pumping capacity of the fire department.

Exception No. 3: Single-story buildings not exceeding 2000 ft² (186 m²) in area.

4-15.2.2 Size. Pipe size shall be 4 in. (102 mm) for fire engine connections and 6 in. (152 mm) for fire boat connections.

Exception No. 1: For hydraulically calculated systems, fire department connection pipe as small as the system riser shall be permitted where serving one system riser.

Exception No. 2: A single-outlet fire department connection shall be acceptable where piped to a 3-in. (76-mm) or smaller riser.

4-15.2.3* Arrangement. (*See Figure 4-15.2.1.*)

4-15.2.3.1 The fire department connection shall be on the system side of the water supply check valve.

4-15.2.3.2 For single systems, the fire department connection shall be installed as follows:

(a) *Wet System.* On the system side of system control, check, and alarm valves. (*See Figure A-4-14.1.1.*)

(b) *Dry System.* Between the system control valve and the dry pipe valve.

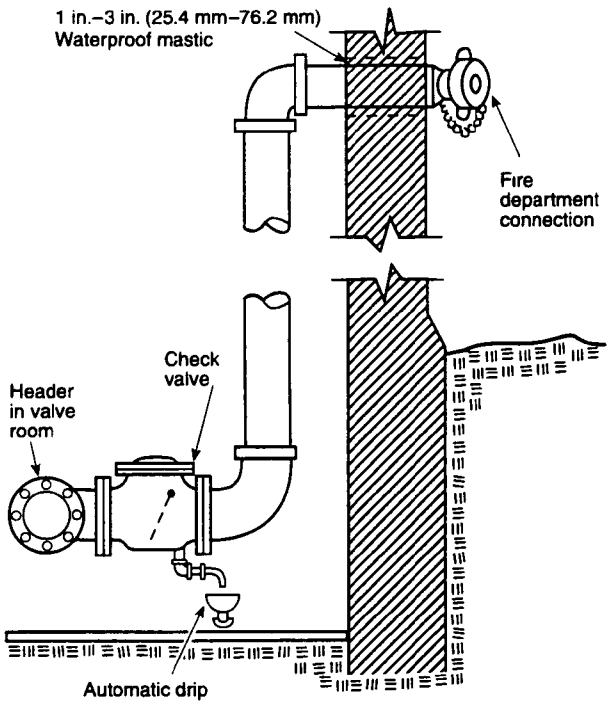


Figure 4-15.2.1 Fire department connection.

(c) *Preaction System.* Between the preaction valve and the check valve on the system side of the preaction valve.

(d) *Deluge System. On the system side of the deluge valve.*

Exception: Connection of the fire department connection to underground piping is acceptable.

4-15.2.3.3 For multiple systems, the fire department connection shall be connected between the supply control valves and the system control valves.

Exception: Connection of the fire department connection to underground piping is acceptable.

4-15.2.3.4 Where a fire department connection services only a portion of a building, a sign shall be attached indicating the portions of the building served.

4-15.2.3.5 Fire department connections shall be located and arranged so that hose can be readily and conveniently attached.

Each fire department connection to sprinkler systems shall be designated by a sign having raised or engraved letters at least 1 in. (25.4 mm) in height on plate or fitting reading service design, e.g., "AUTOSPKR.," "OPEN SPKR. AND STANDPIPE." A sign shall also indicate the pressure required at the inlets to deliver the greatest system demand.

Exception: The sign is not required where the system demand pressure is less than 150 psi (10.3 bars).

4-15.2.3.6 Fire department connections shall not be connected on the suction side of fire pumps.

4-15.2.4 Valves.

4-15.2.4.1 A listed check valve shall be installed in each fire department connection.

4-15.2.4.2 There shall be no shutoff valve in the fire department connection piping.

4-15.2.5 Drainage. The piping between the check valve and the outside hose coupling shall be equipped with an approved automatic drip.

Exception: An automatic drip is not required in areas not subject to freezing.

4-15.3 Gauges.

4-15.3.1 A pressure gauge with a connection not smaller than ¼ in. (6.4 mm) shall be installed at the system main drain, at each main drain associated with a floor control valve, and on the inlet and outlet side of each pressure reducing valve. Each gauge connection shall be equipped with a shutoff valve and provisions for draining.

4-15.3.2 The required pressure gauges shall be listed and shall have a maximum limit not less than twice the normal working pressure at the point where installed. They shall be installed to permit removal and shall be located where they will not be subject to freezing.

4-15.4 System Connections.

4-15.4.1 Main Drain Test Connections. Main drain test connections shall be provided at locations that will permit flow tests of water supplies and connections. They shall be so installed that the valve can be opened wide for a sufficient time to assure a proper test without causing water damage. Main drain connections shall be sized in accordance with 4-14.3.4 and 4-14.3.6.

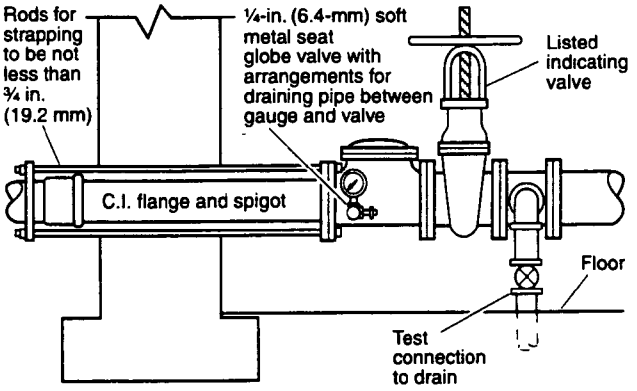


Figure 4-15.4.1 Water supply connection with test connection.

4-15.4.2* Wet Pipe Systems. An alarm test connection not less than 1 in. (25.4 mm) in diameter, terminating in a smooth bore corrosion-resistant orifice, giving a flow equivalent to one sprinkler of a type having the smallest orifice installed on the particular system, shall be provided to test each waterflow alarm device for each system. The test connection valve shall be readily accessible. The discharge shall be to the outside, to a drain connection capable of accepting full flow under system pressure, or to another location where water damage will not result.

4-15.4.3* Dry Pipe Systems. A trip test connection not less than 1 in. (25.4 mm) in diameter, terminating in a smooth bore corrosion-resistant orifice, to provide a flow equivalent to one sprinkler of a type installed on the particular system, shall be installed on the end of the most distant sprinkler pipe in the upper story and shall be equipped with a readily accessible 1-in. (25.4-mm) shutoff valve and plug, at least one of which shall be brass. In lieu of a plug, a nipple and cap shall be acceptable.

4-15.4.4 Preaction Systems. A test connection shall be provided on a preaction system using supervisory air. The connection used to control the level of priming water shall be considered adequate to test the operation of the alarms monitoring the supervisory air pressure.

4-15.4.5 Deluge Systems. A test connection is not required on a deluge system.

4-15.4.6 Backflow Devices.

4-15.4.6.1 Backflow Prevention Valves. Means shall be provided downstream of all backflow prevention valves for floor tests at system demand.

4-15.4.6.2* When backflow prevention devices are to be retroactively installed on existing systems, a thorough hydraulic analysis, including revised hydraulic calculations, new fire flow data, and all necessary system modifications to accommodate the additional friction loss, shall be completed as a part of the installation.

Chapter 5 Design Approaches

5-1 General. Water demand requirements shall be determined from the occupancy hazard fire control approach of Section 5-2.

Exception: Special design approaches shall be permitted for specific hazards in Section 5-3.

5-2 Occupancy Hazard Fire Control Approach.

5-2.1 Occupancy Classifications.

5-2.1.1 Occupancy classifications for this standard relate to sprinkler installations and their water supplies only. They shall not be used as a general classification of occupancy hazards.

5-2.1.2 Occupancies or portions of occupancies shall be classified according to the quantity and combustibility of contents, the expected rates of heat release, the total potential for energy release, the heights of stockpiles, and the presence of flammable and combustible liquids, using the definitions contained in 1-4.7. Classifications are as follows:

Light Hazard

Ordinary Hazard (Groups 1 and 2)

Extra Hazard (Groups 1 and 2)

Special Occupancy Hazard.

5-2.1.3* Sprinklers in light hazard occupancies shall be of the quick-response type as defined in 1-4.5.2.

Exception No. 1: Residential sprinklers are permitted in accordance with 4-4.5.

Exception No. 2: For modifications or additions to existing systems equipped with standard response sprinklers, standard response sprinklers shall be permitted to be used.

Exception No. 3: When individual standard response sprinklers are replaced in existing systems, standard response sprinklers shall be permitted to be used.

5-2.1.3.1 When existing light hazard systems are converted to use quick-response or residential sprinklers, all sprinklers in a compartmented space shall be changed.

5-2.2 Water Demand Requirements—Pipe Schedule Method.

5-2.2.1 Table 5-2.2 shall be used in determining the minimum water supply requirements for Light and Ordinary Hazard Occupancies protected by systems with pipe sized according to the pipe schedules of 6-5. Pressure and flow requirements for Extra Hazard Occupancies shall be based on the hydraulic calculation methods of 5-2.3. The pipe schedule method shall be permitted only for new installations of 5000 ft² (465 m) or less or for additions or modifications to existing pipe schedule systems sized according to the pipe schedules of Section 6-5. Table 5-2.2 shall be used in determining the minimum water supply requirements.

Exception No 1: The pipe schedule method shall be permitted for use in systems exceeding 5000 ft² (465m²) where the flows required in Table 5-2.2 are available at a minimum residual pressure of 50 psi (3.4 bar) at the highest elevation of sprinkler.

Exception No. 2: The pipe schedule method shall be permitted for additions or modifications to existing extra hazard pipe schedule systems if the pressures and flows are determined to be acceptable to the authority having jurisdiction.

Table 5-2.2 Water Supply Requirements for Pipe Schedule Sprinkler Systems

Occupancy Classification	Minimum Residual Pressure Required	Acceptable Flow at Base of Riser	Duration in Minutes
Light Hazard	15 psi	500–750 gpm	30–60
Ordinary Hazard	20 psi	850–1500 gpm	60–90

For SI Units: 1 gpm = 3.785L/min; 1 psi = 0.0689 bar.

5-2.2.2 The lower duration value of Table 5-2.2 shall be acceptable only where remote station or central station waterflow alarm service is provided.

5-2.2.3* The residual pressure requirement of Table 5-2.2 shall be met at the elevation of the highest sprinkler. (*See the Exceptions to 5-2.2.1.*)

5-2.2.4 The lower flow figure of Table 5-2.2 shall be permitted only where the building is of noncombustible construction or the potential areas of fire are limited by building size or compartmentation such that no open areas exceed 3000 sq ft (279 m²) for Light Hazard or 4000 sq ft (372 m²) for Ordinary Hazard.

5-2.3 Water Demand Requirements—Hydraulic Calculation Methods.

5-2.3.1 General.

5-2.3.1.1* The minimum water supply requirements for a hydraulically designed occupancy hazard fire control sprinkler system shall be determined by adding the hose stream demand from Table 5-2.3 to the water supply for sprinklers determined in 5-2.3.1.2. This supply shall be available for the minimum duration specified in Table 5-2.3.

Exception No. 1: Where other NFPA standards have developed sprinkler system area/density or other design criteria and water supply requirements appropriate for fire control or suppression of Special Occupancy Hazards, they shall take precedence.

Exception No. 2: An allowance for inside and outside hose shall not be required where tanks supply sprinklers only.

Exception No. 3: Where pumps taking suction from a private fire service main supply sprinklers only, the pump need not be sized to accommodate inside and outside hose. Such hose allowance shall be considered in evaluating the available water supplies.

Table 5-2.3 Hose Stream Demand and Water Supply Duration Requirements

Hazard Classification	Inside Hose (gpm)	Total Combined Inside and Outside Hose (gpm)	Duration in Minutes
Light	0, 50, or 100	100	30
Ordinary	0, 50, or 100	250	60–90
Extra Hazard	0, 50, or 100	500	90–120

For SI Units: 1 gpm = 3.785L/min.

5-2.3.1.2 The water supply for sprinklers only shall be determined either from the area/density curves of Figure 5-2.3 in accordance with the method of 5-2.3.2 or be based upon the room design method in accordance with 5-2.3.3, at the discretion of the designer. For special areas under consideration, as described in 5-2.3.4, separate hydraulic calculations shall be required in addition to those required by 5-2.3.2 or 5-2.3.3.

5-2.3.1.3 Regardless of which of the two methods is used, the following restrictions apply:

(a) For areas of sprinkler operation less than 1500 sq ft (139 m^2) used for Light and Ordinary Hazard Occupancies, the density for 1500 sq ft (139 m^2) shall be used. For areas of sprinkler operation less than 2500 sq ft (232 m^2) for Extra Hazard Occupancies, the density for 2500 sq ft (232 m^2) shall be used.

(b)* For buildings having unsprinklered combustible concealed spaces (as described in 4-13.1.1), the minimum area of sprinkler operation shall be 3000 sq ft (279 m^2).

Exception No. 1: Combustible concealed spaces filled entirely with noncombustible insulation.

Exception No. 2: Light or Ordinary Hazard Occupancies where noncombustible or limited combustible ceilings are directly attached to the bottom of solid wood joists so as to create enclosed joist spaces 160 cu ft (4.8 m^3) or less in volume.*

Exception No. 3: Concealed spaces where the exposed surfaces have a flame spread rating of 25 or less and the materials have been demonstrated to not propagate fire in the form in which they are installed in the space.*

(c) Water demand of sprinklers installed in racks or water curtains shall be added to the ceiling sprinkler water demand at the point of connection. Demands shall be balanced to the higher pressure. (*See Chapter 6.*)

Water demand of sprinklers installed in concealed spaces or under obstructions such as ducts and cutting tables need not be added to ceiling demand.

(d) Where inside hose stations are planned or are required by other standards, a total water allowance of 50 gpm (189 L/min) for a single hose station installation or 100 gpm (378 L/min) for a multiple hose station installation shall be added to the sprinkler requirements. The water allowance shall be added in 50-gpm (189-L/min) increments beginning at the most remote hose station, with each increment added at the pressure required by the sprinkler system design at that point.

(e) When hose valves for fire department use are attached to wet pipe sprinkler system risers in accordance with 4-13.21, the water supply shall not be required to be

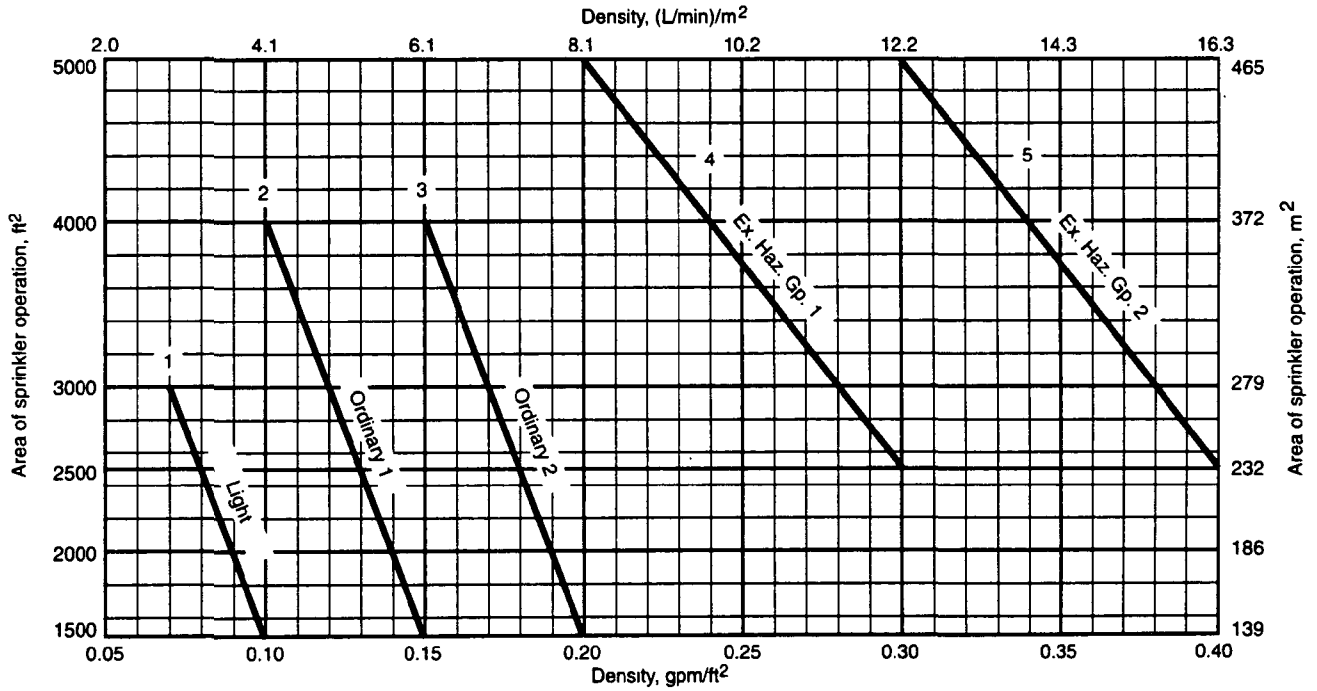


Figure 5-2.3 Area/density curves.

added to standpipe demand as determined from NFPA 14, *Standard for the Installation of Standpipe and Hose Systems.*

Exception No. 1: Where the combined sprinkler system demand and hose stream allowance of Table 5-2.3 exceeds the requirements of NFPA 14, Standard for the Installation of Standpipe and Hose Systems, this higher demand shall be used.

Exception No. 2: For partially sprinklered buildings, the sprinkler demand, not including hose stream allowance, as indicated in Table 5-2.3 shall be added to the requirements given in NFPA 14, Standard for the Installation of Standpipe and Hose Systems.

(f) Water allowance for outside hose shall be added to the sprinkler and inside hose requirement at the connection to the city water main, or a yard hydrant, whichever is closer to the system riser.

(g) The lower duration values in Table 5-2.3 shall be permitted where remote station or central station waterflow alarm service is provided.

(h) Where pumps, gravity tanks, or pressure tanks supply sprinklers only, requirements for inside and outside hose need not be considered in determining the size of such pumps or tanks.

5-2.3.1.4 Total system water supply requirements shall be determined in accordance with the hydraulic calculation procedures of Section 6-4.

5-2.3.2 Area/Density Method.

5-2.3.2.1 The water supply requirement for sprinklers only shall be calculated from the area/density curves in Figure 5-2.3. The calculations shall satisfy any single point on the appropriate area/density curve as follows:

(a) Light Hazard Area/Density Curve 1
(b) Ordinary Hazard (Group 1) Area/Density Curve 2
(c) Ordinary Hazard (Group 2) Area/Density Curve 3
(d) Extra Hazard (Group 1) Area/Density Curve 4
(e) Extra Hazard (Group 2) Area/Density Curve 5.

It is not necessary to meet all points on the selected curve.

5-2.3.2.2 For protection of storage up to 12 ft (3.6 m) in height, the following shall be applicable:

Commodity Classes I through IV

Commodity Classification	Palletized and Bin Box	Rack
I	OH-1	OH-1
II up to 8 ft (2.4 m)	OH-1	OH-1
II over 8 ft (2.4 m) up to 12 ft (3.6 m)	OH-2	OH-2
III	OH-2	OH-2
IV up to 10 ft (3 m)	OH-2	OH-2
IV over 10 ft (3 m) to 12 ft (3.6 m)	OH-2	EH-1

5-2.3.2.3 The densities and areas provided in Figure 5-2.3 are for use only with spray sprinklers. For use with other types of sprinklers, see Section 5-3.

Exception No. 1: Quick-response sprinklers shall not be permitted for use with Curves 4 and 5 (Extra Hazard).*

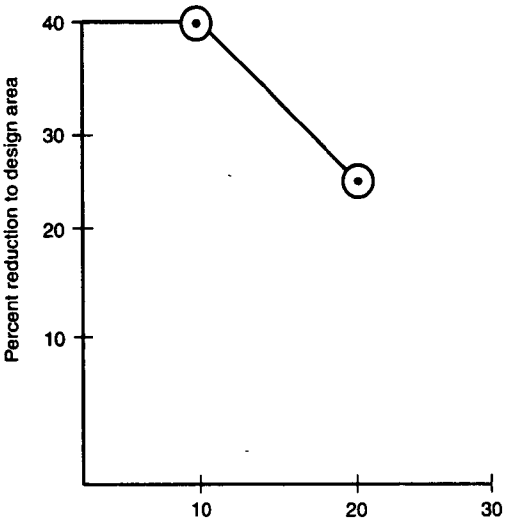
Exception No. 2: Sidewall spray sprinklers shall be permitted for use with Area/Density Curve 1 (Light Hazard) and, if specifically listed, with Area/Density Curves 2 or 3 (Ordinary Hazard).

Exception No. 3: For extended coverage sprinklers, the minimum design area shall be that corresponding to the maximum density for the hazard in Figure 5-2.3 or the area protected by 5 sprinklers, whichever is greater. Extended coverage sprinklers shall be listed with and designed for the minimum flow corresponding to the density for the smallest area of operation for the hazard as specified in Figure 5-2.3.

5-2.3.2.4 Where listed quick-response sprinklers are used throughout, the system area of operation is permitted to be reduced without revising the density as indicated in Figure 5-2.3.2.4 when all of the following conditions are satisfied:

Wet pipe system
Light hazard or ordinary hazard occupancy
20-foot (9.0-m) maximum ceiling height.

The number of sprinklers in the design area shall never be less than five.



Note: $y = \frac{-3x}{2} + 55$

For ceiling height ≥ 10 ft and ≤ 20 ft, $y = \frac{-3x}{2} + 55$;
For ceiling height < 10 ft, y = 40;
For ceiling height > 20, y = 0.
For SI units: 1 ft = 0.31 m.

Figure 5-2.3.2.4

5-2.3.2.5 The system area of operation shall be increased by 30 percent without revising the density when the following types of sprinklers are used on sloped ceilings with a pitch exceeding 2 in. in 12 in. (50 mm in .3 m):

Standard Spray Upright
Standard Spray Pendent
Sidewall Spray
Large Drop.

5-2.3.2.6 For dry pipe systems and double interlock preaction systems, the area of sprinkler operation shall be increased by 30 percent without revising the density.

5-2.3.2.7 Where high temperature sprinklers are used for Extra Hazard Occupancies, the area of sprinkler operation shall be permitted to be reduced by 25 percent without revising the density, but not to less than 2000 sq ft (186 m^2).

5-2.3.3 Room Design Method.

5-2.3.3.1* The water supply requirements for sprinklers only shall be based upon the room that creates the greatest demand. The density selected shall be that from Figure 5-2.3 corresponding to the room size. To utilize this method, all rooms shall be enclosed with walls having a fire-resistance rating equal to the water supply duration indicated in Table 5-2.3.

5-2.3.3.2 If the room is smaller than the smallest area shown in the applicable curve in Figure 5-2.3, the provisions of 5-2.3.1.3(a) shall apply.

5-2.3.3.3 Minimum protection of openings shall be as follows:

(a) Light Hazard — automatic or self-closing doors.

Exception: Where openings are not protected, calculations shall include the sprinklers in the room plus two sprinklers in the communicating space nearest each such unprotected opening unless the communicating space has only one sprinkler, in which case calculations shall be extended to the operation of that sprinkler. The selection of the room and communicating space sprinklers to be calculated shall be that which produces the greatest hydraulic demand.

(b) Ordinary and Extra Hazard — automatic or self-closing doors with appropriate fire-resistance ratings for the enclosure.

5-2.3.4 Special Design Methods.

5-2.3.4.1 Where the design area consists of a building service chute supplied by a separate riser, the maximum number of sprinklers that needs to be calculated is 3.

5-2.3.4.2 Where the room design method is used, and the area under consideration is a corridor protected by one row of sprinklers, the maximum number of sprinklers that needs to be calculated is 5. (*See 5-2.3.1.*)

Exception: Where the area under consideration is a corridor protected by a single row of sprinklers and the openings are not protected, the design area shall include all sprinklers in the corridor to a maximum of 7.

5-3 Special Design Approaches.

5-3.1 General. All special design approaches utilize the hydraulic calculation procedures of Section 6-4, except as specified.

5-3.2 Residential Sprinklers.

5-3.2.1* Sprinkler discharge rates shall be provided in accordance with minimum flow rates indicated in individual residential sprinkler listings, both for the single sprinkler discharge and the multiple sprinkler discharge of the design sprinklers.

5-3.2.2* The design area shall be that area that includes the 4 hydraulically most demanding sprinklers. Calculations shall be provided to verify the single (1) operating sprinkler criteria and the multiple (4) operating sprinkler criteria.

5-3.2.3 Where areas such as attics, basements, or other types of occupancies are outside of dwelling units but within the same structure, these areas shall be protected in accordance with the provisions of this standard, including appropriate design criteria of 5-2.3.

5-3.2.4 Hose stream demand and water supply duration requirements shall be in accordance with those for Light Hazard Occupancies in Table 5-2.3.

5-3.3 Quick-Response Early Suppression (QRES) Sprinklers. (Reserved) (*See 1-4.5.2 and A-1-4.5.2.*)

5-3.4* Large-Drop Sprinklers.

5-3.4.1 Large-drop sprinklers shall be permitted to protect ordinary hazard, miscellaneous storage, and other storage as specified by other NFPA standards.

5-3.4.2 Number of Design Sprinklers.

5-3.4.2.1 Protection shall be provided as specified in Table A-5-3.4 or appropriate NFPA standards in terms of minimum operating pressure and the number of sprinklers to be included in the design area.

5-3.4.2.2 The minimum number of design sprinklers for ordinary hazard and miscellaneous storage in accordance with this standard shall be 15 for wet pipe and preaction systems and 25 for double interlock preaction systems and dry pipe systems. For other storage configurations, the number of design sprinklers shall be in accordance with the appropriate NFPA storage standard.

5-3.4.3 Large-drop sprinkler systems shall be designed such that the minimum operating pressure is not less than 25 psi (170 kPa).

5-3.4.4 For design purposes, 95 psi (650 kPa) shall be the maximum discharge pressure at the hydraulically most remote sprinkler.

5-3.4.5 The design area shall be a rectangular area having a dimension parallel to the branch lines at least 1.2 times the square root of the area protected by the number of sprinklers to be included in the design area. Any fractional sprinkler shall be included in the design area.

5-3.4.6 The nominal diameter of branch line pipes (including riser nipples) shall be not less than 1 ¼ in. (33 mm) nor greater than 2 in. (51 mm).

Exception No. 1: Starter pieces shall be permitted to be 2½ in. (64 mm).

Exception No. 2: Where branch lines are larger than 2 in. (51 mm), the sprinkler shall be supplied by a riser nipple to elevate the sprinkler 13 in. (330 mm) for 2½-in. (64-mm) pipe and 15 in. (380 mm) for 3-in. (76-mm) pipe. These dimensions are measured from the centerline of the pipe to the deflector. In lieu of this, sprinklers may be offset horizontally a minimum of 12 in. (305 mm).

5-3.4.7 Hose stream demand and water supply duration requirements shall be in accordance with those for extra hazard occupancies in Table 5-2.3.

5-3.5* Early Suppression Fast-Response (ESFR) Sprinklers.

5-3.5.1 ESFR sprinklers shall be permitted to protect ordinary hazard, miscellaneous storage, and other storage as specified by other NFPA standards.

5-3.5.1.1* ESFR sprinklers shall be designed such that the minimum operating pressure is not less than 50 psi (3.445 bars).

5-3.5.2 ESFR sprinklers are suitable for use with the hazards listed in Table A-5-3.5 and shall be permitted to be used

in other specific hazard classifications and configurations only when proven by large-scale or other suitable fire testing. ESFR sprinklers listed for use in buildings up to 30 ft (9.1 m) high shall be used only in buildings up to 30 ft (9.1 m) high. ESFR sprinklers listed for use in buildings up to 40 ft (12.2 m) high shall used where building height exceeds 30 ft (9.1 m) to a maximum of 40 ft (12.2 m).

5-3.5.3 ESFR sprinkler systems shall be designed such that the minimum operating pressure is not less than that indicated in Table A-5-3.5 for type of storage, commodity, storage height, and building height involved.

5-3.5.4 The design area shall consist of the most hydraulically demanding area of 12 sprinklers, consisting of 4 sprinklers on each of 3 branch lines. Design shall include a minimum of 960 sq ft (89 m^2).

5-3.5.5 Water supply duration shall be at least 60 min.

5-3.6 Exposure Protection.

5-3.6.1* Piping shall be hydraulically calculated in accordance with Section 6-4 to furnish a minimum of 7 psi (48 kPa) at any sprinkler with all sprinklers facing the exposure operating.

5-3.6.2 Where the water supply feeds other fire protection systems, it shall be capable of furnishing total demand for such systems as well as the exposure system demand.

5-3.7 Water Curtains. Sprinklers in a water curtain as described in 4-13.3.4 shall be hydraulically designed to provide a discharge of 3 gpm per lineal foot [37 (L/min)/m] of water curtain, with no sprinklers discharging less than 15 gpm (56.8 L/min). The number of sprinklers calculated in this water curtain shall be the number in the length corresponding to the length parallel to the branch lines in the area determined by 6-4.4.1(a). If a single fire can be expected to operate sprinklers within the water curtain and within the design area of a hydraulically calculated system, the water supply to the water curtain shall be added to the water demand of the hydraulic calculations and shall be balanced to the calculated area demand. Hydraulic design calculations shall include a design area selected to include ceiling sprinklers adjacent to the water curtain. (*See 4-13.14.1*).

5-4 In-Rack Sprinklers. In-rack sprinklers mandated by this standard shall meet the requirements of this section.

5-4.1 In-rack sprinklers shall operate at a minimum of 15 psi (1 bar).

5-4.2 Water Demand.

5-4.2.1 Where one level of in-rack sprinklers is installed, water demand shall be based on simultaneous operation of the hydraulically most demanding 4 adjacent sprinklers.

Chapter 6 Plans and Calculations

6-1* Working Plans.

6-1.1* Working plans shall be submitted for approval to the authority having jurisdiction before any equipment is installed or remodeled. Deviation from approved plans will require permission of the authority having jurisdiction.

6-1.1.1 Working plans shall be drawn to an indicated scale, on sheets of uniform size, with a plan of each floor, and shall show those items from the following list that pertain to the design of the system.

(a) Name of owner and occupant.

(b) Location, including street address.

(c) Point of compass.

(d) Full height cross section, or schematic diagram, if required for clarity; including ceiling construction and method of protection for nonmetallic piping.

(e) Location of partitions.

(f) Location of fire walls.

(g) Occupancy class of each area or room.

(h) Location and size of concealed spaces, closets, attics, and bathrooms.

(i) Any small enclosures in which no sprinklers are to be installed.

(j) Size of city main in street and whether dead-end or circulating; and, if dead-end, direction and distance to nearest circulating main. City main test results and system elevation relative to test hydrant (*see A-7-2.1.*)

(k) Other sources of water supply, with pressure or elevation.

(l) Make, type, and nominal orifice size of sprinklers.

(m) Temperature rating and location of high-temperature sprinklers.

(n) Total area protected by each system on each floor.

(o) Number of sprinklers on each riser per floor.

(p) Total number of sprinklers on each dry pipe system, preaction system, combined dry pipe-preaction system, or deluge system.

(q) Approximate capacity in gal of each dry pipe system.

(r) Pipe type and schedule of wall thickness.

(s) Nominal pipe size and cutting lengths of pipe (or center-to-center dimensions).

NOTE: Where typical branch lines prevail, it will be necessary to size only one typical line.

(t) Location and size of riser nipples.

(u) Type of fittings and joints and location of all welds and bends. The contractor shall specify on drawing any sections to be shop welded and the type of fittings or formations to be used.

(v) Type and locations of hangers, sleeves, braces, and methods of securing sprinklers when applicable.

(w) All control valves, check valves, drain pipes, and test connections.

(x) Make, type, model, and size of alarm or dry pipe valve.

(y) Make, type, model, and size of preaction or deluge valve.

(z) Kind and location of alarm bells.

(aa) Size and location of hose outlets, hand hose, and related equipment.

(bb) Underground pipe size, length, location, weight, material, point of connection to city main; the type of valves, meters, and valve pits; and the depth that the top of the pipe is laid below grade.

(cc) Piping provisions for flushing.

(dd) Where the equipment is to be installed as an addition to an existing system, enough of the existing system indicated on the plans to make all conditions clear.

(ee) For hydraulically designed systems, the information on the hydraulic data nameplate.

(ff) A graphic representation of the scale used on all plans.

(gg) Name and address of contractor.

(hh) Hydraulic reference points shown on the plan shall correspond with comparable reference points on the hydraulic calculation sheets.

(ii) The minimum rate of water application (density), the design area of water application, in-rack sprinkler demand, and the water required for hose streams both inside and outside.

(jj) The total quantity of water and the pressure required noted at a common reference point for each system.

(kk) Relative elevations of sprinklers, junction points, and supply or reference points.

(ll) If room design method is used, all unprotected wall openings throughout the floor protected.

(mm) Calculation of loads for sizing, and details of, sway bracing.

(nn) The setting for pressure-reducing valves.

(oo) Information about backflow preventers (manufacturer, size, type).

(pp) Information about antifreeze solution used (type and amount).

6-1.1.2 The working plan submittal shall include manufacturer's installation instructions for any specially listed equipment, including descriptions, applications, and limitations for any sprinklers, devices, piping, or fittings.

6-1.1.3* Working plans for automatic sprinkler systems with nonfire protection connections. Special symbols shall be used and explained for auxiliary piping, pumps, heat exchangers, valves, strainers, and the like, clearly distinguishing these devices and piping runs from those of the sprinkler system. Model number, type, and manufacturer's name shall be identified for each piece of auxiliary equipment.

6-2 Hydraulic Calculation Forms.

6-2.1 General. Hydraulic calculations shall be prepared on form sheets that include a summary sheet, detailed work sheets, and a graph sheet. [*See copies of typical forms, Figures A-6-2.2(a), A-6-2.3, and A-6-2.4.*]

6-2.2* Summary Sheet. The summary sheet shall contain the following information, where applicable:

(a) Date.

(b) Location.

(c) Name of owner and occupant.

(d) Building number or other identification.

(e) Description of hazard.

(f) Name and address of contractor or designer.

(g) Name of approving agency.

(h) System design requirements.

1. Design area of water application, sq ft (m^2).

2. Minimum rate of water application (density), gpm per sq ft (L/min/m^2).

3. Area per sprinkler, sq ft (m^2).

(i) Total water requirements as calculated including allowance for inside hose, outside hydrants, and water curtain and exposure sprinklers.

(j) Allowance for in-rack sprinklers, gpm (L/min).

(k) Limitations (dimension, flow, and pressure) on extended coverage or other listed special sprinklers.

6-2.3* Detailed Work Sheets. Detailed work sheets or computer printout sheets shall contain the following information:

(a) Sheet number.

(b) Sprinkler description and discharge constant (K).

(c) Hydraulic reference points.

(d) Flow in gpm (L/min).

(e) Pipe size.

(f) Pipe lengths, center-to-center of fittings.

(g) Equivalent pipe lengths for fittings and devices.

(h) Friction loss in psi per ft (bars/m) of pipe.

(i) Total friction loss between reference points.

(j) In-rack sprinkler demand balanced to ceiling demand.

(k) Elevation head in psi (bars) between reference points.

(l) Required pressure in psi (bars) at each reference point.

(m) Velocity pressure and normal pressure if included in calculations.

(n) Notes to indicate starting points, reference to other sheets, or to clarify data shown.

(o)* Diagram to accompany gridded system calculations to indicate flow quantities and directions for lines with sprinklers operating in the remote area.

(p) Combined K-factor calculations for sprinklers on drops, armovers, or sprigs where calculations do not begin at sprinkler.

6-2.4* Graph Sheet. A graphic representation of the complete hydraulic calculation shall be plotted on semi-exponential graph paper ($Q^{1.85}$) and shall include the following:

(a) Water supply curve.

(b) Sprinkler system demand.

(c) Hose demand (where applicable).

(d) In-rack sprinkler demand (where applicable).

6-3 Water Supply Information. The following information shall be included:

(a) Location and elevation of static and residual test gauge with relation to the riser reference point.

(b) Flow location.

(c) Static pressure, psi (bars).

(d) Residual pressure, psi (bars).

(e) Flow, gpm (L/min).

(f) Date.

(g) Time.

(h) Test conducted by or information supplied by.

(i) Other sources of water supply, with pressure or elevation.

6-4 Hydraulic Calculation Procedures.

6-4.1* General. A calculated system for a building, or a calculated addition to a system in an existing sprinklered

Table 6-4.3.1 Equivalent Schedule 40 Steel Pipe Length Chart

Fittings and Valves	Fittings and Valves Expressed in Equivalent Feet of Pipe														
	½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.	2½ in.	3 in.	3½ in.	4 in.	5 in.	6 in.	8 in.	10 in.	12 in.
45° Elbow		1	1	1	2	2	3	3	3	4	5	7	9	11	13
90° Standard elbow	1	2	2	3	4	5	6	7	8	10	12	14	18	22	27
90° Long turn elbow	0.5	1	2	2	2	3	4	5	5	6	8	9	13	16	18
Tee or cross (flow turned 90°)	3	4	5	6	8	10	12	15	17	20	25	30	35	50	60
Butterfly valve		-	-	-	-	6	7	10	-	12	9	10	12	19	21
Gate valve		-	-	-	-	1	1	1	1	2	2	3	4	5	6
Swing check*		-	5	7	9	11	14	16	19	22	27	32	45	55	65

For SI Units: 1 in. = 25.4 mm, 1 ft = 0.3048 m.

*Due to the variations in design of swing check valves, the pipe equivalents indicated in the above chart are considered average

NOTE 1: This table applies to all types of pipe listed in Table 6-4.4.5.

NOTE 2: Information on ½-in. pipe is included in this table only because it is allowed under 4-13.18.2 and 4-13.18.3

building, supersedes the rules in this standard governing pipe schedules, except that all systems continue to be limited by area, and pipe sizes shall be no less than 1 in. (25.4 mm) nominal for ferrous piping and ¾ in. (19 mm) nominal for copper tubing or nonmetallic piping listed for fire sprinkler service. The size of pipe, number of sprinklers per branch line, and number of branch lines per cross main are otherwise limited only by the available water supply. However, sprinkler spacing and all other rules covered in this and other applicable standards shall be observed.

6-4.2 Formulas.

6-4.2.1 Friction Loss Formula. Pipe friction losses shall be determined on the basis of the Hazen-Williams formula.

$$p = \frac{4.52\,Q^{1.85}}{C^{1.85}\,d^{4.87}}$$

where:

p = frictional resistance in pounds pressure per square inch per foot of pipe
Q = flow in gpm
d = actual internal diameter of pipe in inches
C = friction loss coefficient.

$$\text{For SI Units: } p_m = 6.05 \times \frac{Q_m^{1.85}}{C^{1.85}\,d_m^{4.87}} \times 10^5$$

where:

p_m = frictional resistance in bars per meter of pipe
Q_m = flow in L/min
d_m = actual internal diameter in mm
C = friction loss coefficient.

6-4.2.2 Velocity Pressure Formula. Velocity pressure shall be determined on the basis of the formula

$$P_v = \frac{0.001123Q^2}{D^4}$$

where:

P_v = velocity pressure in psi
Q = flow in gpm
D = inside diameter in inches

For SI Units: 1 in. = 25.4 mm; 1 gal = 3.785 L; 1 psi = 0.0689 bar.

6-4.2.3 Normal Pressure Formula. Normal pressure (P_n) shall be determined on the basis of the formula

$$P_n = P_t - P_v$$

where:

P_n = normal pressure
P_t = total pressure in psi (bars)
P_v = velocity pressure in psi (bars).

6-4.2.4 Hydraulic Junction Points. Pressures at hydraulic junction points shall balance within 0.5 psi (0.03 bar). The highest pressure at the junction point, and the total flows as adjusted, shall be carried into the calculations.

6-4.3 Equivalent Pipe Lengths of Valves and Fittings.

6-4.3.1 Table 6-4.3.1 shall be used to determine the equivalent length of pipe for fittings and devices unless manufacturer's test data indicate that other factors are appropriate. For saddle-type fittings having friction loss greater than that shown in Table 6-4.3.1, the increased friction loss shall be included in hydraulic calculations. For internal pipe diameters different from Schedule 40 steel pipe, the equivalent feet shown in Table 6-4.3.1 shall be multiplied by a factor derived from the following formula:

$$\left[\frac{\text{Actual inside diameter}}{\text{Schedule 40 steel pipe inside diameter}}\right]^{4.87} = \text{Factor}$$

The factor thus obtained shall be further modified as required by Table 6-4.3.2.

This table shall apply to other types of pipe listed in Table 6-4.4.5 only where modified by factors from 6-4.3.1 and 6-4.3.2.

6-4.3.2 Table 6-4.3.1 shall be used with Hazen-Williams C = 120 only. For other values of C, the values in Table 6-4.3.1 shall be multiplied by the factors indicated in Table 6-4.3.2.

Table 6-4.3.2 C Value Multiplier

Value of C	100	130	140	150
Multiplying Factor	0.713	1.16	1.33	1.51

NOTE: This is based upon the friction loss through the fitting being independent of the C factor available to the piping.

6-4.3.3 Specific friction loss values or equivalent pipe lengths for alarm valves, dry pipe valves, deluge valves,

strainers, and other devices shall be made available to the authority having jurisdiction.

6-4.3.4 Specific friction loss values or equivalent pipe lengths for listed fittings not in Table 2-4.1 (*see 2-4.2*) shall be used in hydraulic calculations where these losses or equivalent pipe lengths are different from those shown in Table 6-4.3.1.

6-4.4* Calculation Procedure.

6-4.4.1* For all systems the design area shall be the hydraulically most demanding based on the criteria of 5-2.3.

Exception: Special design approaches in accordance with 5-3.3.

(a) Where the design is based on area/density method, the design area shall be a rectangular area having a dimension parallel to the branch lines at least 1.2 times the square root of the area of sprinkler operation (A) used. This shall permit the inclusion of sprinklers on both sides of the cross main. Any fractional sprinkler shall be carried to the next higher whole sprinkler.

Exception: In systems having branch lines with an insufficient number of sprinklers to fulfill the 1.2 $\sqrt{A}$ requirement, the design area shall be extended to include sprinklers on adjacent branch lines supplied by the same cross main.

(b) Where the design is based on the room design method, see 5-2.3.3. The calculation shall be based on the room and communicating space, if any, that is the hydraulically most demanding.

6-4.4.2* For gridded systems, the designer shall verify that the hydraulically most demanding area is being used. A minimum of two additional sets of calculations shall be submitted to demonstrate peaking of demand area friction loss when compared to areas immediately adjacent on either side along the same branch lines.

Exception: Computer programs that show the peaking of the demand area friction loss shall be acceptable based on a single set of calculations.

6-4.4.3 System piping shall be hydraulically designed using design densities and areas of operation in accordance with Figure 5-2.3 as required for the occupancies involved.

(a)* The density shall be calculated on the basis of floor area of sprinkler operation. The area covered by any sprinkler used in hydraulic design and calculations shall be the horizontal distances measured between the sprinklers on the branch line and between the branch lines in accordance with 4-2.2.1.

(b)* Where sprinklers are installed above and below a ceiling or in a case where more than two areas are supplied from a common set of branch lines, the branch lines and supplies shall be calculated to supply the largest water demand.

6-4.4.4* Each sprinkler in the design area and the remainder of the hydraulically designed system shall discharge at a flow rate at least equal to the stipulated minimum water application rate (density) multiplied by the area of sprinkler operation. Calculations shall begin at the hydraulically most remote sprinkler. Discharge at each sprinkler shall be based on the calculated pressure at that sprinkler.

Exception No. 1: Where the area of application is equal to or greater than the minimum allowable area of Figure 5-2.3 for the appropriate hazard classification (including a 30 percent increase for dry pipe systems), sprinkler discharge in closets, washrooms, and similar small compartments requiring only one sprinkler shall be permitted to be omitted from hydraulic calculations within the area of application. Sprinklers in these small compartments shall, however, be capable of discharging minimum densities in accordance with Figure 5-2.3.

Exception No. 2: Where sprinklers are provided above and below obstructions such as wide ducts or tables, the water supply for one of the levels of sprinklers shall be permitted to be omitted from the hydraulic ceiling design calculations within the area of application. In any case, the most hydraulically demanding arrangement shall be calculated.

6-4.4.5 Pipe friction loss shall be calculated in accordance with the Hazen-Williams formula with C values from Table 6-4.4.5.

(a) Include pipe, fittings, and devices such as valves, meters, and strainers, and calculate elevation changes that affect the sprinkler discharge.

Exception: Tie-in drain piping shall not be included in the hydraulic calculations.

(b) Calculate the loss for a tee or a cross where flow direction change occurs based on the equivalent pipe length of the piping segment in which the fitting is included. The tee at the top of a riser nipple shall be included in the branch line; the tee at the base of a riser nipple shall be included in the riser nipple; and the tee or cross at a cross main-feed main junction shall be included in the cross main. Do not include fitting loss for straight-through flow in a tee or cross.

(c) Calculate the loss of reducing elbows based on the equivalent feet value of the smallest outlet. Use the equivalent feet value for the standard elbow on any abrupt 90-degree turn, such as the screw-type pattern. Use the equivalent feet value for the long-turn elbow on any sweeping 90-degree turn, such as a flanged, welded, or mechanical joint-elbow type. (*See Table 6-4.3.1.*)

(d) Friction loss shall be excluded for the fitting directly connected to a sprinkler.

(e) Losses through a pressure-reducing valve shall be included based on the normal inlet pressure condition. Pressure loss data from the manufacturer's literature shall be used.

Table 6-4.4.5 Hazen-Williams C Values

Pipe or Tube	C Value*
Unlined cast or ductile iron	100
Black steel (dry systems including preaction)	100
Black steel (wet systems including deluge)	120
Galvanized (all)	120
Plastic (listed)—all	150
Cement lined cast or ductile iron	140
Copper tube or stainless steel	150

*The authority having jurisdiction is permitted to consider other C values.

6-4.4.6* Orifice plates or sprinklers of different orifice sizes shall not be used for balancing the system.

Exception No. 1: Sprinklers with different orifice sizes shall be acceptable for special use such as exposure protection, small rooms or enclosures, or directional discharge. (See 1-4.2 for definition of small rooms.)

Exception No. 2: Extended-coverage sprinklers with a different orifice size shall be acceptable for part of the protection area where installed in accordance with their listing.

6-4.4.7* When calculating flow from an orifice, the total pressure (P_t) shall be used.

Exception: Use of the normal pressure (P_n) calculated by subtracting the velocity pressure from the total pressure shall be permitted. Where the normal pressure is used, it shall be used on all branch lines and cross mains where applicable.

6-4.4.8 Minimum operating pressure of any sprinkler shall be 7 psi (0.5 bar).

Exception: Where higher minimum operating pressure for the desired application is specified in the listing of the sprinkler.

6-5 Pipe Schedules. Pipe schedules shall not be used, except in existing systems and in new systems or extensions to existing systems described in Chapter 5. Water supplies shall conform to 5-2.2.

6-5.1* General. The pipe schedule sizing provisions shall not apply to hydraulically calculated systems. Sprinkler systems having sprinklers with orifices other than ½ in. (13 mm) nominal, listed piping material other than that covered in Table 2-3.1, Extra Hazard Groups 1 and 2 systems, and exposure protection systems shall be hydraulically calculated.

6-5.1.1 The number of automatic sprinklers on a given pipe size on one floor shall not exceed the number given in 6-5.2, 6-5.3, or 6-5.4 for a given occupancy.

6-5.1.2* Size of Risers. Each system riser shall be sized to supply all sprinklers on the riser on any one floor as determined by the standard schedules of pipe sizes in 6-5.2, 6-5.3, or 6-5.4.

6-5.1.3 Slatted Floors, Large Floor Openings, Mezzanines, and Large Platforms. Buildings having slatted floors, or large unprotected floor openings without approved stops, shall be treated as one area with reference to pipe sizes, and the feed mains or risers shall be of the size required for the total number of sprinklers.

6-5.1.4 Stair Towers. Stairs, towers, or other construction with incomplete floors, if piped on independent risers, shall be treated as one area with reference to pipe sizes.

6-5.2 Schedule for Light Hazard Occupancies.

6-5.2.1 Branch lines shall not exceed 8 sprinklers on either side of a cross main.

Exception: Where more than 8 sprinklers on a branch line are necessary, lines may be increased to 9 sprinklers by making the 2 end lengths 1 in. (25.4 mm) and 1¼ in. (33 mm), respectively, and the sizes thereafter standard. Ten sprinklers may be placed on a branch line making the 2 end lengths 1 in. (25.4 mm) and 1¼ in. (33 mm), respectively, and feeding the tenth sprinkler by a 2½-in. (64-mm) pipe.

6-5.2.2 Pipe sizes shall be in accordance with Table 6-5.2.2.

Exception: Each area requiring more sprinklers than the number specified for 3 ½-in. (89-mm) pipe in Table 6-5.2.2 and without subdividing partitions (not necessarily fire walls) shall be supplied by mains or risers sized for Ordinary Hazard Occupancies.

6-5.2.3 Where sprinklers are installed above and below ceilings [*see Figures 6-5.2.3(a), (b), and (c)*] and such sprinklers are supplied from a common set of branch lines or separate branch lines from a common cross main, such branch lines shall not exceed 8 sprinklers above and 8 sprinklers below any ceiling on either side of the cross main. Pipe sizing up to and including 2 ½ in. (64 mm) shall be as shown in Table 6-5.2.3 utilizing the greatest number of sprinklers to be found on any two adjacent levels.

Exception: Branch lines and cross mains supplying sprinklers installed entirely above, or entirely below, ceilings shall be sized in accordance with Table 6-5.2.2.

Table 6-5.2.2 Light Hazard Pipe Schedules

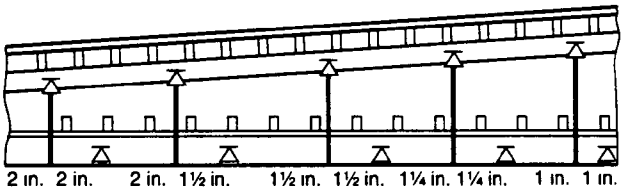
Steel		Copper	
1 in.	2 sprinklers	1 in.	2 sprinklers
1¼ in.	3 sprinklers	1¼ in.	3 sprinklers
1½ in.	5 sprinklers	1½ in.	5 sprinklers
2 in.	10 sprinklers	2 in.	12 sprinklers
2½ in.	30 sprinklers	2½ in.	40 sprinklers
3 in.	60 sprinklers	3 in.	65 sprinklers
3½ in.	100 sprinklers	3½ in.	115 sprinklers
4 in.	See 4-2.1	4 in.	See 4-2.1

For SI Units: 1 in. = 25.4 mm.

Table 6-5.2.3 Number of Sprinklers above and below a Ceiling

Steel		Copper	
1 in.	2 sprinklers	1 in.	2 sprinklers
1¼ in.	4 sprinklers	1¼ in.	4 sprinklers
1½ in.	7 sprinklers	1½ in.	7 sprinklers
2 in.	15 sprinklers	2 in.	18 sprinklers
2½ in.	50 sprinklers	2½ in.	65 sprinklers

For SI Units: 1 in. = 25.4 mm.



For SI units: 1 in. = 25.4 mm.

Figure 6-5.2.3(a) Arrangement of branch lines supplying sprinklers above and below a ceiling.

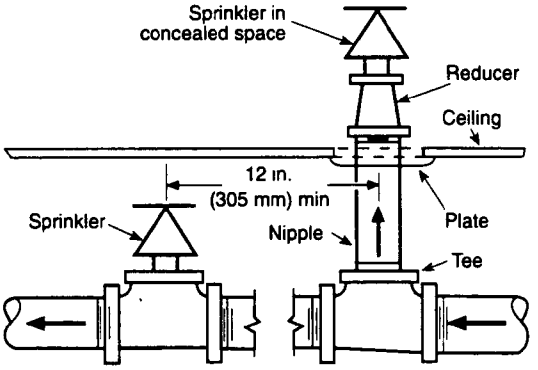


Figure 6-5.2.3(b) Sprinkler on riser nipple from branch line in lower fire area.

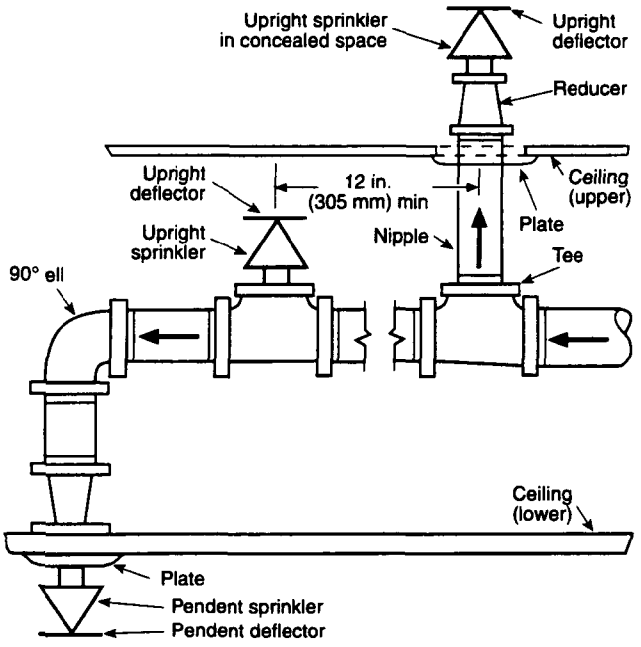


Figure 6-5.2.3(c) Arrangement of branch lines supplying sprinklers above and below ceilings.

6-5.2.3.1* Where the total number of sprinklers above and below a ceiling exceeds the number specified in Table 6-5.2.3 for 2½-in. (64-mm) pipe, the pipe supplying such sprinklers shall be increased to 3 in. (76 mm) and sized thereafter according to the schedule shown in Table 6-5.2.2 for the number of sprinklers above or below a ceiling, whichever is larger.

6-5.3 Schedule for Ordinary Hazard Occupancies.

6-5.3.1 Branch lines shall not exceed 8 sprinklers on either side of a cross main.

Exception: Where more than 8 sprinklers on a branch line are necessary, lines may be increased to 9 sprinklers by making the 2 end lengths 1 in. (25.4 mm) and 1¼ in. (33 mm), respectively, and the sizes thereafter standard. Ten sprinklers are permitted to be placed on a branch line making the 2 end lengths 1 in. (25.4 mm) and 1¼ in. (33 mm), respectively, and feeding the tenth sprinkler by a 2½-in. (64-mm) pipe.

6-5.3.2 Pipe sizes shall be in accordance with Table 6-5.3.2(a).

Table 6-5.3.2(a) Ordinary Hazard Pipe Schedule

Steel		Copper	
1 in.	2 sprinklers	1 in.	2 sprinklers
1¼ in.	3 sprinklers	1¼ in.	3 sprinklers
1½ in.	5 sprinklers	1½ in.	5 sprinklers
2 in.	10 sprinklers	2 in.	12 sprinklers
2½ in.	20 sprinklers	2½ in.	25 sprinklers
3 in.	40 sprinklers	3 in.	45 sprinklers
3½ in.	65 sprinklers	3½ in.	75 sprinklers
4 in.	100 sprinklers	4 in.	115 sprinklers
5 in.	160 sprinklers	5 in.	180 sprinklers
6 in.	275 sprinklers	6 in.	300 sprinklers
8 in.	See 4-2.1	8 in.	See 4-2.1

For SI Units: 1 in. = 25.4 mm.

Exception: Where the distance between sprinklers on the branch line exceeds 12 ft (3.7 m), or the distance between the branch lines exceeds 12 ft (3.7 m), the number of sprinklers for a given pipe size shall be in accordance with Table 6-5.3.2(b).

Table 6-5.3.2(b) Number of Sprinklers—Greater than 12 ft Separations

Steel		Copper	
2½ in.	15 sprinklers	2½ in.	20 sprinklers
3 in.	30 sprinklers	3 in.	35 sprinklers
3½ in.	60 sprinklers	3½ in.	65 sprinklers

For other pipe and tube sizes, see Table 6-5.3.2(a).

For SI Units: 1 in. = 25.4 mm.

6-5.3.3 Where sprinklers are installed above and below ceilings and such sprinklers are supplied from a common set of branch lines or separate branch lines supplied by a common cross main, such branch lines shall not exceed 8 sprinklers above and 8 sprinklers below any ceiling on either side of the cross main. Pipe sizing up to and including 3 in. (76 mm) shall be as shown in Table 6-5.3.3 [*see Figures 6-5.2.3(a), (b), and (c)*] utilizing the greatest number of sprinklers to be found on any two adjacent levels.

Exception: Branch lines and cross mains supplying sprinklers installed entirely above, or entirely below, ceilings shall be sized in accordance with Tables 6-5.3.2(a) or (b).

Table 6-5.3.3 Number of Sprinklers above and below a Ceiling

Steel		Copper	
1 in.	2 sprinklers	1 in.	2 sprinklers
1¼ in.	4 sprinklers	1¼ in.	4 sprinklers
1½ in.	7 sprinklers	1½ in.	7 sprinklers
2 in.	15 sprinklers	2 in.	18 sprinklers
2½ in.	30 sprinklers	2½ in.	40 sprinklers
3 in.	60 sprinklers	3 in.	65 sprinklers

For SI Units: 1 in. = 25.4 mm

6-5.3.3.1* Where the total number of sprinklers above and below a ceiling exceeds the number specified in Table 6-5.3.3 for 3-in. (76-mm) pipe, the pipe supplying such sprinklers shall be increased to 3 ½ in. (89 mm) and sized thereafter according to the schedule shown in Table 6-5.2.2 or Table 6-5.3.2(a) for the number of sprinklers above or below a ceiling, whichever is larger.

Exception: Where the distance between the sprinklers protecting the occupied area exceeds 12 ft (3.7 m) or the distance between the branch lines exceeds 12 ft (3.7 m), the branch lines shall be sized in accordance with either Table 6-5.3.2(b), taking into consideration the sprinklers protecting the occupied area only, or paragraph 6-5.3.3, whichever requires the greater size of pipe.

6-5.4* Extra Hazard Occupancies shall be hydraulically calculated.

Exception: For existing systems, see A-6-5.4.

6-5.5 Deluge Systems. Open sprinkler and deluge systems shall be hydraulically calculated according to applicable standards.

6-5.6* Exposure Systems. Exposure sprinklers shall be hydraulically calculated using Table 6-5.6 and a relative classification of exposures guide number.

Table 6-5.6 Exposure Protection

Section A—Window Sprinklers

Guide Number	Level of Window Sprinkler	Window Sprinkler Orifice Size	Discharge Coefficient (K Factor)	Flow Rate (Q)	Application Rate over 25 ft² of Window Area
1.50 or less	Top 2 levels	3/8 in. (9.5 mm)	2.8	7.4 gpm	0.30 gpm/ft²
	Next lower 2 levels	5/16 in. (7.9 mm)	1.9	5.0 gpm	0.20 gpm/ft²
	Next lower 2 levels	1/4 in. (6.4 mm)	1.4	3.7 gpm	0.15 gpm/ft²
1.51 to 2.20	Top 2 levels	1/2 in. (12.7 mm)	5.6	14.8 gpm	0.59 gpm/ft²
	Next lower 2 levels	7/16 in. (11.1 mm)	4.2	11.1 gpm	0.44 gpm/ft²
	Next lower 2 levels	3/8 in. (9.5 mm)	2.8	7.4 gpm	0.30 gpm/ft²
2.21 to 13.15	Top 2 levels	5/8 in. (15.9 mm)	11.2	29.6 gpm	1.18 gpm/ft²
	Next lower 2 levels	17/32 in. (13.5 mm)	8.0	21.2 gpm	0.85 gpm/ft²
	Next lower 2 levels	1/2 in. (12.7 mm)	5.6	14.8 gpm	0.59 gpm/ft²

Section B—Cornice Sprinklers

Guide Number	Cornice Sprinkler Orifice Size	Application Rate per Lineal Foot
1.50 or less	3/8 in. (9.5 mm)	0.75 gpm
1.51 to 2.20	1/2 in. (12.7 mm)	1.50 gpm
2.21 to 13.15	5/8 in. (15.9 mm)	3.00 gpm

For SI Units: 1 gpm = 3.785 L/min; 1 gpm/ft² = 40.76 (L/min)/m².

6-6 In-Rack Sprinklers.

6-6.1 Pipes to in-rack sprinklers shall be sized by hydraulic calculations.

6-6.2 Water demand of sprinklers installed in racks shall be added to ceiling sprinkler water demand over the same protected area at the point of connection. The demand shall be balanced to the higher pressure.

Chapter 7 Water Supplies

7-1 General. Every automatic sprinkler system shall have at least one automatic water supply.

7-1.1 Capacity. Water supplies shall be reliable and be capable of providing the required flow and pressure for the required duration as specified in Chapter 5 ("Design Approaches").

7-1.2 Arrangement.

7-1.2.1 Underground Supply Pipe. For pipe schedule systems, the underground supply pipe shall be at least as large as the system riser.

7-1.2.2 Connection between Underground and Aboveground Piping. The connection between the system piping and underground piping shall be made with a suitable transition piece and shall be properly strapped or fastened by approved devices. The transition piece shall be protected against possible damage from corrosive agents, solvent attack, or mechanical damage.

7-1.2.3* Connection Passing through or under Foundation Walls. When system piping pierces a foundation wall below grade or is located under the foundation wall, clearance shall be provided to prevent breakage of the piping due to building settlement.

7-1.3 Meters. Where meters are required by other authorities, they shall be listed.

7-2 Types.

7-2.1* Connections to Water Works Systems. A connection to a reliable water works system shall be an acceptable water supply source. The volume and pressure of a public water supply shall be determined from waterflow test data. (*See NFPA 24, Standard for the Installation of Private Fire Service Mains and Their Appurtenances.*) The authority having jurisdiction shall be permitted to require an adjustment to the waterflow test data to account for daily and seasonal fluctuations, possible interruption by flood or ice conditions, large simultaneous industrial use, future demand on the water supply system, or any other condition that could affect the water supply.

7-2.2 Pumps.

7-2.2.1* Acceptability. A single automatically controlled fire pump installed in accordance with NFPA 20, *Standard for the Installation of Centrifugal Fire Pumps*, shall be an acceptable water supply source.

7-2.3 Pressure Tanks.

7-2.3.1 Acceptability.

7-2.3.1.1 A pressure tank installed in accordance with NFPA 22, *Standard for Water Tanks for Private Fire Protection*, shall be an acceptable water supply source.

7-2.3.1.2 Pressure tanks shall be provided with an approved means for automatically maintaining the required air pressure. Where a pressure tank is the sole water supply, there shall also be provided an approved trouble alarm to indicate low air pressure and low water level with the alarm supplied from an electrical branch circuit independent of the air compressor.

7-2.3.1.3 Pressure tanks shall not be used to supply other than sprinklers and hand hose attached to sprinkler piping.

7-2.3.2 Capacity. In addition to the requirements of 7-1.1, the water capacity of a pressure tank shall include the extra capacity needed to fill dry pipe or preaction systems where installed. The total volume shall be based on the water capacity, plus the air capacity required by 7-2.3.3.

7-2.3.3* Water Level and Air Pressure. Pressure tanks shall be kept two-thirds full of water, and an air pressure of at least 75 psi (5.2 bars) by the gauge shall be maintained. Where the bottom of the tank is located below the highest sprinklers served, the air pressure by the gauge shall be at least 75 psi (5.2 bars) plus three times the pressure caused by the column of water in the sprinkler system above the tank bottom.

7-2.4 Gravity Tanks. An elevated tank installed in accordance with NFPA 22, *Standard for Water Tanks for Private Fire Protection*, shall be an acceptable water supply source.

Chapter 8 System Acceptance

8-1 Approval of Sprinkler Systems. The installing contractor shall:

(a) Notify the authority having jurisdiction and owner's representative of the time and date testing will be performed.

(b) Perform all required acceptance tests. (*See Section 8-2.*)

(c) Complete and sign the appropriate Contractor's Material and Test Certificate(s) [*see Figures 8-1(a) and 8-1(b)*].

8-2 Acceptance Requirements.

8-2.1* Flushing of Piping. Underground mains and lead-in connections to system risers shall be completely flushed before connection is made to sprinkler piping. The flushing operation shall be continued for a sufficient time to ensure thorough cleaning. The minimum rate of flow shall be not less than:

(a) The hydraulically calculated water demand rate of the system including any hose requirements, or

(b) That flow necessary to provide a velocity of 10 ft per sec (3 m/s), [*see Table 8-2.1(b)*] or

(c) The maximum flow rate available to the system under fire conditions.

Table 8-2.1(b) Flow Required to Produce a Velocity of 10 ft per sec (3 m/s) in Pipes

Pipe Size (in.)	Pipe Size (mm)	Flow Rate (gpm)	Flow Rate (L/min)
4	102	390	1476
6	152	880	3331
8	203	1560	5905
10	254	2440	9235
12	305	3520	13323

8-2.2 Hydrostatic Tests.

8-2.2.1* All interior piping and attached appurtenances subjected to system working pressure shall be hydrostatically tested at 200 psi (13.8 bars) and shall maintain that pressure without loss for 2 hours. Loss shall be determined by a drop in gauge pressure or visual leakage.

Exception No. 1: Portions of systems normally subjected to working pressures in excess of 150 psi (10.4 bars) shall be tested as described above at a pressure of 50 psi (3.5 bars) in excess of normal working pressure.

Exception No. 2: Where cold weather will not permit testing with water, an interim air test may be conducted as described in 8-2.3.

Exception No. 3: When an addition or modification is made to an existing system, the new installation shall be isolated and tested at not less than 50 psi (3.4 bars) in excess of normal static pressure for 2 hr.

Exception No. 4: Modifications that cannot be isolated, such as relocated drops, shall not require testing in excess of normal static pressure.

The test pressure shall be read from a gauge located at the low elevation point of the system or portion being tested.

8-2.2.2 Additives. Additives, corrosive chemicals such as sodium silicate or derivatives of sodium silicate, brine, or other chemicals shall not be used while hydrostatically testing systems or for stopping leaks.

8-2.2.3 Piping between the exterior fire department connection and the check valve in the fire department inlet pipe shall be hydrostatically tested in the same manner as the balance of the system.

8-2.2.4 When deluge systems are being hydrostatically tested, plugs shall be installed in fittings and replaced with open sprinklers after the test is completed, or the operating elements of automatic sprinklers shall be removed after the test is completed.

8-2.2.5 All underground piping shall be hydrostatically tested in accordance with NFPA 24, *Standard for the Installation of Private Fire Service Mains and Their Appurtenances*. The allowable leakage shall be within the limits prescribed by NFPA 24 and shall be recorded on the test certificate.

8-2.2.6 Provision shall be made for the proper disposal of water used for flushing or testing.

8-2.2.7* Test blanks shall have painted lugs protruding in such a way as to clearly indicate their presence. The test blanks shall be numbered, and the installing contractor shall have a record-keeping method ensuring their removal after work is completed.

8-2.2.8 Differential-Type Valves. When subject to hydrostatic test pressures, the clapper of a differential-type valve shall be held off its seat to prevent damaging the valve.

8-2.3 Dry and Double Interlocked System(s) Air Test. In addition to the standard hydrostatic test, an air pressure leakage test at 40 psi (2.8 bars) shall be conducted for 24 hr. Any leakage that results in a loss of pressure in excess of 1 ½ psi (0.1 bar) for the 24 hr shall be corrected.

8-2.3.1 Where systems are installed in spaces that are capable of being operated at temperatures below 32°F (0°C), air pressure leakage tests required in 8-2.3 shall be conducted at the lowest nominal temperature of the space.

8-2.4 System Operational Tests.

8-2.4.1 Waterflow detecting devices including the associated alarm circuits shall be flow tested through the inspec-

Contractor's Material and Test Certificate for Aboveground Piping

PROCEDURE

Upon completion of work, inspection and tests shall be made by the contractor's representative and witnessed by an owner's representative. All defects shall be corrected and system left in service before contractor's personnel finally leave the job.

A certificate shall be filled out and signed by both representatives. Copies shall be prepared for approving authorities, owners, and contractor. It is understood the owner's representative's signature in no way prejudices any claim against contractor for faulty material, poor workmanship, or failure to comply with approving authority's requirements or local ordinances.

PROPERTY NAME		DATE
PROPERTY ADDRESS		
PLANS	ACCEPTED BY APPROVING AUTHORITIES (NAMES)	
	ADDRESS	
	INSTALLATION CONFORMS TO ACCEPTED PLANS	☐ YES ☐ NO
	EQUIPMENT USED IS APPROVED	☐ YES ☐ NO
	IF NO, EXPLAIN DEVIATIONS	
INSTRUCTIONS	HAS PERSON IN CHARGE OF FIRE EQUIPMENT BEEN INSTRUCTED AS TO LOCATION OF CONTROL VALVES AND CARE AND MAINTENANCE OF THIS NEW EQUIPMENT?	☐ YES ☐ NO
	IF NO, EXPLAIN	
	HAVE COPIES OF THE FOLLOWING BEEN LEFT ON THE PREMISES?	☐ YES ☐ NO
	1. SYSTEM COMPONENTS INSTRUCTIONS	☐ YES ☐ NO
	2. CARE AND MAINTENANCE INSTRUCTIONS	☐ YES ☐ NO
	3. NFPA 25	☐ YES ☐ NO
LOCATION OF SYSTEM	SUPPLIES BUILDINGS	

SPRINKLERS	MAKE	MODEL	YEAR OF MANUFACTURE	ORIFICE SIZE	QUANTITY	TEMPERATURE RATING

PIPE AND FITTINGS

Type of Pipe _____

Type of Fittings _____

ALARM VALVE OR FLOW INDICATOR	ALARM DEVICE			MAXIMUM TIME TO OPERATE THROUGH TEST CONNECTION	
	TYPE	MAKE	MODEL	MIN	SEC

DRY PIPE OPERATING TEST

DRY VALVE			Q. O. D		
MAKE	MODEL	SERIAL NO.	MAKE	MODEL	SERIAL NO.

	TIME TO TRIP THROUGH TEST CONNECTION[1]		WATER PRESSURE	AIR PRESSURE	TRIP POINT AIR PRESSURE	TIME WATER REACHED TEST OUTLET[1]		ALARM OPERATED PROPERLY	
	MIN	SEC	PSI	PSI	PSI	MIN	SEC	YES	NO
Without Q.O.D.									
With Q.O.D.									

IF NO, EXPLAIN

[1]MEASURED FROM TIME INSPECTOR'S TEST CONNECTION IS OPENED

Figure 8-1(a) Part 1.

DELUGE AND PREACTION VALVES

OPERATION ☐ PNEUMATIC ☐ ELECTRIC ☐ HYDRAULIC

PIPING SUPERVISED ☐ YES ☐ NO | DETECTING MEDIA SUPERVISED ☐ YES ☐ NO

DOES VALVE OPERATE FROM THE MANUAL TRIP, REMOTE, OR BOTH CONTROL STATIONS ☐ YES ☐ NO

IS THERE AN ACCESSIBLE FACILITY IN EACH CIRCUIT FOR TESTING ☐ YES ☐ NO | IF NO, EXPLAIN

MAKE	MODEL	DOES EACH CIRCUIT OPERATE SUPERVISION LOSS ALARM?		DOES EACH CIRCUIT OPERATE VALVE RELEASE?		MAXIMUM TIME TO OPERATE RELEASE	
		YES	NO	YES	NO	MIN	SEC

PRESSURE REDUCING VALVE TEST

LOCATION & FLOOR	MAKE & MODEL	SETTING	STATIC PRESSURE		RESIDUAL PRESSURE (FLOWING)		FLOW RATE
			INLET (PSI)	OUTLET (PSI)	INLET (PSI)	OUTLET (PSI)	FLOW (GPM)

TEST DESCRIPTION

HYDROSTATIC: Hydrostatic tests shall be made at not less than 200 psi (13.6 bars) for 2 hours or 50 psi (3.4 bars) above static pressure in excess of 150 psi (10.2 bars) for 2 hours. Differential dry-pipe valve clappers shall be left open during the test to prevent damage. All aboveground piping leakage shall be stopped.

PNEUMATIC: Establish 40 psi (2.7 bars) air pressure and measure drop, which shall not exceed 1½ psi (0.1 bars) in 24 hours. Test pressure tanks at normal water level and air pressure and measure air pressure drop, which shall not exceed 1½ psi (0.1 bars) in 24 hours.

TESTS

ALL PIPING HYDROSTATICALLY TESTED AT ___ PSI (__ BARS) FOR ___ HRS | IF NO, STATE REASON

DRY PIPING PNEUMATICALLY TESTED ☐ YES ☐ NO

EQUIPMENT OPERATES PROPERLY ☐ YES ☐ NO

DO YOU CERTIFY AS THE SPRINKLER CONTRACTOR THAT ADDITIVES AND CORROSIVE CHEMICALS, SODIUM SILICATE OR DERIVATIVES OF SODIUM SILICATE, BRINE, OR OTHER CORROSIVE CHEMICALS WERE NOT USED FOR TESTING SYSTEMS OR STOPPING LEAKS? ☐ YES ☐ NO

DRAIN TEST	READING OF GAUGE LOCATED NEAR WATER SUPPLY TEST CONNECTION: _____ PSI (__ BARS)	RESIDUAL PRESSURE WITH VALVE IN TEST CONNECTION OPEN WIDE: _____ PSI (__ BARS)

UNDERGROUND MAINS AND LEAD IN CONNECTIONS TO SYSTEM RISERS FLUSHED BEFORE CONNECTION MADE TO SPRINKLER PIPING

VERIFIED BY COPY OF THE U FORM NO. 85B ☐ YES ☐ NO | OTHER EXPLAIN

FLUSHED BY INSTALLER OF UNDERGROUND SPRINKLER PIPING ☐ YES ☐ NO

IF POWDER-DRIVEN FASTENERS ARE USED IN CONCRETE, HAS REPRESENTATIVE SAMPLE TESTING BEEN SATISFACTORILY COMPLETED? ☐ YES ☐ NO | IF NO, EXPLAIN

BLANK TESTING GASKETS

NUMBER USED	LOCATIONS	NUMBER REMOVED

WELDING

WELDED PIPING ☐ YES ☐ NO

IF YES. . .

DO YOU CERTIFY AS THE SPRINKLER CONTRACTOR THAT WELDING PROCEDURES COMPLY WITH THE REQUIREMENTS OF AT LEAST AWS D10.9, LEVEL AR-3? ☐ YES ☐ NO

DO YOU CERTIFY THAT THE WELDING WAS PERFORMED BY WELDERS QUALIFIED IN COMPLIANCE WITH THE REQUIREMENTS OF AT LEAST AWS D10.9, LEVEL AR-3? ☐ YES ☐ NO

DO YOU CERTIFY THAT WELDING WAS CARRIED OUT IN COMPLIANCE WITH A DOCUMENTED QUALITY CONTROL PROCEDURE TO ENSURE THAT ALL DISCS ARE RETRIEVED, THAT OPENINGS IN PIPING ARE SMOOTH, THAT SLAG AND OTHER WELDING RESIDUE ARE REMOVED, AND THAT THE INTERNAL DIAMETERS OF PIPING ARE NOT PENETRATED? ☐ YES ☐ NO

CUTOUTS (DISCS)

DO YOU CERTIFY THAT YOU HAVE A CONTROL FEATURE TO ENSURE THAT ALL CUTOUTS (DISCS) ARE RETRIEVED? ☐ YES ☐ NO

Figure 8-1(a) Part 2.

HYDRAULIC DATA NAMEPLATE	NAMEPLATE PROVIDED ☐ YES ☐ NO	IF NO, EXPLAIN	
REMARKS	DATE LEFT IN SERVICE WITH ALL CONTROL VALVES OPEN		
SIGNATURES	NAME OF SPRINKLER CONTRACTOR		
	TESTS WITNESSED BY		
	FOR PROPERTY OWNER (SIGNED)	TITLE	DATE
	FOR SPRINKLER CONTRACTOR (SIGNED)	TITLE	DATE
ADDITIONAL EXPLANATION AND NOTES			

Figure 8-1(a) Part 3.

tor's test connection and shall result in an audible alarm on the premises within 5 min after such flow begins and until such flow stops.

8-2.4.2 A working test of the dry pipe valve alone, and with a quick-opening device, if installed, shall be made by opening the inspector's test connection. The test shall measure the time to trip the valve and the time for water to be discharged from the inspector's test connection. All times shall be measured from the time the inspector's test connection is completely opened. The results shall be recorded using the Contractor's Material and Test Certificate for Aboveground Piping.

8-2.4.3 The automatic operation of a deluge or preaction valve shall be tested in accordance with the manufacturer's instructions. The manual and remote control operation, where present, shall also be tested.

8-2.4.4 The main drain valve shall be opened and remain open until the system pressure stabilizes. The static and residual pressures shall be recorded on the contractor's test certificate.

8-2.5 Each pressure-reducing valve shall be tested upon completion of installation to ensure proper operation under flow and no-flow conditions. Testing shall verify that the device properly regulates outlet pressure at both maximum and normal inlet pressure conditions. The results of the flow test of each pressure-reducing valve shall be recorded on the contractor's test certificate. The results shall include the static and residual inlet pressures, static and residual outlet pressures, and the flow rate.

8-2.6 The backflow prevention assembly shall be forward flow tested to ensure proper operation. The minimum flow rate shall be the system demand, including hose stream demand where applicable.

8-2.7 Operating tests shall be made of exposure protection systems upon completion of the installation, where such tests do not risk water damage to the building on which they are installed or to adjacent buildings.

8-3 Circulating Closed Loop Systems. For sprinkler systems with nonfire protection connections, additional information shall be appended to the Contractor's Material and Test Certificate shown in Figure 8-1(a) as follows:

(a) Certification that all auxiliary devices, such as heat pumps, circulating pumps, heat exchangers, radiators, and luminaries, if a part of the system, have a pressure rating of at least 175 psi or 300 psi (12.1 or 20.7 bars) if exposed to pressures greater than 175 psi (12.1 bars).

(b) All components of sprinkler system and auxiliary system have been pressure tested as a composite system in accordance with 8-2.2.

(c) Waterflow tests have been conducted and waterflow alarms have operated while auxiliary equipment is in each of the possible modes of operation.

(d) With auxiliary equipment tested in each possible mode of operation and with no flow from sprinklers or test connection, waterflow alarm signals did not operate.

(e) Excess temperature controls for shutting down the auxiliary system have been properly field tested.

8-4 Instructions.

8-4.1 The installing contractor shall provide the owner with:

(a) All literature and instructions provided by the manufacturer describing proper operation and maintenance of any equipment and devices installed.

(b) Publication titled NFPA 25, *Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems.*

Contractor's Material and Test Certificate for Underground Piping

PROCEDURE

Upon completion of work, inspection and tests shall be made by the contractor's representative and witnessed by an owner's representative. All defects shall be corrected and system left in service before contractor's personnel finally leave the job.

A certificate shall be filled out and signed by both representatives Copies shall be prepared for approving authorities, owners, and contractor. It is understood the owner's representative's signature in no way prejudices any claim against contractor for faulty material, poor workmanship, or failure to comply with approving authority's requirements or local ordinances.

PROPERTY NAME		DATE
PROPERTY ADDRESS		
PLANS	ACCEPTED BY APPROVING AUTHORITIES (NAMES)	
	ADDRESS	
	INSTALLATION CONFORMS TO ACCEPTED PLANS	☐ YES ☐ NO
	EQUIPMENT USED IS APPROVED IF NO, STATE DEVIATIONS	☐ YES ☐ NO
INSTRUCTIONS	HAS PERSON IN CHARGE OF FIRE EQUIPMENT BEEN INSTRUCTED AS TO LOCATION OF CONTROL VALVES AND CARE AND MAINTENANCE OF THIS NEW EQUIPMENT? IF NO, EXPLAIN	☐ YES ☐ NO
	HAVE COPIES OF APPROPRIATE INSTRUCTIONS AND CARE AND MAINTENANCE CHARTS BEEN LEFT ON PREMISES? IF NO, EXPLAIN	☐ YES ☐ NO
LOCATION	SUPPLIES BUILDINGS	
UNDERGROUND PIPES AND JOINTS	PIPE TYPES AND CLASS / TYPE JOINT	
	PIPE CONFORMS TO _____ STANDARD FITTINGS CONFORM TO _____ STANDARD IF NO, EXPLAIN	☐ YES ☐ NO ☐ YES ☐ NO
	JOINTS NEEDING ANCHORAGE CLAMPED, STRAPPED, OR BLOCKED IN ACCORDANCE WITH _____ STANDARD IF NO, EXPLAIN	☐ YES ☐ NO
TEST DESCRIPTION	FLUSHING: Flow the required rate until water is clear as indicated by no collection of foreign material in burlap bags at outlets such as hydrants and blow-offs. Flush at flows not less than 390 GPM (1476 L/min) for 4-inch pipe, 880 GPM (3331 L/min) for 6-inch pipe, 1560 GPM (5905 L/min) for 8-inch pipe, 2440 GPM (9235 L/min) for 10-inch pipe, and 3520 GPM (13323 L/min) for 12-inch pipe When supply cannot produce stipulated flow rates, obtain maximum available. HYDROSTATIC Hydrostatic tests shall be made at not less than 200 psi (13.8 bars) for two hours or 50 psi (3.4 bars) above static pressure in excess of 150 psi (10.3 bars) for two hours. LEAKAGE: New pipe laid with rubber gasketed joints shall, if the workmanship is satisfactory, have little or no leakage at the joints The amount of leakage at the joints shall not exceed 2 qts. per hr. (1.89 L/h) per 100 joints irrespective of pipe diameter. The leakage shall be distributed over all joints. If such leakage occurs at a few joints the installation shall be considered unsatisfactory and necessary repairs made The amount of allowable leakage specified above may be increased by 1 fl oz per in. valve diameter per hr. (30 mL/25 mm/h) for each metal seated valve isolating the test section. If dry barrel hydrants are tested with the main valve open, so the hydrants are under pressure, an additional 5 oz per minute (150 mL/min) leakage is permitted for each hydrant.	
FLUSHING TESTS	NEW UNDERGROUND PIPING FLUSHED ACCORDING TO _____ STANDARD BY (COMPANY) IF NO, EXPLAIN	☐ YES ☐ NO
	HOW FLUSHING FLOW WAS OBTAINED ☐ PUBLIC WATER ☐ TANK OR RESERVOIR ☐ FIRE PUMP	THROUGH WHAT TYPE OPENING ☐ HYDRANT BUTT ☐ OPEN PIPE
	LEAD-INS FLUSHED ACCORDING TO _____ STANDARD BY (COMPANY) IF NO, EXPLAIN	☐ YES ☐ NO
	HOW FLUSHING FLOW WAS OBTAINED ☐ PUBLIC WATER ☐ TANK OR RESERVOIR ☐ FIRE PUMP	THROUGH WHAT TYPE OPENING ☐ Y CONN. TO FLANGE & SPIGOT ☐ OPEN PIPE

Figure 8-1(b) Part 1.

HYDROSTATIC TEST	ALL NEW UNDERGROUND PIPING HYDROSTATICALLY TESTED AT _____ PSI FOR _____ HOURS	JOINTS COVERED ☐ YES ☐ NO
LEAKAGE TEST	TOTAL AMOUNT OF LEAKAGE MEASURED _____ GALS. _____ HOURS	
	ALLOWABLE LEAKAGE _____ GALS. _____ HOURS	
HYDRANTS	NUMBER INSTALLED / TYPE AND MAKE	ALL OPERATE SATISFACTORILY ☐ YES ☐ NO
CONTROL VALVES	WATER CONTROL VALVES LEFT WIDE OPEN ☐ YES ☐ NO IF NO, STATE REASON	
	HOSE THREADS OF FIRE DEPARTMENT CONNECTIONS AND HYDRANTS INTERCHANGEABLE WITH THOSE OF FIRE DEPARTMENT ANSWERING ALARM ☐ YES ☐ NO	
REMARKS	DATE LEFT IN SERVICE	
SIGNATURES	NAME OF INSTALLING CONTRACTOR	
	TESTS WITNESSED BY	
	FOR PROPERTY OWNER (SIGNED) / TITLE / DATE	
	FOR INSTALLING CONTRACTOR (SIGNED) / TITLE / DATE	
ADDITIONAL EXPLANATION AND NOTES		

Figure 8-1(b) Part 2.

8-5* Hydraulic Design Information Sign. The installing contractor shall identify a hydraulically designed sprinkler system with a permanently marked weatherproof metal or rigid plastic sign secured with corrosion-resistant wire, chain, or other approved means. Such signs shall be placed at the alarm valve, dry pipe valve, preaction valve, or deluge valve supplying the corresponding hydraulically designed area. The sign shall include the following information:

(a) Location of the design area or areas.

(b) Discharge densities over the design area or areas.

(c) Required flow and residual pressure demand at the base of riser.

(d) Occupancy classification or commodity classification and maximum permitted storage height and configuration.

(e) Hose stream demand included in addition to the sprinkler demand.

8-6 Circulating Closed Loop Systems. Discharge tests of sprinkler systems with nonfire protection connections shall be conducted using system test connections described in 2-7.2. Pressure gauges shall be installed at critical points and readings taken under various modes of auxiliary equipment operation. Waterflow alarm signals shall be responsive to discharge of water through system test pipes while auxiliary equipment is in each of the possible modes of operation.

Chapter 9 Marine Systems

9-1 General. This chapter outlines the deletions, modifications, and additions that are necessary for marine application. All other requirements of this standard shall apply to merchant vessel systems except as modified by this chapter.

9-1.1 The following definitions shall be applicable to this chapter.

A-Class Boundary. A boundary designed to resist the passage of smoke and flame for 1 hr when tested in accordance with ASTM E 119, *Standard Test Methods for Fire Tests of Building Construction and Materials*.

B-Class Boundary. A boundary designed to resist the passage of flame for ½ hr when tested in accordance with ASTM E 119, *Standard Test Methods for Fire Tests of Building Construction and Materials*.

Central Safety Station. A continuously manned control station from which all of the fire control equipment is monitored. If this station is not the bridge, direct communication with the bridge shall be provided by means other than the ship's service telephone.

Heat-Sensitive Material.* A material whose melting point is below 1700°F (926.7°C).

Heel. The inclination of a ship to one side.

Heel Angle. The angle defined by the intersection of a vertical line through the center of a vessel and a line perpendicular to the surface of the water.

International Shore Connection.* A universal connection complying with ASTM F1121, to which shoreside firefighting hoses are to be connected.

Marine Thermal Barrier.* An assembly that is constructed of noncombustible materials and made intact with the main structure of the vessel, such as shell, structural bulkheads, and decks. A marine thermal barrier shall meet the requirements of a B-Class boundary. In addition, a marine thermal barrier shall be insulated such that, if tested in accordance with ASTM E 119, *Standard Test Methods for Fire Tests of Building Construction and Materials*, for 15 min, the average temperature of the unexposed side does not rise more than 250°F (193°C) above the original temperature, nor does the temperature at any one point, including any joint, rise more than 405°F (225°C) above the original temperature.

Supervision. A visual and audible alarm signal given at the central safety station to indicate when the system is in operation or when a condition that would impair the satisfactory operation of the system exists. Supervisory alarms shall give a distinct indication for each individual system component that is monitored.

Survival Angle. The maximum angle to which a vessel is permitted to heel after the assumed damage required by stability regulations is imposed.

Type 1 Stair. A fully enclosed stair that serves all levels of a vessel in which persons may be employed.

Water Supply. The supply portion of the sprinkler system from the water pressure tank or the sea suction of the designated sprinkler system pump up to and including the valve that isolates the sprinkler system from these two water sources.

9-1.2* Occupancy Classifications. Marine environment classifications shall be in accordance with 1-4.7.

9-1.3* Partial installation of automatic sprinklers shall not be permitted.

Exception No. 1: Spaces shall be permitted to be protected with an alternative, approved fire suppression system where such areas are separated from the sprinklered areas with a 1-hr-rated assembly.

Exception No. 2: Where specific sections of this standard permit the omission of sprinklers.

9-2 System Components, Hardware, and Use.

9-2.1* A sprinkler orifice shall not be less than a nominal $^3/_8$ in. (9.5 mm) in size. Sprinklers shall have a discharge coefficient greater than 2.9. The minimum operating pressure of any sprinkler shall be 10 psi (68.9 kPa).

9-2.2* Sprinkler piping penetrations shall be designed to preserve the fire integrity of the ceiling or bulkhead penetrated.

9-2.3 Spare Sprinklers.

9-2.3.1 The required stock of spare sprinklers shall be carried for each type of sprinkler installed onboard the vessel. Where fewer than six sprinklers of a particular type are installed, 100 percent spares shall be kept in stock. Where applicable, at least one elastometric gasket shall be kept in the cabinet for each fire department connection that is installed onboard the vessel.

9-2.3.2 The cabinet containing spare sprinklers, special wrenches, and elastometric gaskets shall be located in the same central safety station that contains the alarm annunciator panel(s) and supervisory indicators.

9-2.4 System Pipe and Fittings.

9-2.4.1 All the materials listed in Tables 2-3.1 and 2-4.1 shall be acceptable for use except Brazing Filler Metal (AWS A5.8). Where ferrous materials are subjected to salt water, the materials shall be protected against corrosion by hotdip galvanizing or by the use of extra heavy schedule material.

9-2.4.2 Maximum design pressure for copper and brass pipe shall not exceed 250 psi (1722 kPa).

9-2.4.3 Materials other than those meeting the requirements of Table 2-3.1 or Table 2-4.1 shall be permitted to be installed in wet automatic sprinkler systems in accordance with their listing, subject to the following restrictions:

(a) Portions of a system that are constructed from heat-sensitive materials shall be installed behind a marine thermal barrier.

(b)* Piping materials shall be listed for the intended service and installed according to the listing requirements.

9-2.5 Pipe Support.

9-2.5.1* Pipe supports shall comply with the following:

(a) Pipe supports shall be designed to provide adequate lateral, longitudinal, and vertical sway bracing. The design shall account for the degree of bracing, which varies with the route and operation of the vessel. Bracing shall be designed to ensure that:

1. Slamming, heaving, and rolling will not shift sprinkler piping, potentially moving sprinklers above ceilings, bulkheads, or other obstructions.

2. Piping and sprinklers will remain in place at a steady heel angle at least equal to the maximum required damaged survival angle.

(b) Pipe supports shall be welded to the structure. Hangers that can loosen during ship motion or vibration, such as screw-down-type hangers, shall not be permitted.

Exception to (b): Hangers that are listed for seismic use shall be permitted to be used in accordance with their listing.

9-2.5.2 Sprinkler piping shall be supported by the primary structural members of the vessel such as beams, girders, and stiffeners.

9-2.5.3* The components of hanger assemblies that are welded directly to the ship structure are not required to be listed.

9-2.5.4* U-hook sizes shall be no less than that specified in Table 2-6.4.1.

9-2.6 Valves.

9-2.6.1* All indicating, supply, and zone control valves shall be supervised open from a central safety station.

9-2.6.2 Drain and test valves shall meet the applicable requirements of 46 CFR 56.20 and 56.60.

9-2.6.3 Valve markings shall include the information required by 46 CFR 56.20-5(a).

9-2.7 Fire Department Connections and International Shore Connections.

9-2.7.1* A fire department connection and an International Shore Connection shall be installed.

Exception: Fire department connections shall not be required on vessels that operate primarily on international voyages.

9-2.7.2 Connections shall be located near the gangway or other shore access point so that they are readily accessible to the landbased fire department. Fire department and international shore connections shall be colored and marked so that the connections are easily located from the shore access point (i.e., gangway location) and will not be confused with a firemain connection. An 18 × 18 in. (0.46 × 0.46 m) sign displaying standard symbol 4-2.1 of NFPA 170, *Standard for Fire Safety Symbols*, shall be placed at the connection so that it is in plain sight from the shore access point. Connections on both sides of the vessel shall be provided where shore access arrangements make it necessary.

9-2.7.3* Fire department connection thread type shall be compatible with fire department equipment.

9-3 System Requirements.

9-3.1* Relief Valves. Relief valves shall be provided on all wet pipe systems.

9-3.2 Spare Detection Devices. The number of spare detection devices or fusible elements used for protection systems that shall be carried per temperature rating is as follows:

(a) Vessels shall have 2 spare detection devices or fusible elements when operating voyages are normally less than 24 hr.

(b) Vessels shall have 4 spare detection devices or fusible elements when operating voyages are normally more than 24 hr.

9-3.3 System Piping Supervision. All preaction sprinkler systems shall be supervised regardless of the number of sprinklers supplied.

9-3.4 Circulating Closed Loop Systems. Circulating closed loop systems shall not be permitted.

9-4 Installation Requirements.

9-4.1 Temperature Zones. Intermediate-temperature-rated sprinklers shall be installed under a noninsulated steel deck that is exposed to sunlight.

9-4.2* Residential Sprinklers. Residential sprinklers shall be permitted for use only in sleeping accommodation areas.

9-4.3 Window Protection. Where required, windows shall be protected as outlined below:

(a) Sprinklers shall be installed at a distance not exceeding 1 ft (0.3 m) from the glazing at a spacing not exceeding 6 ft (1.8 m) such that the entire glazing surface is wetted at a linear density not less than 6 gpm/ft (75 Lpm/m).

Exception: Window sprinkler protection systems installed in accordance with their installation and testing criteria.

9-4.4* Concealed Spaces. Concealed spaces that are constructed of combustible materials, or materials with combustible finishes or that contain combustible materials, shall be sprinklered.

Exception: Spaces that contain only nonmetallic piping that is continuously filled with water are not required to be sprinklered.

9-4.5 Vertical Shafts.

9-4.5.1 Sprinklers are not required in vertical shafts used as duct, electrical, or pipe shafts that are nonaccessible, noncombustible, and enclosed in an A-Class-rated assembly.

9-4.5.2 Stairway enclosures shall be fully sprinklered.

9-4.6 Bath Modules. Sprinklers shall be installed in bath modules (full room modules) constructed with combustible materials, regardless of room fire load.

9-4.7 Ceiling Types. Drop-out ceilings shall not be used in conjunction with sprinklers.

9-4.8 Return Bends. To prevent sediment buildup, return bends shall be installed in all shipboard sprinkler systems where pendent-type or dry pendent-type sprinklers are used in wet systems. (*See Figure 4-13.17.*) Consideration shall be given concerning the intrusion of saltwater into the system. Specifically, sprinklers shall not be rendered ineffective by corrosion related to saltwater entrapment within the return bend.

9-4.9 Hose Connections. Sprinkler system piping shall not be used to supply hose connections or hose connections for fire department use.

9-4.10* Heat-Sensitive Piping Materials.

9-4.10.1 Portions of the piping system constructed with a heat-sensitive material permitted by 9-2.4.3 shall be subject to the following restrictions:

(a) Piping shall be of non-heat-sensitive type from the sea suction up through the penetration of the last A-Class barrier enclosing the space(s) in which the heat-sensitive piping is installed.

(b) B-Class draft stops shall be fitted not more than 45 ft (13.7 m) apart between the marine thermal barrier (*see definitions*) and the deck or shell.

9-4.10.2 Each zone in which heat-sensitive piping is used (under the provisions of 9-2.4.3) shall be fitted with a valve capable of segregating that zone from the remainder of the system. The valve shall be supervised and shall be located within a constantly attended control station or Type 1 stair.

9-4.11 Discharge of Drain Lines.

9-4.11.1 Drain lines shall not be connected to housekeeping, sewage, or deck drains. Drains shall be permitted to be discharged to bilges. Overboard discharges shall meet the requirements of 46 CFR 56.50-95 and shall be corrosion resistant in accordance with 46 CFR 56.60. Systems that contain water additives that are not permitted to be discharged into the environment shall be specially designed to prevent such discharge.

9-4.11.2 Discharges shall be provided with a down-turned elbow.

9-4.12 Alarm Signals and Devices.

9-4.12.1* A visual and audible alarm signal shall be given at the central safety station to indicate when the system is in operation or when a condition that would impair the satisfactory operation of the system exists. Alarm signals shall be provided for, but not limited to, each of the following: monitoring position of control valves, fire pump power supplies and operating condition, water tank levels and temperatures, zone water flow alarms, pressure of tanks, and air pressure on dry-pipe valves. Alarms shall give a distinct indication for each individual system component that is monitored. An audible alarm shall be given at the central safety station within 30 sec of water flow.

9-4.12.2 Waterflow alarms shall be installed for every zone of the sprinkler system. Sprinkler zones shall not encompass more than two adjacent decks or encompass more than one main vertical zone.

9-4.12.3 Electrically operated alarm attachments shall comply with, meet, and be installed in accordance with the requirements of 46 CFR, Subchapter J (Electrical Engineering). All wiring shall be chosen and installed in accordance with IEEE 45, *Marine Supplement.*

9-4.13 Test Connections. Where test connections are below the bulkhead deck, they shall comply with the overboard discharge arrangements of 46 CFR 56.50-95.

9-5 Design Approaches.

9-5.1 Design Options. Marine sprinkler systems shall be designed using the hydraulic calculation procedure of Chapter 5. The pipe schedule method shall not be used to determine the water demand requirements.

9-5.2* Window Protection. Minimum water demand requirements shall include sprinklers that are installed for the protection of windows as described in 9-4.3.

9-5.3* Hose Stream Allowance. No allowance for hose stream use is required.

9-6 Water Supplies.

9-6.1 General. The water supply requirements for marine applications shall be in accordance with Section 9-6.

9-6.2 Pressure Tank.

9-6.2.1 A pressure tank shall be provided. The pressure tank shall be sized and constructed so that:

(a) The tank shall contain a standing charge of fresh water equal to that specified by Table 9-6.2.1.

(b) The pressure tank shall be sized in accordance with 7-2.3.2.

(c) A glass gauge shall be provided to indicate the correct level of water within the pressure tank.

(d) Arrangements shall be provided for maintaining an air pressure in the tank such that, while the standing charge of water is being expended, the pressure will not be less than that necessary to provide the design pressure and flow of the hydraulically most remote design area.

(e) Suitable means of replenishing the air under pressure and the fresh water standing charge in the tank shall be provided.

(f) Tank construction shall be in accordance with the applicable requirements of 46 CFR, Subchapter F (Marine Engineering).

Exception: In lieu of a pressure tank, a dedicated pump connected to a fresh water tank shall be permitted to be used provided:

(a) The pump is listed for marine use and is sized to meet the required system demand;

(b) The suction for the fire pump is located below the suction for the fresh water system so that there shall be a minimum water supply of at least 1 min for the required system demand;

(c) Pressure switches are provided in the system and the controller for the pump that automatically start the pump within 10 sec after detection of a pressure drop of more than 5 percent;

(d) There shall be a reduced pressure zone backflow preventer to prevent contamination of the potable water system by salt water; and

(e) There are at least two sources of power for this pump. Where the sources of power are electrical, these shall be a main generator and an emergency source of power. One supply shall be taken from the main switchboard, by separate feeder reserved solely for that purpose. This feeder shall be run to an automatic change-over switch situated near the sprinkler unit and the switch shall normally be kept closed to the feeder from the emergency switchboard. The changeover switch shall be clearly labeled and no other switch shall be permitted in these feeders.

Table 9-6.2.1 Required Water Supply

System type	Additional Water Volume
Wet pipe system	Flow requirement of the hydraulically most remote system demand for one minute.
Dry pipe system	Flow requirement of the hydraulically most remote system demand for one minute of system demand plus the volume needed to fill all dry piping.
Preaction system Deluge system	

9-6.2.2 Relief valves shall be installed on the tank to avoid overpressurization and false actuation of any dry pipe valve. Relief valves shall comply with 46 CFR 54.15-10.

9-6.2.3 There shall be not less than two sources of power for the compressors that supply air to the pressure tank. Where the sources of power are electrical, these shall be a main generator and an emergency source of power. One supply shall be taken from the main switchboard, by separate feeders reserved solely for that purpose. Such feeders shall be run to a changeover switch situated near the air compressor, and the switch normally shall be kept closed to the feeder from the emergency switchboard. The changeover switch shall be clearly labeled, and no other switch shall be permitted in these feeders.

9-6.2.4 More than one pressure tank can be installed provided that each is treated as a single water source when determining valve arrangements. Check valves shall be installed to prohibit flow from tank to tank or from pump to tank.

Exception: Arrangements where a tank is designed to hold only pressurized air.

9-6.2.5 In systems subject to use with saltwater, valves shall be so arranged as to prohibit contamination of the pressure tank with saltwater.

9-6.2.6* Where applicable, a means shall be provided to restrict the amount of air that can enter the pressure tank from the air supply system. A means shall also be provided to prevent water from backflowing into the air supply system.

9-6.3 Fire Pump.

9-6.3.1 A dedicated, automatically controlled pump that is listed for marine service, which takes suction from the sea, shall be provided to supply the sprinkler system. Where two pumps are required to ensure the reliability of the water supply, the pump that supplies the fire main shall be allowed to serve as the second fire pump.

9-6.3.2 The pump shall be sized to meet the water demand of the hydraulically most demanding area. Pumps shall be designed to not exceed 120 percent of the rated capacity of the pump.

9-6.3.3 The system shall be designed so that, before the supply falls below the design criteria, the fire pump shall be automatically started and shall supply water to the system until manually shut off.

Exception: Where pump and fresh water tank arrangement is used in lieu of the pressure tank, there must be a pressure switch that senses a system pressure drop of 25 percent, and the controller must automatically start the fire pump(s) if pressure is not restored within 20 sec.

9-6.3.4 There shall be not less than two sources of power supply for the fire pumps. Where the sources of power are electrical, these shall be a main generator and an emergency source of power. One supply shall be taken from the main switchboard, by separate feeders reserved solely for that purpose. Such feeders shall be run to a changeover switch situated near to the sprinkler unit and the switch normally shall be kept closed to the feeder from the emergency switchboard. The changeover switch shall be clearly labeled and no other switch shall be permitted in these feeders.

9-6.3.5 A test valve(s) shall be installed on the discharge side of the pump with a short open-ended discharge pipe. The area of the pipe shall be adequate to permit the release of the required water output to supply the demand of the hydraulically most remote area.

9-6.3.6 Where two fire pumps are required to ensure the reliability of the water supply, each fire pump shall meet the requirements of 9-7.1.1.7, exception items (a) through (d), above. In addition, a system that is required to have more than one pump shall be designed to accommodate the following features:

(a)* Pump controls and system sensors shall be arranged such that the secondary pump will automatically operate if the primary pump fails to operate or deliver the required water pressure and flow. (*Figure A-9-7.1.2.6(a) is an example of an acceptable dual pump arrangement.*)

(b) Both pumps shall be served from normal and emergency power sources. However, where approved by the authority having jurisdiction, the secondary pump shall be permitted to be non-electrically driven.

(c) Pump failure or operation shall be indicated at the central safety station.

9-6.3.7 If not specifically prohibited, the fire pump that supplies the fire main is permitted to be used as the second pump provided that: (*See Figure A-9-6.3.7*).

(a) The pump is adequately sized to meet the required fire hose and sprinkler system pressure and flow demands simultaneously;

(b) The fire main system is segregated from the sprinkler system by a normally closed valve that is designed to automatically open upon failure of the designated fire pump; and

(c) The fire pump that supplies the fire main is automatically started in the event of dedicated fire pump failure or loss of pressure in the sprinkler main.

9-6.4 Water Supply Configurations.

9-6.4.1 The pressure tank and fire pump shall be located in a position reasonably remote from any machinery space of Category A.

9-6.4.2 All valves within the water supply piping system shall be supervised.

9-6.4.3 The sprinkler system shall be cross-connected with the ship's fire main system and fitted with a lockable screw-down nonreturn valve such that backflow from the sprinkler system to the fire main is prevented.

9-6.4.4 The piping, tanks, and pumps that make up the water supply shall be installed in accordance with the applicable requirements of 46 CFR, Subchapter F (Marine Engineering).

9-6.4.5* When a shore water supply is to be used during extended dockside periods, the water supply shall be qualified in the manner described in 7-2.1. Tests shall be conducted in accordance with the requirements of the local shore-based authority having jurisdiction. The water supply information listed in Section 6-3 shall then be provided to the authority having jurisdiction.

9-7 Plans and Calculations.

9-7.1 Additional Information. The pressure tank size, high pressure relief setting, high and low water alarm settings, low pressure alarm setting, and pump start pressure shall be provided.

9-7.2 Sprinklers specifically installed for the protection of windows under 9-4.3 are permitted to be of a different size from those protecting the remainder of the occupancy classification. All of the window sprinklers, however, shall be of the same size.

9-8 System Acceptance.

9-8.1 Hydrostatic Tests. In addition to the interior piping, the test required by 8-2.2.3 shall also be conducted on all external water supply connections including international shore and fireboat connections.

9-8.2 Alarm Test. A waterflow test shall result in an alarm at the central safety station within 30 sec after flow through the test connection begins.

9-8.3 Operational Tests. Pressure tank and pump operation, valve actuation, and water flow shall also be tested. Pump operation and performance shall be tested in accordance with Chapter 11 of NFPA 20, *Standard for the Installation of Centrifugal Fire Pumps.*

9-9 System Maintenance.

9-9.1 Periodic Inspection, Test, and Maintenance.

9-9.1.1 Sprinkler systems shall be inspected, tested, and maintained in accordance with Chapter 2 of NFPA 25, *Stan-*

dard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems.

9-9.1.2 Sprinkler pumps and any fire pumps that are cross-connected to the sprinkler system shall be inspected, tested, and maintained in accordance with Chapter 5 of NFPA 25, *Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems.*

9-9.1.3 The pressure tank shall be inspected, tested, and maintained in accordance with 46 CFR, Subchapter F, Marine Engineering and Chapter 6 of NFPA 25, *Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems.*

9-9.1.4 System valves, international shore connections, and fire department connections shall be inspected, tested, and maintained in accordance with Chapter 9 of NFPA 25, *Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems.*

9-9.1.5 Instructions for operation, inspection, maintenance, and testing shall be kept in the cabinet containing the spare sprinklers.

9-9.1.6 Impairments to the system shall be handled in accordance with Chapter 11 of NFPA 25, *Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems*, except that inspections, maintenance, and testing shall not be conducted when the vessel is at sea. Extended periods of impairment shall not be scheduled for periods when passengers or cargo are onboard the vessel. Log entries shall be made whenever a system impairment occurs or is removed. In addition, shipboard fire-fighting personnel shall be onboard the vessel and notified whenever portions of the system are impaired.

9-9.1.7 A separate card or booklet with tabulated spaces for the date and signature of the licensed officer of the vessel who shall witness or conduct inspections, maintenance, and tests shall also be kept in the cabinet containing the spare sprinklers.

9-9.1.8 Fresh water wet pipe systems that have had sea water introduced into the pipe network shall be flushed with fresh water within 45 days.

Exception: Flushing the pipe network at the vessel's next port of call shall be permitted when the vessel's voyage is longer than 45 days.

Chapter 10 System Maintenance

10-1 General.

10-1.1* A sprinkler system installed in accordance with this standard shall be properly inspected, tested, and maintained in accordance with NFPA 25, *Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems*, to provide at least the same level of performance and protection as designed. The owner shall be responsible for maintaining the system and keeping the system in good operating condition.

Chapter 11 Referenced Publications

11-1 The following documents or portions thereof are referenced within this standard and shall be considered part of the requirements of this document. The edition indicated for each reference is the current edition as of the date of the NFPA issuance of this document.

11-1.1 NFPA Publications. National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101.

NFPA 13D, *Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes*, 1996 edition.

NFPA13R, *Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height*, 1996 edition.

NFPA 14, *Standard for the Installation of Standpipe and Hose Systems*, 1996 edition.

NFPA 20, *Standard for the Installation of Centrifugal Fire Pumps*, 1996 edition.

NFPA 22, *Standard for Water Tanks for Private Fire Protection*, 1996 edition.

NFPA 24, *Standard for the Installation of Private Fire Service Mains and Their Appurtenances*, 1995 edition.

NFPA 25, *Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems*, 1995 edition.

NFPA 51B, *Standard for Fire Prevention in Use of Cutting and Welding Processes*, 1994 edition.

NFPA 70, *National Electrical Code*, 1996 edition.

NFPA 72, *National Fire Alarm Code*, 1996 edition.

NFPA 170, *Standard for Fire Safety Symbols*, 1996 edition.

NFPA 231, *Standard for General Storage*, 1995 edition.

NFPA 231C, *Standard for Rack Storage of Materials*, 1995 edition.

NFPA 251, *Standard Methods of Tests of Fire Endurance of Building Construction and Materials*, 1995 edition.

11-1.2 The following NFPA codes, standards, and recommended practices contain specific sprinkler design criteria.

NFPA 13D, *Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes*, 1996 edition.

NFPA 13R, *Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height*, 1996 edition.

NFPA 15, *Standard for Water Spray Fixed Systems for Fire Protection*, 1996 edition.

NFPA 16, *Standard on Deluge Foam-Water Sprinkler and Foam-Water Spray Systems*, 1995 edition.

NFPA 30, *Flammable and Combustible Liquids Code*, 1996 edition.

NFPA 30B, *Code for the Manufacture and Storage of Aerosol Products*, 1994 edition.

NFPA 33, *Standard for Spray Application Using Flammable and Combustible Materials*, 1995 edition.

NFPA 34, *Standard for Dipping and Coating Processes Using Flammable or Combustible Liquids*, 1995 edition.

NFPA 35, *Standard for the Manufacture of Organic Coatings*, 1995 edition.

NFPA 40, *Standard for the Storage and Handling of Cellulose Nitrate Motion Picture Film*, 1994 edition.

NFPA 40E, *Code for the Storage of Pyroxylin Plastic*, 1993 edition.

NFPA 43B, *Code for the Storage of Organic Peroxide Formulations*, 1993 edition.

NFPA 45, *Standard on Fire Protection for Laboratories Using Chemicals*, 1996 edition.

NFPA 51, *Standard for the Design and Installation of Oxygen-Fuel Gas Systems for Welding, Cutting, and Allied Processes*, 1992 edition.

NFPA 51A, *Standard for Acetylene Cylinder Charging Plants*, 1996 edition.

NFPA 58, *Standard for the Storage and Handling of Liquefied Petroleum Gases*, 1995 edition.

NFPA 61, *Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Products Facilities*, 1995 edition.

NFPA 75, *Standard for the Protection of Electronic Computer/Data Processing Equipment*, 1995 edition.

NFPA 82, *Standard on Incinerators and Waste and Linen Handling Systems and Equipment*, 1994 edition.

NFPA 86, *Standard for Ovens and Furnaces*, 1995 edition.

NFPA 86C, *Standard for Industrial Furnaces Using a Special Processing Atmosphere*, 1995 edition.

NFPA 88B, *Standard for Repair Garages*, 1991 edition.

NFPA 99, *Standard for Health Care Facilities*, 1996 edition.

NFPA 99B, *Standard for Hypobaric Facilities*, 1996 edition.

NFPA *101®*, *Life Safety Code®*, 1994 edition.

NFPA 120, *Standard for Coal Preparation Plants*, 1994 edition.

NFPA 122, *Standard for Fire Prevention and Control in Underground Metal and Nonmetal Mine*, 1995 edition.

NFPA 123, *Standard for Fire Prevention and Control in Underground Bituminous Coal Mines*, 1995 edition.

NFPA 130, *Standard for Fixed Guideway Transit Systems*, 1995 edition.

NFPA 150, *Standard on Fire Safety in Racetrack Stables*, 1995 edition.

NFPA 214, *Standard on Water-Cooling Towers*, 1996 edition.

NFPA 231, *Standard for General Storage*, 1995 edition.

NFPA 231C, *Standard for Rack Storage of Materials*, 1995 edition.

NFPA 231D, *Standard for Storage of Rubber Tires*, 1994 edition.

NFPA 231E, *Recommended Practice for the Storage of Baled Cotton*, 1996 edition.

NFPA 231F, *Standard for Storage of Roll Paper*, 1996 edition.

NFPA 232, *Standard for the Protection of Records*, 1995 edition.

NFPA 307, *Standard for the Construction and Fire Protection of Marine Terminals, Piers, and Wharves*, 1995 edition.

NFPA 318, *Standard for the Protection of Cleanrooms*, 1995 edition.

NFPA 409, *Standard on Aircraft Hangars*, 1995 edition.

NFPA 423, *Standard for Construction and Protection of Aircraft Engine Test Facilities*, 1994 edition.

NFPA 430, *Code for the Storage of Liquid and Solid Oxidizers*, 1995 edition.

NFPA 850, *Recommended Practice for Fire Protection for Electric Generating Plants and High Voltage Direct Current Converter Stations*, 1996 edition.

NFPA 851, *Recommended Practice for Fire Protection for Hydroelectric Generating Plants*, 1996 edition.

NFPA 1231, *Standard on Water Supplies for Suburban and Rural Fire Fighting*, 1993 edition.

11-1.3 Other Publications.

11-1.3.1 ANSI Publications. American National Standards Institute, Inc., 1450 Broadway, New York, NY 10018.

ANSI B1.20.1-1983, *Pipe Threads, General Purpose (Inch)*.

ANSI B16.1-1989, *Cast Iron Pipe Flanges and Flanged Fittings*.

ANSI B16.3-1992, *Malleable Iron Threaded Fittings*.

ANSI B16.4-1992, *Cast Iron Threaded Fittings*.

ANSI B16.5-1988, *Pipe Flanges and Flanged Fittings*.

ANSI B16.9-1993, *Factory-Made Wrought Steel Buttwelding Fittings*.

ANSI B16.11-1991, *Forged Steel Fittings, Socket-Welding and Threaded*.

ANSI B16.18-1984, *Cast Copper Alloy Solder Joint Pressure Fittings*.

ANSI B16.22-1995, *Wrought Copper and Copper Alloy Solder Joint Pressure Fittings*.

ANSI B16.25-1992, *Buttwelding Ends*.

ANSI B36.10M-1995, *Welded and Seamless Wrought Steel Pipe*.

11-1.3.2 ASME Publication. American Society of Mechanical Engineers, 345 East 47th Street, New York, NY 10017.

ASME A17.1-1993, *Safety Code for Elevators and Escalators*.

11-1.3.3 ASTM Publications. American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19105.

ASTM A 53-Rev. A-95, *Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless*.

ASTM A 135-1993, *Standard Specification for Electric-Resistance-Welded Steel Pipe*.

ASTM A 234/A234M-Rev. B-95, *Standard Specification for Piping Fittings of Wrought-Carbon Steel and Alloy Steel for Moderate and Elevated Temperatures*.

ASTM A 795-1995, *Standard Specification for Black and Hot-Dipped Zinc-Coated (Galvanized) Welded and Seamless Steel Pipe for Fire Protection Use*.

ASTM B 32-Rev. B-95, *Standard Specification for Solder Metal*.

ASTM B 75-Rev. A-95, *Standard Specification for Seamless Copper Tube*.

ASTM B 88-Rev. A-95, *Standard Specification for Seamless Copper Water Tube*.

ASTM B 251-1993, *Standard Specification for General Requirements for Wrought Seamless Copper and Copper-Alloy Tube.*

ASTM B 813-1993, *Standard Specification for Liquid and Paste Fluxes for Soldering Applications of Copper and Copper-Alloy Tube.*

ASTM D 3309-1995, *Standard Specification for Polybutylene (PB) Plastic Hot- and Cold-Water Distribution Systems.*

ASTM E 119-Rev. A-95, *Standard Test Methods for Fire Tests of Building Construction and Materials.*

ASTM E 136-1995, *Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C.*

ASTM F 437-1995, *Standard Specification for Threaded Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80.*

ASTM F 438-1993, *Standard Specification for Socket-Type Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 40.*

ASTM F 439-Rev. A-93, *Standard Specification for Socket-Type Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80.*

ASTM F 442-1994, *Standard Specification for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe (SDR-PR).*

ASTM F 1121-1987, *Standard Specification for International Shore Connections for Marine Fire Applications.*

11-1.3.4 AWS Publications. American Welding Society, 550 N.W. LeJeune, Miami, FL 33135.

AWS A5.8-1992, *Specification for Filler Metals for Brazing and Braze Welding.*

AWS D10.9-1980, *Specification for Qualification of Welding Procedures and Welders for Piping and Tubing.*

11-1.3.5 IEEE Publication. Underwriters Laboratories Inc., 333 Pfingsten Road, Northbrook, IL 60062.

UL 300-1996, *Standard for Safety Fire Testing of Fire Extinguishing Systems for Protection of Restaurant Cooking Areas.*

11-1.3.6 UL Publication. Underwriters Laboratories Inc., 333 Pfingsten Road, Northbrook, IL 60062.

UL 300-1996, *Standard for Safety Fire Testing of Fire Extinguishing Systems for Protection of Restaurant Cooking Areas.*

11-1.3.7 U.S. Government Publications. Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

Title 46, *Code of Federal Regulations*, Subchapter F, (Marine Engineering).

Title 46, *Code of Federal Regulations*, Subchapter H, Subpart 76.25 (Automatic Sprinkling System, Details).

11-1.3.8 Additional References.

International Convention for the Safety of Life at Sea, International Maritime Organization, London, UK.

SNAME Technical and Research Bulletin No. 2-21, *Aluminum Fire Protection Guidelines*, July 1974, Society of Naval Architects and Marine Engineers, 601 Pavonia Ave, Jersey City, NJ 07306.

Appendix A Explanatory Material

This Appendix is not a part of the requirements of this NFPA document, but is included for informational purposes only.

A-1-1 Exception No. 2. The limitations on the type and size of storage are intended to identify the situations where tire storage is present in limited quantities and incidental to the main use of the building. Occupancies such as aircraft hangars, automobile dealers, repair garages, retail stores, automotive and truck assembly plants, mobile home assembly plants, etc., are types of facilities where miscellaneous storage could be present. The fire protection sprinkler design densities specified by NFPA 13 are adequate to provide protection to the storage heights and areas indicated. Storage beyond these heights and areas present hazards that are properly addressed by NFPA 231D and are outside the scope of NFPA 13.

A-1-4.1 Approved. The National Fire Protection Association does not approve, inspect, or certify any installations, procedures, equipment, or materials; nor does it approve or evaluate testing laboratories. In determining the acceptability of installations, procedures, equipment, or materials, the authority having jurisdiction may base acceptance on compliance with NFPA or other appropriate standards. In the absence of such standards, said authority may require evidence of proper installation, procedure, or use. The authority having jurisdiction may also refer to the listings or labeling practices of an organization concerned with product evaluations that is in a position to determine compliance with appropriate standards for the current production of listed items.

A-1-4.1 Authority Having Jurisdiction. The National Fire Protection Association does not approve, inspect, or certify any installations, procedures, equipment, or materials; nor does it approve or evaluate testing laboratories. In determining the acceptability of installations, procedures, equipment, or materials, the authority having jurisdiction may base acceptance on compliance with NFPA or other appropriate standards. In the absence of such standards, said authority may require evidence of proper installation, procedure, or use. The authority having jurisdiction may also refer to the listings or labeling practices of an organization concerned with product evaluations that is in a position to determine compliance with appropriate standards for the current production of listed items.

A-1-4.1 Listed. The means for identifying listed equipment may vary for each organization concerned with product evaluation, some of which do not recognize equipment as listed unless it is also labeled. The authority having jurisdiction should utilize the system employed by the listing organization to identify a listed.

A-1-4.2 Miscellaneous Storage. The sprinkler system design criteria for miscellaneous storage at heights below 12 ft (3.7 m) is covered by this standard in Chapters 4 and 5. Paragraph 5-2.3.1.1 describes design criteria and 4-2.2 (Table 4-2.2) describes installation requirements (area limits). These apply to all storage of 12 ft (3.7 m) or less in height.

A-1-4.2 Sprinkler System. A sprinkler system is considered to have a single system riser control valve.

A-1-4.3 Gridded System. See Figure A-1-4.3(a).

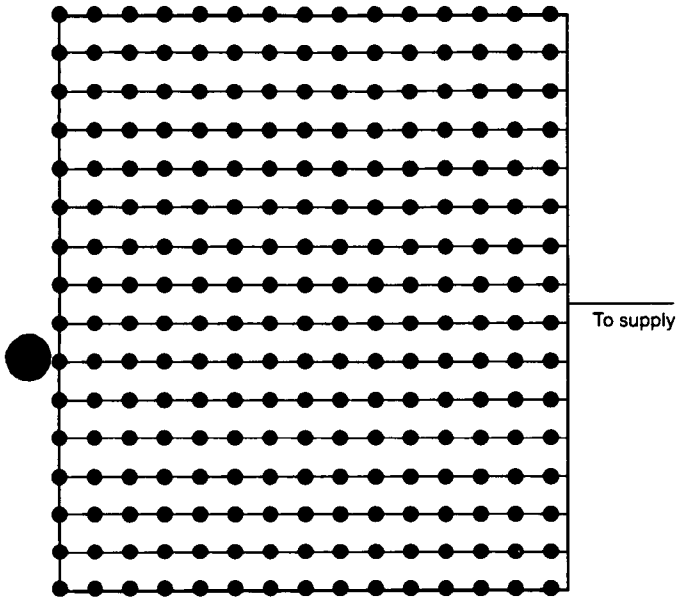


Figure A-1-4.3(a) Gridded system.

A-1-4.3 Looped System. See Figure A-1-4.3(b).

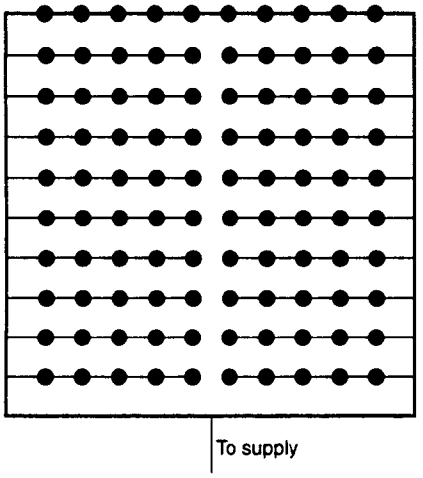


Figure A-1-4.3(b) Looped system.

A-1-4.4 See Figure A-1-4.4.

A-1-4.5.1 The Response Time Index is a measure of the sensitivity of the sprinkler's thermal element as installed in a specific sprinkler. It is usually determined by plunging a sprinkler into a heated laminar airflow within a test oven. The plunge test is not currently applicable to certain sprinklers. These sprinklers must have their thermal sensitivity determined by other standardized test methods.

The RTI is calculated using:

1. The operating time of the sprinkler,
2. The operating temperature of the sprinkler's heat-responsive element (as determined in a bath test),
3. The air temperature of the test oven,
4. The air velocity of the test oven, and
5. The sprinkler's conductivity (c) factor, which is the measure of conductance between the sprinkler's heat-responsive element and the sprinkler oven mount.

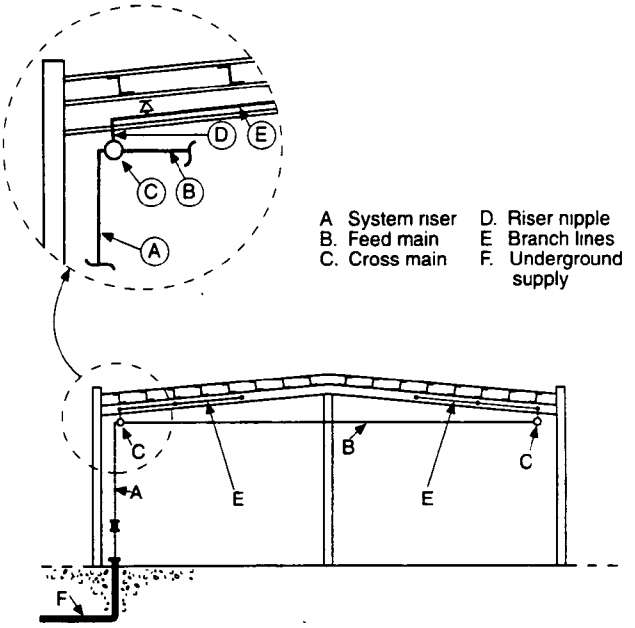


Figure A-1-4.4 Building elevation showing parts of sprinkler piping system.

Other factors affecting response include temperature rating, sprinkler position, fire exposure, and radiation.

ISO standard 6182-1 currently recognizes the RTI range of greater than 50 meter-seconds$^{1/2}$ and less than 80 meter-seconds$^{1/2}$ as special response. Such sprinklers can be recognized as special sprinklers under 4-4.9.1.

A-1-4.5.2 ESFR Sprinkler. It is important to realize that the effectiveness of these highly tested and engineered sprinklers depends on the combination of fast response and the quality and uniformity of the sprinkler discharge. It should also be realized that ESFR sprinklers cannot be relied upon to provide fire control, let alone suppression, if they are used outside the guidelines specified in 5-3.5.

A-1-4.5.2 QRES Sprinkler. Research into the development of QRES sprinklers is continuing under the auspices of the National Fire Protection Research Foundation. It is expected that the proposed design criteria will be added to the standard when a thorough analysis of the test data is completed.

A-1-4.5.4 Dry Sprinkler. Under certain ambient conditions, wet pipe systems having dry-pendent (or upright) sprinklers may freeze due to heat loss by conduction. Therefore, due consideration should be given to the amount of heat maintained in the heated space, the length of the nipple in the heated space, and other relevant factors.

A-1-4.6 Obstructed Construction. The following are examples of obstructed construction. The definitions are provided as guidance to assist the user in determining the type of construction feature:

(i) *Beam and Girder Construction.* The term "beam and girder construction" as used in this standard includes noncombustible and combustible roof or floor decks supported by wood beams of 4 in. (102 mm) or greater nominal thickness or concrete or steel beams spaced 3 to 7½ ft (0.9 to 2.3 m) on center and either supported on or framed into girders. [Where supporting a wood plank deck, this includes

semi-mill and panel construction, and where supporting (with steel framing) gypsum plank, steel deck, concrete, tile, or similar material, this includes much of the so-called noncombustible construction.]

(ii) *Composite Wood Joist Construction.* The term "composite wood joist construction" refers to wood beams of I cross section constructed of wood flanges and solid wood web, supporting a floor or roof deck. Composite wood joists may vary in depth up to 48 in. (1.2 m), may be spaced up to 48 in. (1.2 m) on centers, and may span up to 60 ft (18 m) between supports. Joist channels should be firestopped to the full depth of the joists with material equivalent to the web construction so that individual channel areas do not exceed 300 sq ft (27.9 m^2). See Figure A-1-4.6(a)(ii) for examples of composite wood joist construction.

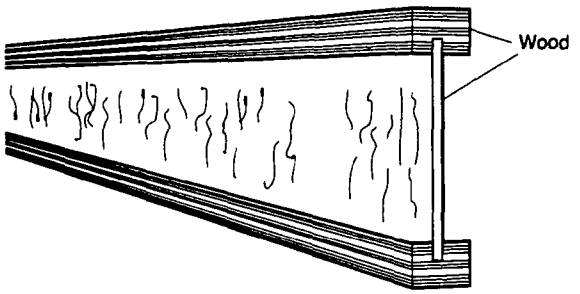


Figure A-1-4.6(a)(ii) Typical composite wood joist construction.

(iii) *Panel Construction.* The term "panel construction" as used in this standard includes ceiling panels formed by members capable of trapping heat to aid the operation of sprinklers and limited to a maximum of 300 sq ft (27.9 m^2) in area. Beams spaced more than 7½ ft (2.3 m) apart and framed into girders qualify for panel construction provided the 300-sq ft (27.9-m^2) area limitation is met.

(iv) *Semi-Mill Construction.* The term "semi-mill construction" as used in this standard refers to a modified standard mill construction, where greater column spacing is used and beams rest on girders.

(v) *Wood Joist Construction.* The term "wood joist construction" refers to solid wood members of rectangular cross section, which may vary from 2 to 4 in. (51 to 102 mm) nominal width and up to 14 in. (356 mm) nominal depth spaced up to 3 ft (0.9 m) on centers, and spanning up to 40 ft (12 m) between supports, supporting a floor or roof deck. Solid wood members less than 4 in. (102 mm) nominal width and up to 14 in. (356 mm) nominal depth, spaced more than 3 ft (0.9 m) on centers, are also considered as wood joist construction.

A-1-4.6 Unobstructed Construction. The following are examples of unobstructed construction. The definitions are provided as guidance to assist the user in determining the type of construction feature:

(i) *Bar Joist Construction.* The term "bar joist construction" refers to construction employing joists consisting of steel truss-shaped members. Wood truss-shaped members, which consist of wood top and bottom chord members not exceeding 4 in. (102 mm) in depth with steel tube or bar webs, are also defined as bar joists. Bar joist includes noncombustible or combustible roof or floor decks on bar joist construction. See Figures A-1-4.6(b)(i)1 and A-1-4.6(b)(i)2 for examples of bar joist construction.

(ii) *Open-Grid Ceilings.* Open-grid ceilings are ceilings in which the openings are ¼ in. (6.4 mm) or larger in the least

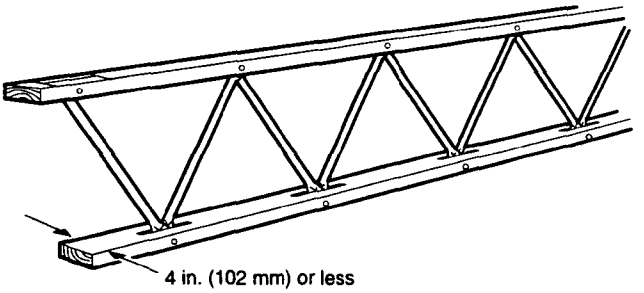


Figure A-1-4.6(b)(i)1 Wood bar joist construction.

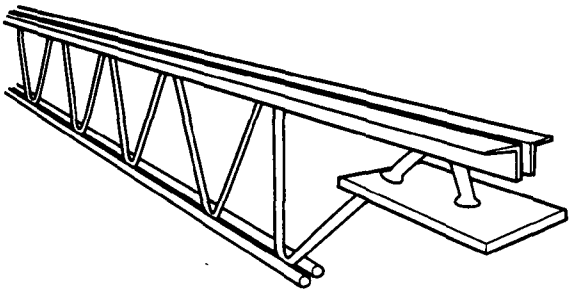


Figure A-1-4.6(b)(i)2 Open-web bar joist construction.

dimension, the thickness of the ceiling material does not exceed the least dimension of the openings, and such openings constitute at least 70 percent of the ceiling area.

(iii) *Smooth Ceiling Construction.* The term "smooth ceiling construction" as used in this standard includes:

a. Flat slab, pan-type reinforced concrete.

b. Continuous smooth bays formed by wood, concrete, or steel beams spaced more than 7½ ft (2.3 m) on centers — beams supported by columns, girders, or trusses.

c. Smooth roof or floor decks supported directly on girders or trusses spaced more than 7½ ft (2.3 m) on center.

d. Smooth monolithic ceilings of at least ¾ in. (19 mm) of plaster on metal lath or a combination of materials of equivalent fire-resistive rating attached to the underside of wood joists, wood trusses, and bar joists.

e. Open web-type steel beams, regardless of spacing.

f. Smooth shell-type roofs, such as folded plates, hyperbolic paraboloids, saddles, domes, and long barrel shells.

NOTE: In b. through f. above, combustible or noncombustible floor decks are permitted. Item b. would include standard mill construction.

g. Suspended ceilings of combustible or noncombustible construction.

h. Smooth monolithic ceilings with fire resistance less than that specified under item d. attached to the underside of wood joists, wood trusses, and bar joists.

(iv) *Standard Mill Construction.* The term "standard mill construction" as used in this standard refers to heavy timber construction as defined in NFPA 220, *Standard on Types of Building Construction.*

(v) *Wood Truss Construction.* The term "wood truss construction" refers to parallel or pitched wood chord members connected by open wood members (webbing) supporting a roof or floor deck. Trusses with steel webbing, similar to bar

joist construction, having top and bottom wood chords exceeding 4 in. (102 mm) in depth, should also be considered wood truss construction. [*See Figure A-1-4.6(b)(v).*]

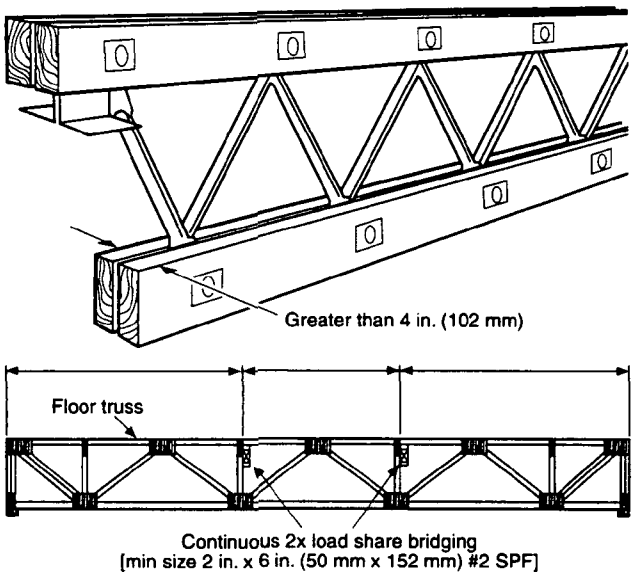


Figure A-1-4.6(b)(v) Examples of wood truss construction.

A-1-4.7 Occupancy examples in the listings as shown in the various hazard classifications are intended to represent the norm for those occupancy types. Unusual or abnormal fuel loadings or combustible characteristics and susceptibility for changes in these characteristics, for a particular occupancy, are considerations that should be weighed in the selection and classification.

The Light Hazard classification is intended to encompass residential occupancies; however, this is not intended to preclude the use of listed residential sprinklers in residential occupancies or residential portions of other occupancies.

A-1-4.7.1 Light Hazard Occupancies include occupancies having conditions similar to:

Churches
Clubs
Eaves and overhangs, if combustible construction with no combustibles beneath
Educational
Hospitals
Institutional
Libraries, except large stack rooms
Museums
Nursing or convalescent homes
Office, including data processing
Residential
Restaurant seating areas
Theaters and Auditoriums excluding stages and prosceniums
Unused attics.

A-1-4.7.2.1 Ordinary Hazard Occupancies (Group 1) include occupancies having conditions similar to:

Automobile parking and showrooms
Bakeries
Beverage manufacturing
Canneries
Dairy products manufacturing and processing
Electronic plants
Glass and glass products manufacturing
Laundries
Restaurant service areas.

A-1-4.7.2.2 Ordinary Hazard Occupancies (Group 2) include occupancies having conditions similar to:

Cereal mills
Chemical plants — ordinary
Confectionery products
Distilleries
Dry cleaners
Feed mills
Horse stables
Leather goods manufacturing
Libraries — large stack room areas
Machine shops
Metal working
Mercantile
Paper and pulp mills
Paper process plants
Piers and wharves
Post offices
Printing and publishing
Repair garages
Stages
Textile manufacturing
Tire manufacturing
Tobacco products manufacturing
Wood machining
Wood product assembly.

A-1-4.7.3.1 Extra Hazard Occupancies (Group 1) include occupancies having conditions similar to:

Aircraft hangars (except as governed by NFPA 409)
Combustible hydraulic fluid use areas
Die casting
Metal extruding
Plywood and particle board manufacturing
Printing [using inks having flash points below 100°F (37.9°C)]
Rubber reclaiming, compounding, drying, milling, vulcanizing
Saw mills
Textile picking, opening, blending, garnetting, carding, combining of cotton, synthetics, wool shoddy, or burlap
Upholstering with plastic foams.

Extra Hazard Occupancies (Group 2) include occupancies having conditions similar to:

Asphalt saturating
Flammable liquids spraying
Flow coating
Manufactured home or modular building assemblies (where finished enclosure is present and has combustible interiors)
Open oil quenching
Plastics processing
Solvent cleaning
Varnish and paint dipping.

A-1-4.7.4.1 Other NFPA standards contain design criteria for fire control or fire suppression (*see 1-4.7.4 and Chapter 11*). While these may form the basis of design criteria, this standard describes the methods of design, installation, fabrication, calculation, and evaluation of water supplies that should be used for the specific design of the system.

A-2-1.1 Included among items requiring listing are sprinklers, some pipe and some fittings, hangers, alarm devices, valves controlling flow of water to sprinklers, valve tamper switches, and gauges.

A-2-2.4 Information regarding the highest temperature that may be encountered in any location in a particular installation may be obtained by use of a thermometer that will register the highest temperature encountered; it should be hung for several days in the location in question, with the plant in operation.

A-2-2.5.1 Examples of such locations are paper mills, packing houses, tanneries, alkali plants, organic fertilizer plants, foundries, forge shops, fumigation, pickle and vinegar works, stables, storage battery rooms, electroplating rooms, galvanizing rooms, steam rooms of all descriptions including moist vapor dry kilns, salt storage rooms, locomotive sheds or houses, driveways, areas exposed to outside weather such as piers and wharves exposed to salt air, areas under sidewalks, around bleaching equipment in flour mills, all portions of cold storage buildings where a direct ammonia expansion system is used, and portions of any plant where corrosive vapors prevail.

A-2-2.5.2 Care should be taken in the handling and installation of wax-coated or similar sprinklers to avoid damaging the coating.

A-2-2.5.3 Painting of sprinklers may retard the thermal response of the heat-responsive element, may interfere with the free movement of parts, and may render the sprinkler inoperative. Moreover, painting may invite the application of subsequent coatings, thus increasing the possibility of a malfunction of the sprinkler.

A-2-2.6.2 The use of the wrong type of escutcheon with recessed or flush type sprinklers can result in severe disruption of the spray pattern, which can destroy the effectiveness of the sprinkler.

A-2-2.7 Sprinklers under open gratings should be provided with shields. Shields over automatic sprinklers should not be less, in least dimension, than four times the distance between the shield and fusible element, except special sprinklers incorporating a built-in shield need not comply with this recommendation if listed for the particular application.

A-2-3.2 See Table A-2-3.2.

A-2-3.4 See Table A-2-3.4.

A-2-3.5 Other types of pipe and tube that have been investigated and listed for sprinkler applications include lightweight steel pipe and thermoplastic pipe and fittings. While these products may offer advantages, such as ease of handling and installation, cost effectiveness, reduction of friction losses, and improved corrosion resistance, it is important to recognize that they also have limitations that are to be considered by those contemplating their use or acceptance.

With respect to lightweight steel pipe, corrosion studies have shown that, in comparison to Schedule 40 pipe, its effective life may be reduced, the level of reduction being related to its wall thickness. Further information with respect to corrosion resistance is contained in the individual listings of such products.

With respect to thermoplastic pipe and fittings, exposure of such piping to elevated temperatures in excess of that for which it has been listed may result in distortion or failure. Accordingly, care must be exercised when locating such systems to ensure that the ambient temperature, including seasonal variations, does not exceed the rated value.

The upper service temperature limit of currently listed CPVC sprinkler pipe is 150°F (65.5°C) at 175 psi (1206 kPa). The upper service temperature limit of currently listed polybutylene sprinkler pipe is 120°F (49°C) at 175 psi (1206 kPa).

Not all pipe or tube made to ASTM F 442 and D 3309 as described in 2-3.5 is listed for fire sprinkler service. Listed pipe is identified by the logo of the listing agency.

Not all fittings made to ASTM F 437, F 438, and F 439 as described in 2-4.2 are listed for fire sprinkler service. Listed fittings are identified by the logo of the listing agency.

Consideration must also be given to the possibility of exposure of the piping to elevated temperatures during a fire. The survival of thermoplastic piping under fire conditions derives primarily from the cooling effect of the discharge from the sprinklers it serves. As this discharge may not occur simultaneously with the rise in ambient temperature and, under some circumstances, may be delayed for periods beyond the tolerance of the piping, protection in the form of a fire-resistant membrane is generally required. (Some listings do provide for the use of exposed piping in conjunction with residential or quick-response sprinklers, but only under specific, limited installation criteria.) Where protection is required, it is described in the listing information for each individual product, and the requirements given must be followed. Equally important, such protection must be maintained. Removal of, for example, one or more panels in a lay-in ceiling can expose piping in the concealed space to the possibility of failure in the event of a fire. Similarly, the relocation of openings through protective ceilings that expose the pipe to heat, inconsistent with the listing, would place the system in jeopardy. The potential for loss of the protective membrane under earthquake conditions should also be considered.

While the listings of thermoplastic piping do not prohibit its installation in combustible concealed spaces where the provision of sprinkler protection is not required, and while the statistical record of fire originating in such spaces is low, it should be recognized that the occurrence of a fire in such a space could result in failure of the piping system.

The investigation of pipe and tube other than described in Table 2-3.1 should involve consideration of many factors, including:

(a) Pressure rating.

(b) Beam strength (hangers).

(c) Unsupported vertical stability.

(d) Movement during sprinkler operation (affecting water distribution).

(e) Corrosion (internal and external), chemical and electrolytic.

(f) Resistance to failure when exposed to elevated temperatures.

(g) Methods of joining (strength, permanence, fire hazard).

(h) Physical characteristics related to integrity during earthquakes.

Table A-2-3.2 Steel Pipe Dimensions

Nominal Pipe Size	Outside Diameter		Schedule 10[1] Inside Diameter		Schedule 10[1] Wall Thickness		Schedule 30 Inside Diameter		Schedule 30 Wall Thickness		Schedule 40 Inside Diameter		Schedule 40 Wall Thickness	
in.	in.	(mm)	in.	(mm)	in.	(mm)	in.	(mm)	in.	(mm)	in.	(mm)	in.	(mm)
1/2	.840	(21.3)	.674	(17)	.083	(2.1)					.622	(15.8)	.109	(2.8)
3/4	1.050	(26.7)	.884	(22.4)	.083	(2.1)					.824	(21)	.113	(2.9)
1	1.315	(33.4)	1.097	(27.9)	0.109	(2.8)	—	—	—	—	1.049	(26.6)	0.133	(3.4)
1 1/4	1.660	(42.2)	1.442	(36.6)	0.109	(2.8)	—	—	—	—	1.380	(35.1)	0.140	(3.6)
1 1/2	1.900	(48.3)	1.682	(42.7)	0.109	(2.8)	—	—	—	—	1.610	(40.9)	0.145	(3.7)
2	2.375	(60.3)	2.157	(54.8)	0.109	(2.8)	—	—	—	—	2.067	(52.5)	0.154	(3.9)
2 1/2	2.875	(73.0)	2.635	(66.9)	0.120	(3.0)	—	—	—	—	2.469	(62.7)	0.203	(5.2)
3	3.500	(88.9)	3.260	(82.8)	0.120	(3.0)	—	—	—	—	3.068	(77.9)	0.216	(5.5)
3 1/2	4.000	(101.6)	3.760	(95.5)	0.120	(3.0)	—	—	—	—	3.548	(90.1)	0.226	(5.7)
4	4.500	(114.3)	4.260	(108.2)	0.120	(3.0)	—	—	—	—	4.026	(102.3)	0.237	(6.0)
5	5.563	(141.3)	5.295	(134.5)	0.134	(3.4)	—	—	—	—	5.047	(128.2)	0.258	(6.6)
6	6.625	(168.3)	6.357	(161.5)	0.134[2]	(3.4)	—	—	—	—	6.065	(154.1)	0.280	(7.1)
8	8.625	(219.1)	8.249	(209.5)	0.188[2]	(4.8)	8.071	(205.0)	0.277	(7.0)	—	—	—	—
10	10.75	(273.1)	10.37	(263.4)	0.188[2]	(4.8)	10.14	(257.6)	0.307	(7.8)	—	—	—	—

For SI Units: 1 in. = 25.4 mm.

NOTES.
1. Schedule 10 defined to 5 in. (127 mm) nominal pipe size by ASTM A 135.
2 Wall thickness specified in 2-3.2.
3. These values applicable when used in conjunction with 4-5.18.2 and 4-5.18.3.

Table A-2-3.4 Copper Tube Dimensions

Nominal Tube Size	Outside Diameter		Type K Inside Diameter		Type K Wall Thickness		Type L Inside Diameter		Type L Wall Thickness		Type M Inside Diameter		Type M Wall Thickness	
in.	in.	(mm)	in.	(mm)	in.	(mm)	in.	(mm)	in.	(mm)	in.	(mm)	in.	(mm)
3/4	0.875	(22.2)	0.745	(18.9)	0.065	(1.7)	0.785	(19.9)	0.045	(1.1)	0.811	(20.6)	0.032	(0.8)
1	1.125	(28.6)	0.995	(25.3)	0.065	(1.7)	1.025	(26.0)	0.050	(1.3)	1.055	(26.8)	0.035	(0.9)
1 1/4	1.375	(34.9)	1.245	(31.6)	0.065	(1.7)	1.265	(32.1)	0.055	(1.4)	1.291	(32.8)	0.042	(1.1)
1 1/2	1.625	(41.3)	1.481	(37.6)	0.072	(1.8)	1.505	(38.2)	0.060	(1.5)	1.527	(38.8)	0.049	(1.2)
2	2.125	(54.0)	1.959	(49.8)	0.083	(2.1)	1.985	(50.4)	0.070	(1.8)	2.009	(51.0)	0.058	(1.5)
2 1/2	2.625	(66.7)	2.435	(61.8)	0.095	(2.4)	2.465	(62.6)	0.080	(2.0)	2.495	(63.4)	0.065	(1.7)
3	3.125	(79.4)	2.907	(73.8)	0.109	(2.8)	2.945	(74.8)	0.090	(2.3)	2.981	(75.7)	0.072	(1.8)
3 1/2	3.625	(92.1)	3.385	(86.0)	0.120	(3.0)	3.425	(87.0)	0.100	(2.5)	3.459	(87.9)	0.083	(2.1)
4	4.125	(104.8)	3.857	(98.0)	0.134	(3.4)	3.905	(99.2)	0.110	(2.8)	3.935	(99.9)	0.095	(2.4)
5	5.125	(130.2)	4.805	(122.0)	0.160	(4.1)	4.875	(123.8)	0.125	(3.2)	4.907	(124.6)	0.109	(2.8)
6	6.125	(155.6)	5.741	(145.8)	0.192	(4.9)	5.845	(148.5)	0.140	(3.6)	5.881	(149.4)	0.122	(3.1)
8	8.125	(206.4)	7.583	(192.6)	0.271	(6.9)	7.725	(196.2)	0.200	(5.1)	7.785	(197.7)	0.170	(4.3)
10	10.13	(257.3)	9.449	(240.0)	0.338	(8.6)	9.625	(244.5)	0.250	(6.4)	9.701	(246.4)	0.212	(5.4)

For SI Units: 1 in. = 25.4 mm.

A-2-4.2 Rubber-gasketed pipe fittings and couplings should not be installed where ambient temperatures can be expected to exceed 150°F (66°C) unless listed for this service. If the manufacturer further limits a given gasket compound, those recommendations should be followed.

A-2-4.4 Listed flexible connections are permissible and encouraged for sprinkler installations in racks to reduce the possibility of physical damage. Where flexible tubing is used, it should be located so that it will be protected against mechanical injury.

A-2-5.1.2 Some steel piping material having lesser wall thickness than specified in 2-5.1.2 has been listed for use in sprinkler systems where joined with threaded connections. The service life of such products may be significantly less than that of Schedule 40 steel pipe, and it should be determined if this service life will be sufficient for the application intended.

All such threads should be checked by the installer using working ring gauges conforming to the Basic Dimensions of Ring Gauges for USA (American) Standard Taper Pipe Threads, NPT, as per ANSI/ASME B1.20.1, Table 8.

A-2-5.2 See Figure A-2-5.2(a) and Figure A-2-5.2(b).

A-2-5.2.2 Cutting and welding operations account for 4 percent of fires each year in nonresidential properties and 8 percent in industrial and manufacturing properties. In-place welding of sprinkler piping introduces a significant hazard that can normally be avoided by shop-welding the piping and installing the welded sections with mechanical fittings. As a result, the standard requires that all piping be shop-welded. When such situations cannot be avoided, the exceptions outline procedures and practices that minimize the increase in hazard.

A-2-5.2.5(a) Listed, shaped, contoured nipples meet the definition of fabricated fittings.

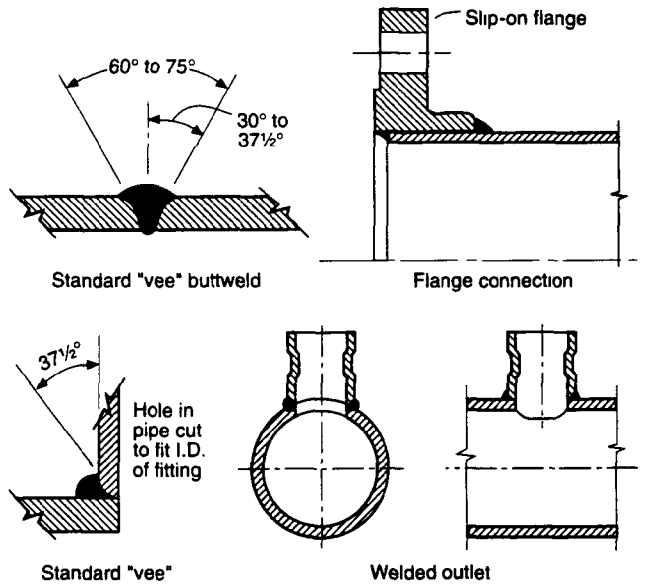


Figure A-2-5.2(a) Acceptable weld joints.

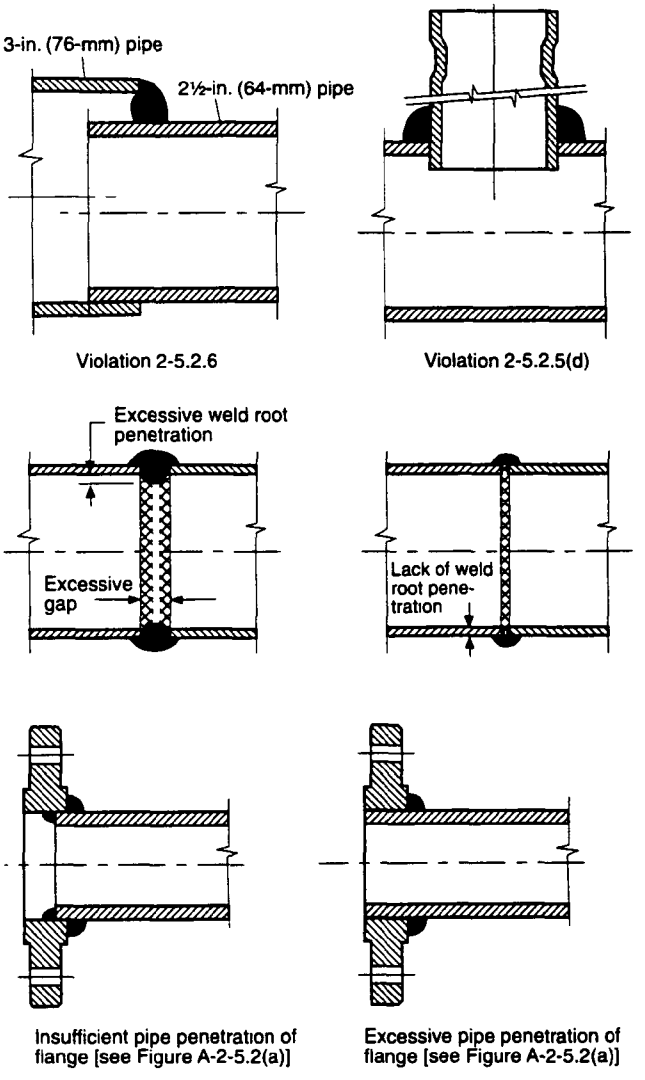


Figure A-2-5.2(b) Unacceptable weld joints.

A-2-5.4 The fire hazard of the brazing and soldering processes should be suitably safeguarded.

A-2-5.4.1 Soldering fluxes manufactured to the specifications required by Table 2-3.1 are unlikely to cause damage to the seats of sprinklers. When brazing flux is used, it must be of a type not likely to damage the seats of sprinklers.

A-2-6.1 See Figure A-2-6.1.

A-2-6.1.5 Table 2-6.1.5(a) assumes that the load from 15 ft (5 m) of water-filled pipe, plus 250 lb (114 kg), is located at the midpoint of the span of the trapeze member, with a maximum allowable bending stress of 15 KSI (111 kg). If the load is applied at other than the midpoint, for the purpose of sizing the trapeze member, an equivalent length of trapeze may be used, derived from the formula

$$L = \frac{4ab}{a + b}$$

where:

L = equivalent length
a = distance from one support to the load
b = distance from the other support to the load.

Where multiple mains are to be supported or multiple trapeze hangers are provided in parallel, the required or available section modulus may be added.

A-2-6.1.7 The rules covering the hanging of sprinkler piping take into consideration the weight of water-filled pipe plus a safety factor. No allowance has been made for the hanging of nonsystem components from sprinkler piping.

A-2-6.3.1 Powder-driven studs should not be used in steel of less than $^3/_{16}$ in. (4.8 mm) total thickness.

A-2-6.3.3 The ability of concrete to hold the studs varies widely according to type of aggregate, quality of concrete, and proper installation.

A-2-7.3 The intent of this section is to provide assistance in determining the area of a building served by a particular control valve.

A-2-9.2.4 The surge of water when the valve trips may seriously damage the device.

A-2-9.3.1 Audible alarms are normally located on the outside of the building. Listed electric gongs, bells, horns, or sirens inside the building or a combination inside and outside are sometimes advisable.

A-2-9.3.2 All alarm apparatus should be so located and installed that all parts are accessible for inspection, removal, and repair and should be substantially supported.

The water motor gong bell mechanism should be protected from weather-related elements such as rain, snow, or ice. To the extent practicable, they should also be protected from other influencing factors such as birds or other small animals that might attempt to nest in such devices.

A-2-9.5 Switches that will silence electric alarm-sounding devices by interruption of electrical current are not desirable; however, if such means are provided, then the electrical alarm-sounding device circuit should be arranged so that, when the sounding device is electrically silenced, that fact should be indicated by means of a conspicuous light located in the vicinity of the riser or alarm control panel. This light should remain in operation during the entire period of the electrical circuit interruption.

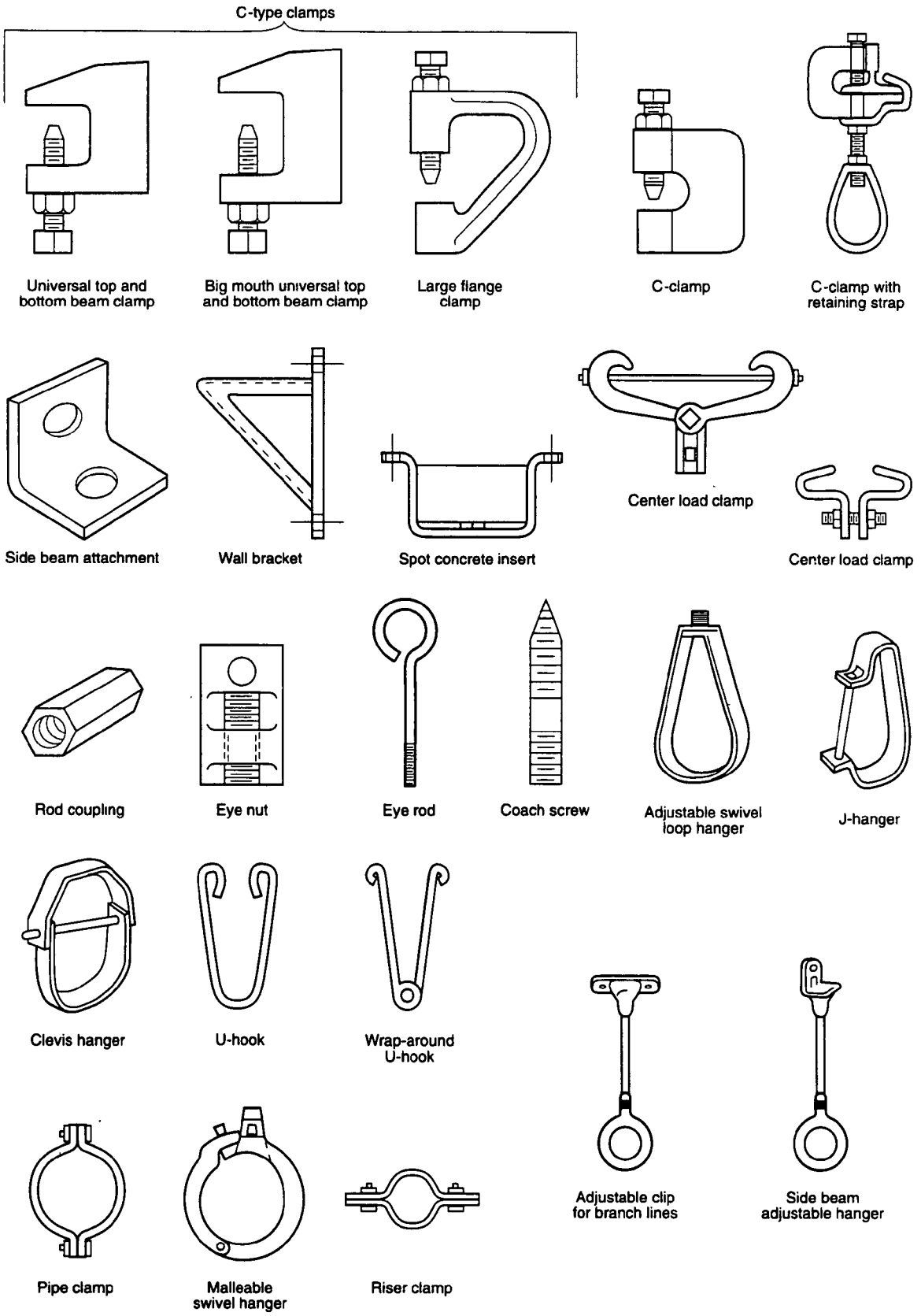


Figure A-2-6.1 Common types of acceptable hangers.

A-3-2 A dry pipe system should be installed only where heat is not adequate to prevent freezing of water in all or sections of the system. Dry pipe systems should be converted to wet pipe systems when they become unnecessary because adequate heat is provided. Sprinklers should not be shut off in cold weather.

Where two or more dry pipe valves are used, systems preferably should be divided horizontally to prevent simultaneous operation of more than one system and the resultant increased time delay in filling systems and discharging water, plus receipt of more than one waterflow alarm signal.

Where adequate heat is present in sections of the dry pipe system, consideration should be given to dividing the system into a separate wet pipe system and dry pipe system. Minimized use of dry pipe systems is desirable where speed of operation is of particular concern.

A-3-2.2 Exception No. 1. Installation limitations of listed dry pendent sprinklers can vary with different products. Limitations should be included in product installation instructions to warn against the potential accumulation of water, scale, and sediment from collecting at the sprinkler.

A-3-2.3 The capacities of the various sizes of pipe given in Table A-3-2.3 are for convenience in calculating the capacity of a system.

Table A-3-2.3 Capacity of One Foot of Pipe (Based on Actual Internal Pipe Diameter)

Nominal Diameter	Gal Sch 40	Gal Sch 10	Nominal Diameter	Gal Sch 40	Gal Sch 10
¾ in.	0.028	—	3 in.	0.383	0.433
1 in.	0.045	0.049	3½ in.	0.513	0.576
1¼ in.	0.078	0.085	4 in.	0.660	0.740
1½ in.	0.106	0.115	5 in.	1.040	1.144
2 in.	0.174	0.190	6 in.	1.501	1.649[1]
2½ in.	0.248	0.283	8 in.	2.66[3]	2.776[2]

For SI Units 1 in = 25.4 mm; 1 ft = 0.3048 m; 1 gal = 3.785 L

[1] 0.134 Wall Pipe.
[2] 0.188 Wall Pipe.
[3] Schedule 30.

A-3-2.3.1 The 60-sec limit does not apply to dry systems with capacities of 500 gal (1893 L) or less, nor to dry systems with capacities of 750 gal (2839 L) or less if equipped with a quick-opening device.

A-3-2.5 The dry pipe valve should be located in an accessible place near the sprinkler system it controls. Where exposed to cold, the dry pipe valve should be located in a valve room or enclosure of adequate size to properly service equipment.

A-3-2.6.2 The compressor should draw its air supply from a place where the air is dry and not too warm. Moisture from condensation can cause trouble in the system.

A-3-3.1 Conditions of occupancy or special hazards might require quick application of large quantities of water, and in such cases deluge systems might be needed.

Fire detection devices should be selected to assure operation, yet guard against premature operation of sprinklers, based on normal room temperatures and draft conditions.

In locations where ambient temperature at the ceiling is high from heat sources other than fire conditions, heat-responsive devices that operate at higher than ordinary temperature and are capable of withstanding the normal high temperature for long periods of time should be selected.

Where corrosive conditions exist, materials or protective coatings that resist corrosion should be used.

To help avoid ice formation in piping due to accidental tripping of dry pipe valves in cold storage rooms, a deluge automatic water control valve can be used on the supply side of the dry pipe valve. Where this combination is employed:

(a) Dry systems can be manifolded to a deluge valve, the protected area not exceeding 40,000 sq ft (3716 m^2). The distance between valves should be as short as possible to minimize water hammer.

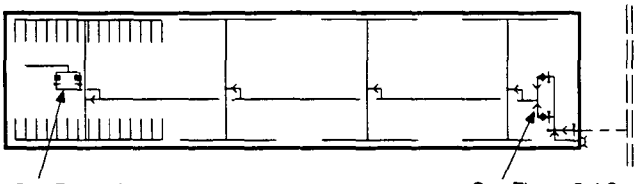
(b) The dry pipe valves should be pressurized to 50 psi (3.4 bars) to reduce the possibility of dry pipe valve operation from water hammer.

A-3-3.2.4 Exception No. 1. See A-3-2.2 Exception No. 1.

A-3-3.3 Where 8-in. (203-mm) piping is employed to reduce friction losses in a system operated by fire detection devices, a 6-in. (152-mm) preaction or deluge valve and 6-in. (152-mm) gate valve between tapered reducers should be permitted.

A-3-4.1 Systems described by Section 3-4 are special types of non-interlocking preaction systems intended for use in, but not limited to, structures where a number of dry pipe valves would be required if a dry pipe system were installed. These systems are primarily used in piers and wharves.

A-3-4.1.1 See Figure A-3-4.1.1.



Typical piping layout
(in one-story shed–4 section system)

Figure A-3-4.1.1 Typical piping layout for combined dry pipe and preaction sprinkler system.

A-3-4.1.4 Exception No. 1. See A-3-2.2 Exception No. 1.

A-3-4.3 See Figure A-3-4.3.

A-3-5.1 Antifreeze solutions may be used for maintaining automatic sprinkler protection in small unheated areas. Antifreeze solutions are recommended only for systems not exceeding 40 gal (151 L).

Because of the cost of refilling the system or replenishing small leaks, it is advisable to use small dry valves where more than 40 gal (151 L) are to be supplied.

A-3-5.2 Listed CPVC sprinkler pipe and fittings should be protected from freezing with glycerine only. The use of diethylene, ethylene, or propylene glycols are specifically prohibited. Laboratory testing shows that glycol-based antifreeze solutions present a chemical environment detrimental to CPVC.

A-3-5.2.3 Beyond certain limits, increased proportion of antifreeze does not lower the freezing point of solution. (*See Figure A-3-5.2.3.*)

Glycerine, diethylene glycol, ethylene glycol, and propylene glycol should never be used without mixing with water

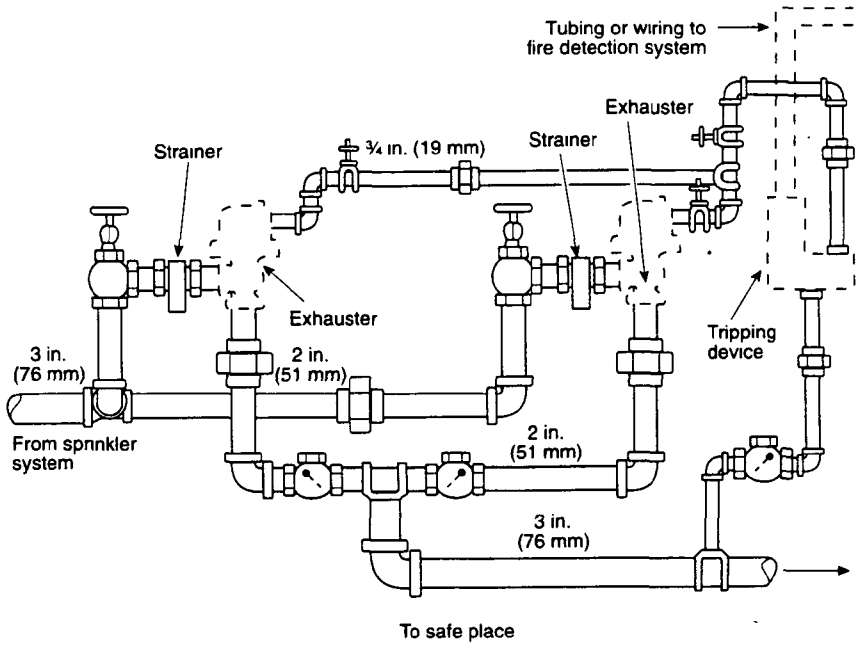


Figure A-3-4.3 Arrangement of air exhaust valves for combined dry pipe and preaction sprinkler system.

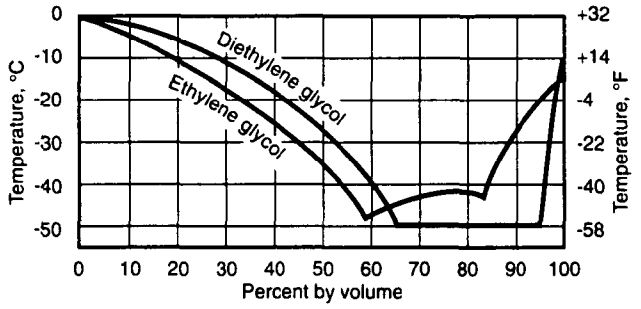


Figure A-3-5.2.3 Freezing points of water solutions of ethylene glycol and diethylene glycol.

in proper proportions, because these materials tend to thicken near 32°F (0°C).

A-3-5.3.1 All permitted antifreeze solutions are heavier than water. At the point of contact (interface), the heavier liquid will be below the lighter liquid, preventing diffusion of water into the unheated areas.

A-3-6.1.2 Outlets should be provided at critical points on sprinkler system piping to accommodate attachment of pressure gauges for test purposes.

A-3-7.2.1 The water supply should be capable of furnishing the total demand for all exposure sprinklers operating simultaneously for protection against the exposure fire under consideration for a duration of not less than 60 min.

A-3-8 Careful installation and maintenance, and some special arrangements of piping and devices as outlined in this section, are needed to avoid the formation of ice and frost inside piping in cold storage rooms that will be maintained at or below 32°F (0°C). Conditions are particularly favorable to condensation where pipes enter cold rooms from rooms having temperatures above freezing.

Whenever the opportunity offers, fittings such as those specified in 3-8.1 and illustrated in Figures A-3-8(a) and (b), as well as flushing connections, should be provided in existing systems.

Where possible, risers should be located in stair towers or other locations outside of refrigerated areas. This would reduce the probabilities of ice or frost formation within the riser (supply) pipe.

Cross mains should be connected to risers or feed mains with flanges. In general, flanged fittings should be installed at points that would allow easy dismantling of the system. Split ring or other easily removable types of hangers will facilitate the dismantling.

Because it is not practical to allow water to flow into sprinkler piping in spaces that might be constantly subject to freezing, or where temperatures must be maintained at or below 40°F (4.4°C), it is important that means be provided at the time of system installation to conduct trip tests on dry pipe valves that service such systems. NFPA 25, *Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems*, contains requirements in this matter.[101]

A-3-8.2 The requirements in this section are intended to minimize the chances of ice plug formation inside sprinkler system piping protecting freezers.

A-3-8.2.4 A higher degree of preventing ice blocks can be achieved by lowering moisture of the air supply entering the refrigerated space to a pressure dew point no greater than 20°F (−6.6°C) below the lowest nominal temperature of the refrigerated space. The pressure dew point of the air supply can cause moisture to condense and freeze in sprinkler pipe even when the air supply is from the freezer. One method of reducing moisture content of the air by use of air drying systems is illustrated in Figure A-3-8.2.4.

When compressors and dryers are used for an air supply, consideration should be given to pressure requirements of

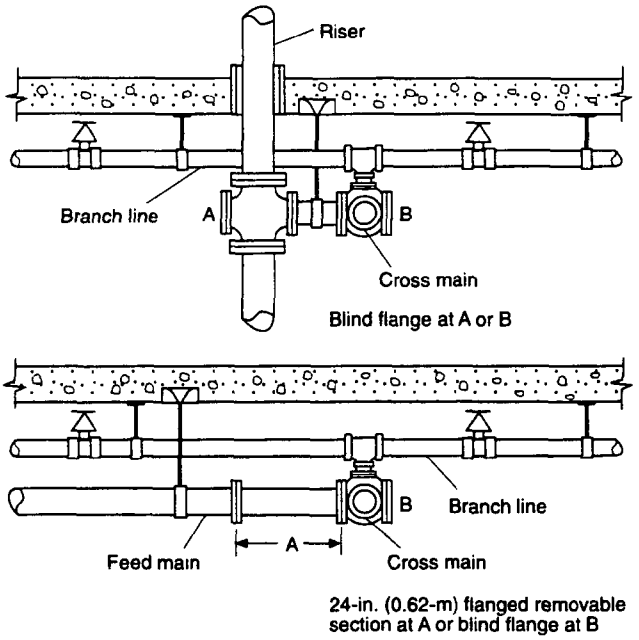


Figure A-3-8(a) Fittings to facilitate examination of feed mains, risers, and cross mains in freezing areas. Top: elevation at riser and cross main. Bottom: elevation at feed main and cross main.

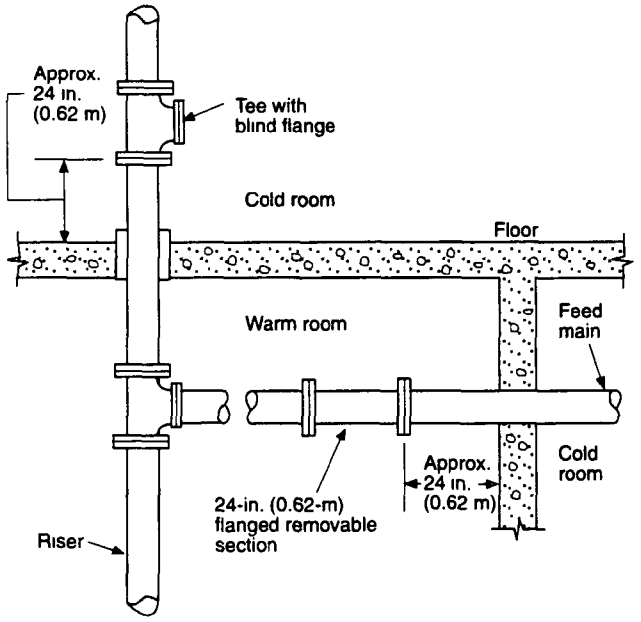
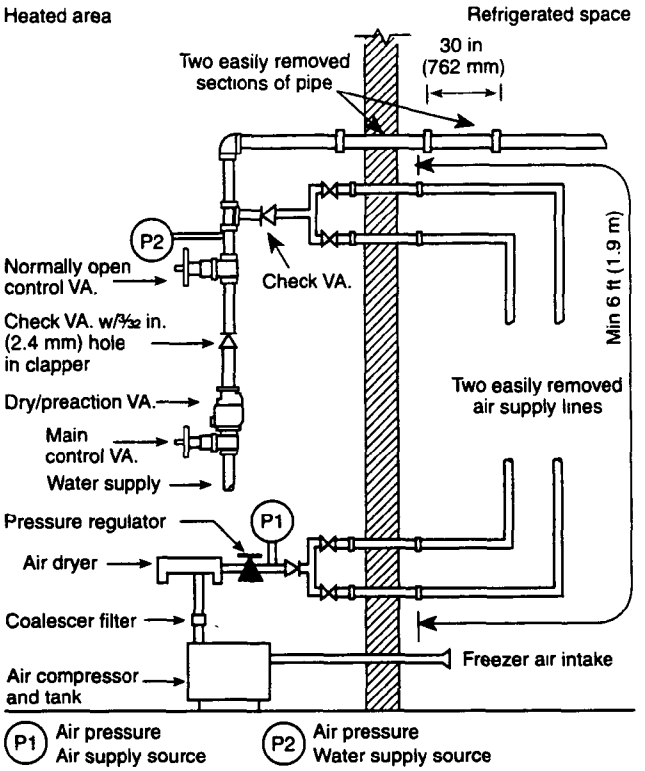


Figure A-3-8(b) Fittings in feed main or riser passing through wall or floor from warm room to cold room.

the regenerative dryers, compressor size, air pressure regulator capacity, and air fill rate. Application of these factors could necessitate use of increased air pressures and larger air compressor.

The compressed air supply should be properly prepared prior to entering a regenerative-type air dryer, such as minimum air pressure, maximum inlet air temperature, and proper filtration of compressed air.

A-3-8.2.5 A major contributing factor of introducing moisture in the system piping comes from excessive air compressor operation caused by system leakage. Where excessive compressor operation is noted or ice is accumulated in the air supply piping, the system should be checked for leakage and appropriate corrective action should be taken.



1. If pressure gauge P1 and P2 do not indicate equal pressures, it could mean the air line is blocked or the air supply is malfunctioning.
2. Air dryer and coalescer filter not required when system piping capacity is less than 250 gal.

Figure A-3-8.2.4 Refrigerator area sprinkler systems to minimize the chances of developing ice plugs.

A-3-8.2.7 The dual lines feeding the system air entering the cold area is intended to facilitate continued service of the system when one line is removed for inspection. It should be noted that, when using a system as described in Figure A-3-8.2.4, differences in the pressures at gauge P1 and gauge P2 indicate blockage in the air supply line or other malfunctions.

A-3-9.2 See Figure A-3-9.2.

A-4-1 The installation requirements are specific for the normal arrangement of structural members. There will be arrangements of structural members not specifically detailed by the requirements. By applying the basic principles, layouts for such construction can vary from specific illustrations, provided the maximum specified for the spacing and location of sprinklers (Section 4-4) are not exceeded.

Where buildings or portions of buildings are of combustible construction or contain combustible material, standard fire barriers should be provided to separate the areas that are sprinkler protected from adjoining unsprinklered areas. All openings should be protected in accordance with applicable standards, and no sprinkler piping should be placed in an unsprinklered area unless the area is permitted to be unsprinklered by this standard.

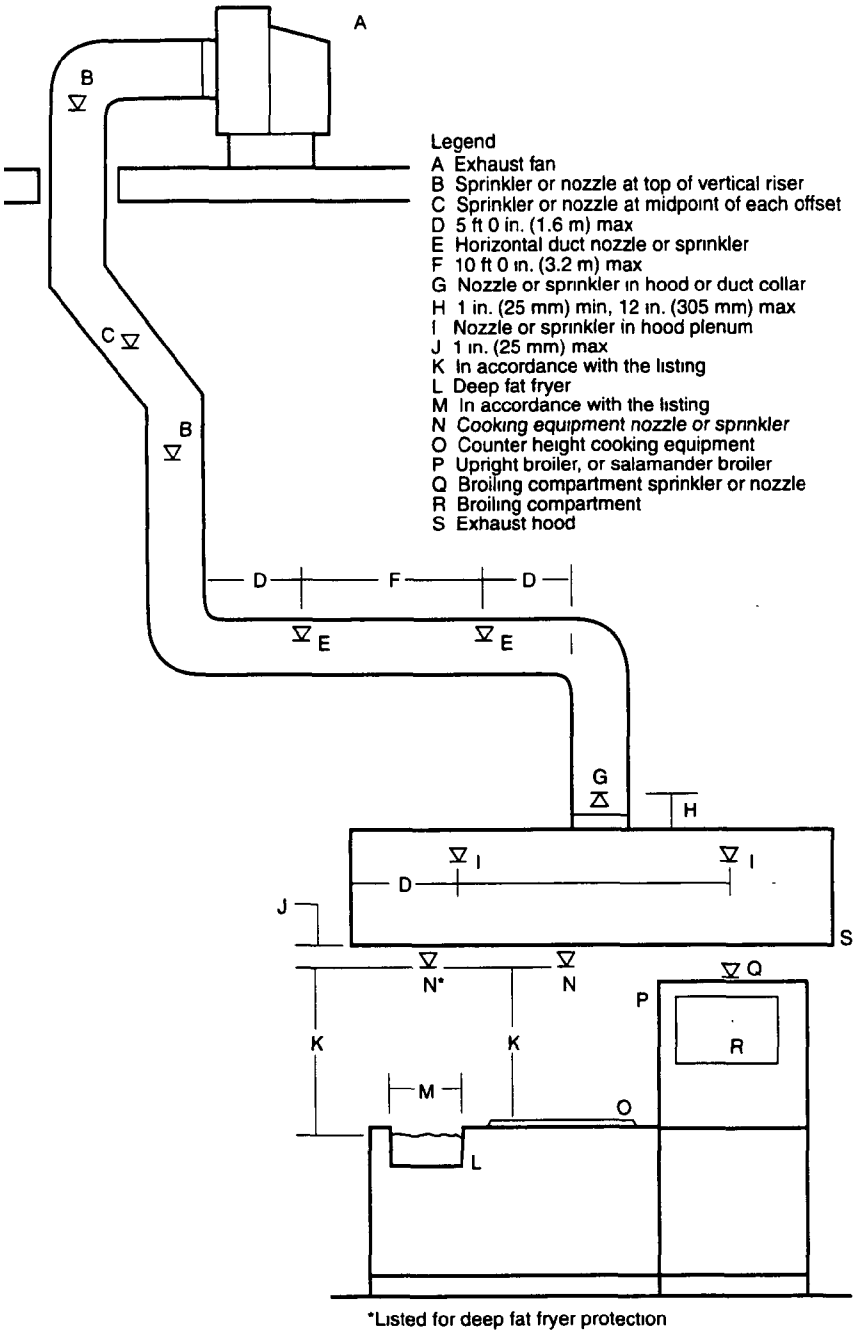


Figure A-3-9.2 Typical installation showing automatic sprinklers or automatic nozzles being used for the protection of commercial cooking equipment and ventilation systems.

Water supplies for partial systems should be designed with consideration to the fact that in a partial system more sprinklers might be opened in a fire that originates in an unprotected area and spreads to the sprinklered area than would be the case in a completely protected building. Fire originating in a nonsprinklered area might overpower the partial sprinkler system.

Where sprinklers are installed in corridors only, sprinklers should be spaced up to the maximum of 15 ft (4.5 m) along the corridor, with one sprinkler opposite the center of any door or pair of adjacent doors opening onto the corridor, and with an additional sprinkler installed inside each adjacent room above the door opening. Where the sprinkler in the adjacent room provides full protection for that space, an additional sprinkler is not required in the corridor adjacent to the door.

A-4-1.1 This standard contemplates full sprinkler protection for all areas. Other NFPA standards that mandate sprinkler installation might not require sprinklers in certain areas. The requirements of this standard should be used

insofar as they are applicable. The authority having jurisdiction should be consulted in each case.

A-4-1.2 The components need not be open or exposed. Doors, removable panels, or valve pits can satisfy this need. Such equipment should not be obstructed by such permanent features as walls, ducts, columns, or direct burial.

A-4-3.1.1 The evaluation for usage should be based upon a review of available technical data.

A-4-3.1.2 This requirement is to minimize the obstruction of the discharge pattern.

A-4-4 The selection of a sprinkler type will vary by occupancy. Where more than one type of sprinkler is used within a compartment, sprinklers with similar response characteristics should be used (i.e., standard or quick response). However, some hazards might benefit from designs that include the use of both standard and quick-response sprinklers. Examples include rack storage protected by standard-response ceiling sprinklers and quick-response in-rack sprinklers. Another case might include opening protection using closely spaced quick-response sprinklers with standard-response sprinklers in the adjoining areas. Other designs can be compromised when sprinklers of differing sensitivity are mixed. An example is a system utilizing ESFR sprinklers adjacent to a system using high temperature standard-response sprinklers as might be found in a warehouse. In this case a fire occurring near the boundary might open ESFR sprinklers, which would not be contemplated in the standard-response system design.

A-4-4.5.1 The response and water distribution pattern of listed residential sprinklers have been shown by extensive fire testing to provide better control than spray sprinklers in residential occupancies. These sprinklers are intended to prevent flashover in the room of fire origin, thus improving the chance for occupants to escape or be evacuated.

The protection area for residential sprinklers is defined in the listing of the sprinkler as a maximum square or rectangular area. Listing information is presented in even 2-ft (.65-m) increments from 12 ft to 20 ft (3.9 m to 6.5 m). When a sprinkler is selected for an application, its area of coverage must be equal to or greater than both the length and width of the hazard area. For example, if the hazard to be protected is a room 13 ft 6 in. (4.4 m) wide and 17 ft 6 in. (5.6 m) long, a sprinkler that is listed to protect a rectangular area of 14 ft × 18 ft (4.5 m × 5.8 m) or a square area of 18 ft × 18 ft (5.8 m × 5.8 m) must be selected. The flow used in the calculations is then selected as the flow required by the listing for the selected coverage.

A-4-4.7.2 This requirement is to avoid scale accumulation.

A-4-4.9.1 Tests of standard sprinklers by approved laboratories have traditionally encompassed a fire test using a 350-lb (160-kg) wood crib and water distribution tests in which water is collected in pans from several arrangements of sprinklers to evaluate distribution under nonfire conditions.

Tests of special sprinklers are customized to evaluate responsiveness, distribution, and other unique characteristics of the sprinkler to control or extinguish. These include variables such as:

(a) The location of the fire relative to the sprinklers, i.e., below 1 sprinkler or between 2, 4, or 6 sprinklers,

(b) Fire conditions that encompass a variety of fire growth rates representative of anticipated conditions of use,

(c) Tests of room areas where sprinklers are expected to function in multiple arrays,

(d) Adverse conditions of use, i.e., pipe shadows or other obstructions to discharge,

(e) Effect of a fire plume on water distribution and discharge under a variety of heat release rates.

A-4-5.5.2 Where of a depth that will obstruct the spray discharge pattern, girders, beams, or trusses forming narrow pockets of combustible construction along walls may require additional sprinklers.

A-4-5.5.3 Frequently, additional sprinkler equipment can be avoided by reducing the width of decks or galleries and providing proper clearances. Slatting of decks or walkways or the use of open grating as a substitute for automatic sprinklers thereunder is not acceptable. The use of cloth or paper dust tops for rooms forms obstruction to water distribution. If dust tops are used, the area below should be sprinklered.

A-4-6.3.2 See Figure A-4-6.3.2.

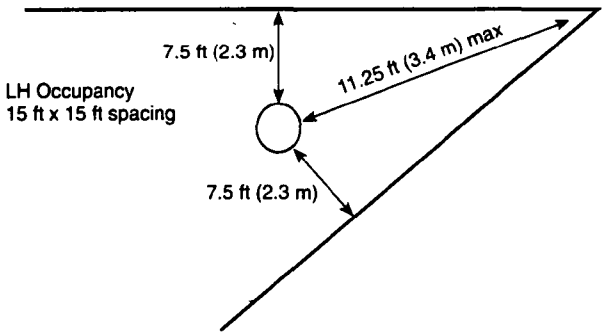


Figure A-4-6.3.2 Maximum distance from walls.

A-4-6.3.2.1 Exception. An example of sprinklers in small rooms for hydraulically designed and pipe schedule systems is shown in Figure A-4-6.3.2 Exception (a), and examples for hydraulically designed systems only are shown in Figures A-4-6.3.2 Exception (b), (c), and (d).

A-4-6.4.1.2 Exception No. 4. For concrete joists spaced less than 3 ft (.91 m) on center, the rules for obstructed construction shown in 4-6.4.1.2 apply. (*See Figure A-4-6.4.1.2 Exception No. 4.*)

A-4-6.4.1.3 Saw-toothed roofs have regularly spaced monitors of saw tooth shape, with the nearly vertical side glazed and usually arranged for venting. Sprinkler placement is limited to a maximum of 3 ft (0.91 m) down the slope from the peak because of the effect of venting on sprinkler sensitivity.

A-4-6.4.2 On sprinkler lines larger than 2 in. (51 mm), consideration should be given to the distribution interference caused by the pipe, which can be minimized by installing sprinklers on riser nipples or installing sprinklers in the pendent position.

A-4-6.5.3 See A-4-5.5.3.

A-4-6.5.4 The distances given in Table 4-6.5.4 were determined through tests in which privacy curtains with either a solid fabric or close mesh [¼ in. (6.4 mm)] top panel were

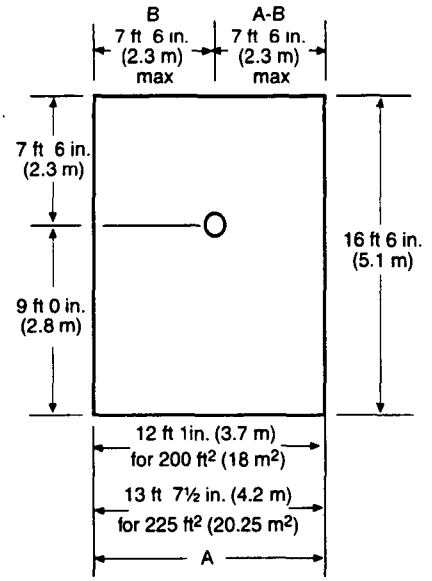


Figure A-4-6.3.2 Exception (a) Small room provision.

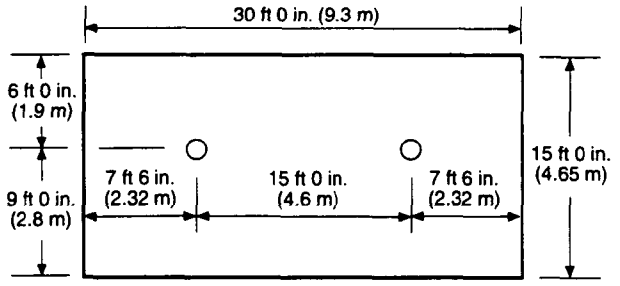


Figure A-4-6.3.2 Exception (b) Small room provision.

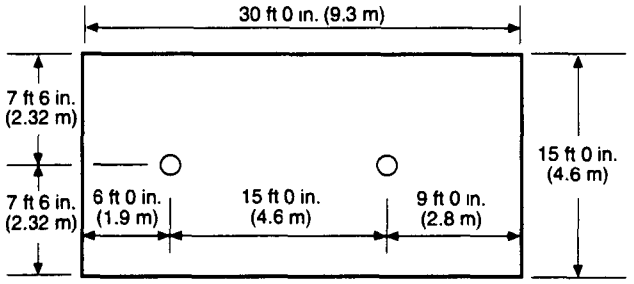


Figure A-4-6.3.2 Exception (c) Small room provision.

installed. For broader-mesh top panels, e.g., ½ in. (13 mm), the obstruction of the sprinkler spray is not likely to be severe and the authority having jurisdiction may not need to apply the requirements in 4-6.5.4.

A-4-6.6 The 18-in. (457-mm) dimension is not intended to limit the height of shelving on a wall or shelving against a wall in accordance with 4-4.1.6. Where shelving is installed on a wall and is not directly below sprinklers, the shelves, including storage thereon, may extend above the level of a plane located 18 in. (457 mm) below ceiling sprinkler deflectors. Shelving, and any storage thereon, directly below the sprinklers may not extend above a plane located 18 in. (457 mm) below the ceiling sprinkler deflectors.

A-4-7.5.3 See A-4-5.5.3.

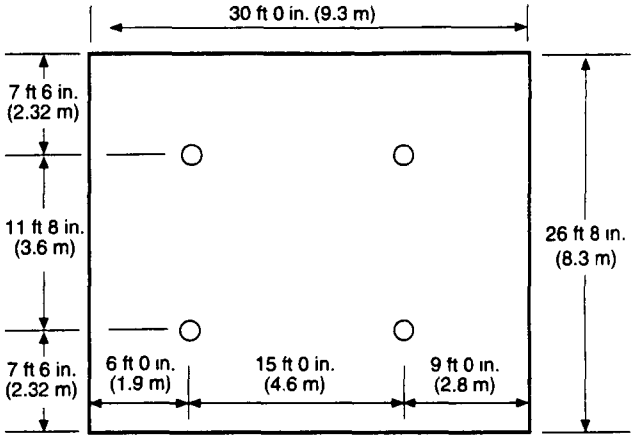


Figure A-4-6.3.2 Exception (d) Small room provision.

Figure A-4-6.4.1.2 Exception No. 4 Typical concrete joist construction.

A-4-8.2.1 The protection area for extended coverage upright and pendent sprinklers is defined in the listing of the sprinkler as a maximum square area. Listing information is presented in even 2-ft (0.65-m) increments up to 20 ft (6.5 m). When a sprinkler is selected for an application, its area of coverage must be equal to or greater than both the length and width of the hazard area. For example, if the hazard to be protected is a room 13 ft 6 in. (4.4 m) wide and 17 ft 6 in. (5.6 m) long, a sprinkler that is listed to protect an area of 18 ft × 18 ft (5.8 m × 5.8 m) must be selected. The flow used in the calculations is then selected as the flow required by the listing for the selected coverage.

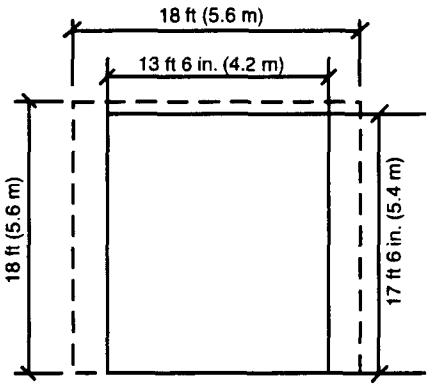


Figure A-4-8.2.1 Determination of protection area of coverage for EC upright and pendent sprinklers.

A-4-8.4.1.3 Saw-toothed roofs have regularly spaced monitors of saw tooth shape, with the nearly vertical side glazed and usually arranged for venting. Sprinkler placement is limited to a maximum of 3 ft (0.91 m) down the slope from the peak because of the effect of venting on sprinkler sensitivity.

A-4-8.5.3 See A-4-5.5.3.

A-4-9.2.1 The protection area for extended coverage sidewall spray sprinklers is defined in the listing of the sprinkler

as a maximum square or rectangular area. Listing information is presented in even 2-ft (0.65-m) increments up to 28 ft (9 m) for extended coverage sidewall spray sprinklers. When a sprinkler is selected for an application, its area of coverage must be equal to or greater than both the length and width of the hazard area. For example, if the hazard to be protected is a room 14 ft 6 in. (4.7 m) wide and 20 ft 8 in. (6.7 m) long, a sprinkler that is listed to protect an area of 16 ft × 22 ft (5.2 m × 7.1 m) must be selected. The flow used in the calculations is then selected as the flow required by the listing for the selected coverage.

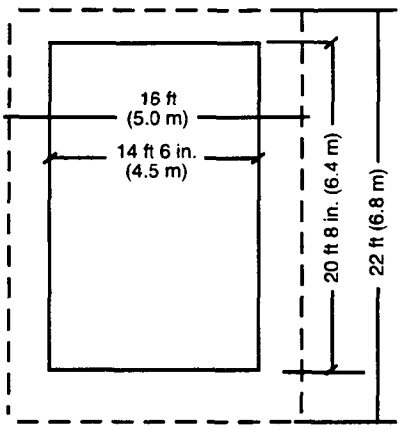


Figure A-4-9.2.1 Determination of protection area of coverage for EC sidewall sprinklers.

A-4-9.5.3 See A-4-5.5.3.

A-4-10.2 Tests involving areas of coverage over 100 ft^2 (9.3 m^2) for large-drop sprinklers are limited in number, and use of areas of coverage over 100 ft^2 (9.3 m^2) should be carefully considered.

A-4-10.3.1 It is important that sprinklers in the immediate vicinity of the fire center not skip, and this requirement imposes certain restrictions on the spacing.

A-4-10.4.1 If all other factors are held constant, the operating time of the first sprinkler will vary exponentially with the distance between the ceiling and deflector. At distances greater than 7 in. (178 mm), for other than open wood joist construction, the delayed operating time will permit the fire to gain headway, with the result that substantially more sprinklers operate. At distances less than 7 in. (178 mm), other effects occur. Changes in distribution, penetration, and cooling nullify the advantage gained by faster operation. The net result again is increased fire damage accompanied by an increase in the number of sprinklers operated. The optimum clearance between deflectors and ceiling is, therefore, 7 in. (178 mm). For open wood joist construction, the optimum clearance between deflectors and the bottom of joists is 3½ in. (89 mm).

A-4-10.5 To a great extent, large-drop sprinklers rely on direct attack to gain rapid control of both the burning fuel and ceiling temperatures. Therefore, interference with the discharge pattern and obstructions to the distribution should be avoided.

A-4-10.5.3 See A-4-5.5.3.

A-4-11.5.3 See A-4-5.5.3.

A-4-13.1.1 Exceptions Nos. 1, 2, and 3 do not require sprinkler protection because it is not physically practical to install sprinklers in these spaces. To reduce the possibility of uncontrolled fire spread, consideration should be given in these unsprinklered concealed space situations to using Exceptions Nos. 5, 8, and 10.

A-4-13.2.2 Where practicable, sprinklers should be staggered at the alternate floor levels, particularly where only one sprinkler is installed at each floor level.

A-4-13.3.3 See Figures A-4-13.3.3(a) and (b). Sprinklers would be required in the case shown in Figure (a) but not in the case shown in Figure (b).

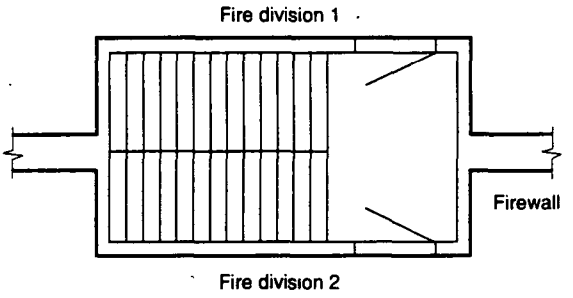


Figure A-4-13.3.3(a) Noncombustible stair shaft serving two fire sections.

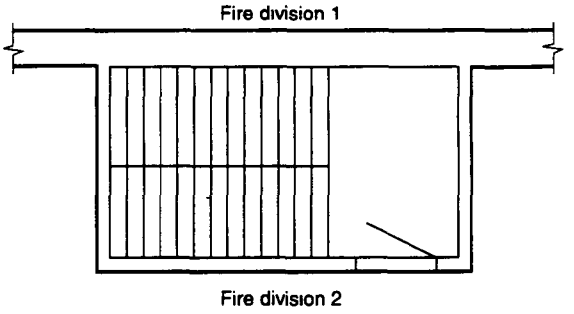


Figure A-4-13.3.3(b) Noncombustible stair shaft serving one fire section.

A-4-13.3.4 Where sprinklers in the normal ceiling pattern are closer than 6 ft (1.8 m) from the water curtain, it might be preferable to locate the water curtain sprinklers in recessed baffle pockets. (*See Figure A-4-13.3.4.*)

A-4-13.4 The installation of sprinklers at floor levels should be arranged so as to protect the sprinklers from mechanical injury and from falling materials and not cause obstruction within the chute. This usually can be accomplished by recessing the sprinkler in the wall of the chute or by providing a protective deflector canopy over the sprinkler. Sprinklers should be placed so that there will be minimum interference of the discharge therefrom. Sprinklers with special directional discharge characteristics might be advantageous. (*See Figure A-4-13.4.*)

A-4-13.5.1 The sprinklers in the pit are intended to protect against fires cause by debris, which can accumulate over time. Ideally, the sprinklers should be located near the side of the pit below the elevator doors, where most debris accumulates. However, care should be taken that the sprinkler location does not interfere with the elevator toe guard, which extends below the face of the door opening.

A-4-13.5.2 The ASME A17.1 code requires the shutdown of power to the elevator upon or prior to the application of

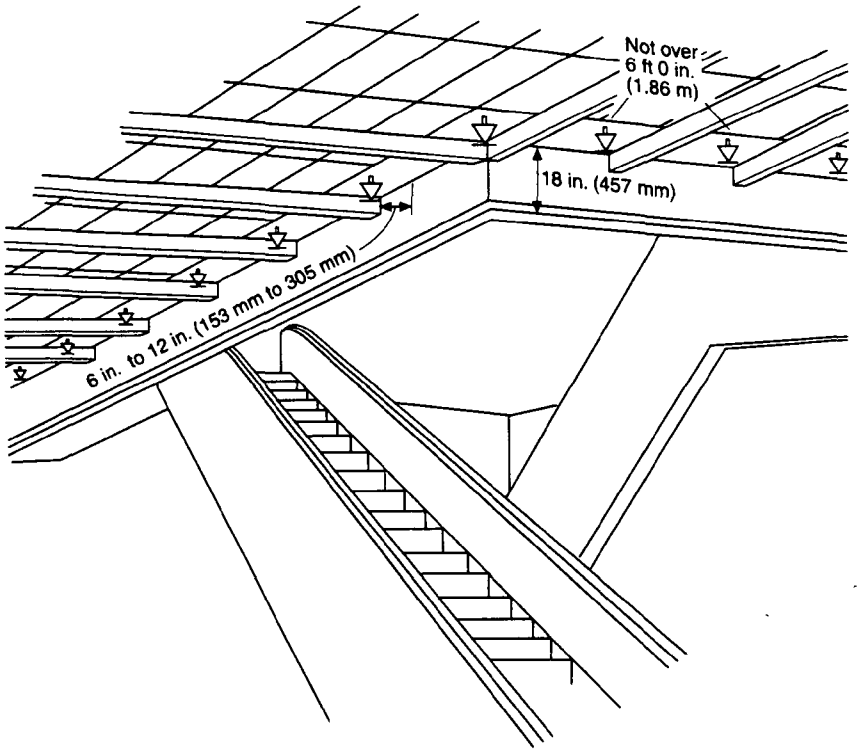


Figure A-4-13.3.4 Sprinklers around escalators.

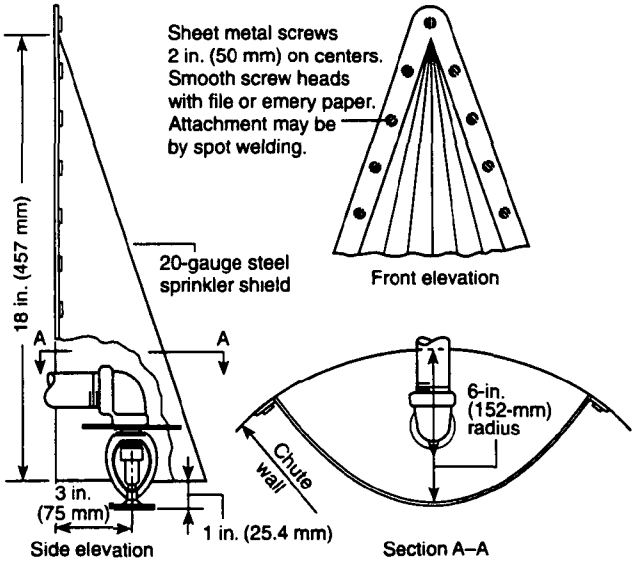


Figure A-4-13.4 Canopy for protecting sprinklers in building service chutes.

water in elevator machine rooms or hoistways. This can be accomplished by a detection system with sufficient sensitivity to operate prior to the activation of the sprinklers (*see also NFPA 72*). As an alternative, the system can be arranged using devices or sprinklers capable of effecting power shutdown immediately upon sprinkler activation, such as a waterflow switch without a time delay. This is intended to interrupt power before significant sprinkler discharge.

A-4-13.5.3 Passenger elevator cars that have been constructed in accordance with A17.1 Rule 204.2a (under A17.1a-1985 and later editions of the code) have limited combustibility. Materials exposed to the interior of the car and the hoistway, in their end-use composition, are limited to a flame spread rating of 0 to 75, and a smoke development rating of 0 to 450.

A-4-13.7 Small loading docks, covered platforms, ducts, or similar small unheated areas can be protected by dry-pendent sprinklers extending through the wall from wet sprinkler piping in an adjacent heated area. Where protecting covered platforms, loading docks, and similar areas, a dry-pendent sprinkler should extend down at a 45-degree angle. The width of the area to be protected should not exceed 7½ ft (2.3 m). Sprinklers should be spaced not over 12 ft (3.7 m) apart. (*See Figure A-4-13.7.*)

A-4-13.8.2 Portable wardrobe units, such as those typically used in nursing homes and mounted to the wall, do not require sprinklers to be installed in them. Although the units are attached to the finished structure, the standard views those units as pieces of furniture rather than a part of the structure; thus, sprinklers are not required.

A-4-13.11 The installation of open-grid egg crate, louver, or honeycomb ceilings beneath sprinklers restricts the sideways travel of the sprinkler discharge and can change the character of discharge.

A-4-13.12.3 Drop-out ceilings do not provide the required protection for soft-soldered copper joints or other piping that requires protection.

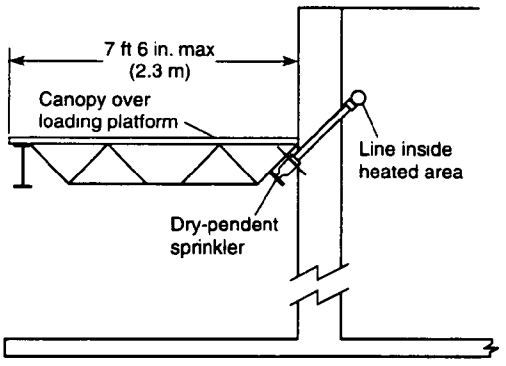


Figure A-4-13.7 Dry-pendent sprinklers for protection of covered platforms, loading docks, and similar areas.

A-4-13.12.4 The ceiling tiles might drop before sprinkler operation. Delayed operation might occur because heat must then bank down from the deck above before sprinklers will operate.

A-4-13.13 Exception No. 1. For tests of sprinkler performance in fur vaults see "Fact Finding Report on Automatic Sprinkler Protection for Fur Storage Vaults" of Underwriters Laboratories Inc., dated November 25, 1947.

Sprinklers should be listed old-style having orifice sizes selected to provide as closely as possible but not less than 20 gal per min (76 L/min) per sprinkler, for four sprinklers, based on the water pressure available.

Sprinklers in fur storage vaults should be located centrally over the aisles between racks and shall be spaced not over 5 ft (1.5 m) apart along the aisles.

Where sprinklers are spaced 5 ft (1.5 m) apart along the sprinkler branch lines, pipe sizes should be in accordance with the following schedule:

1 in. (25.4 mm)	4 sprinklers	2 in. (50.8 mm)	20 sprinklers
1 1/4 in. (31.7 mm)	6 sprinklers	2 1/2 in. (63.5 mm)	40 sprinklers
1 1/2 in. (38.1 mm)	10 sprinklers	3 in. (76.2 mm)	80 sprinklers

A-4-13.20 One-and-one-half (1 1/2) in. hose connections for use in storage occupancies and other locations where standpipe systems are not required are covered by this standard. Where Class II standpipe systems are required, see the appropriate provisions of NFPA 14, *Standard for the Installation of Standpipe and Hose Systems*, with respect to hose stations and water supply for hose connections from sprinkler systems.

A-4-13.21 Combined automatic sprinkler and standpipe risers should not be interconnected by sprinkler system piping.

A-4-13.22 See Figure A-4-13.22.

A-4-14.1.1 See Figure A-4-14.1.1.

A-4-14.1.1.1 A water supply connection should not extend into a building or through a building wall unless such connection is under the control of an outside listed indicating valve or an inside listed indicating valve located near the outside wall of the building.

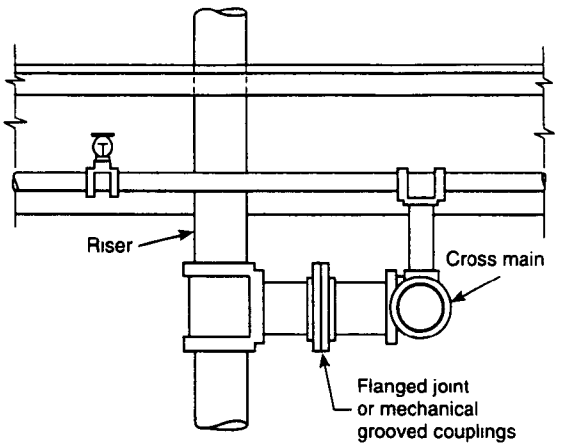


Figure A-4-13.22 One arrangement of flanged joint at sprinkler riser.

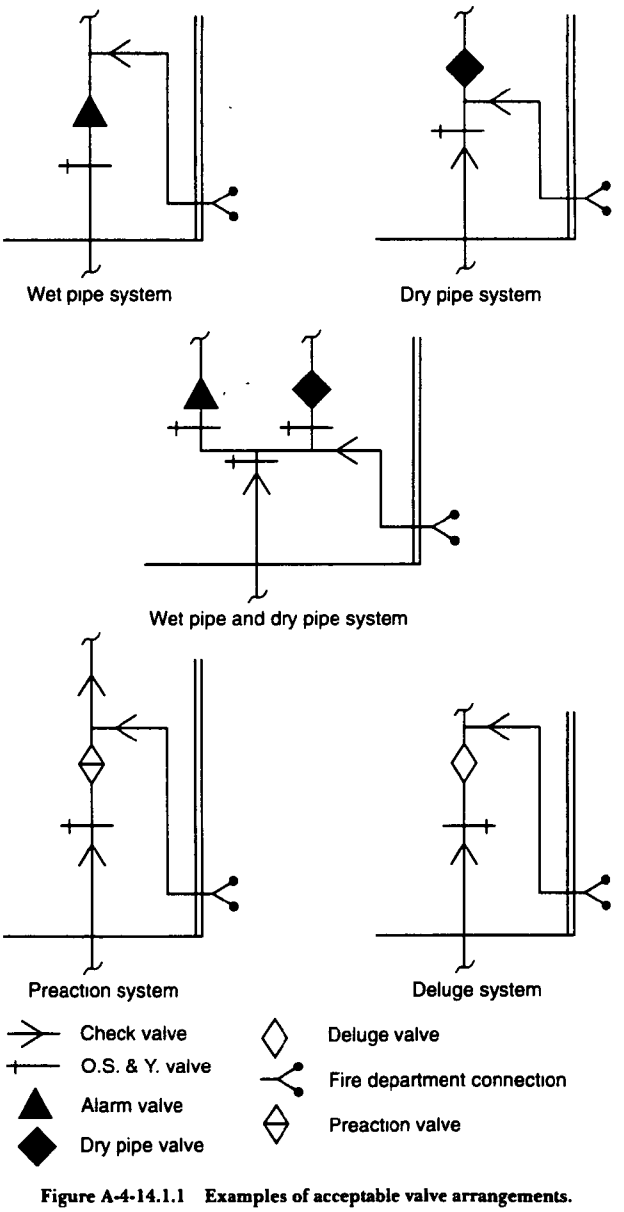


Figure A-4-14.1.1 Examples of acceptable valve arrangements.

All valves controlling water supplies for sprinkler systems or portions thereof, including floor control valves, should be accessible to authorized persons during emergencies. Permanent ladders, clamped treads on risers, chain-operated hand wheels, or other accepted means should be provided where necessary.

Outside control valves are suggested in the following order of preference:

(a) Listed indicating valves at each connection into the building at least 40 ft (12.2 m) from buildings if space permits.

(b) Control valves installed in a cutoff stair tower or valve room accessible from outside.

(c) Valves located in risers with indicating posts arranged for outside operation.

(d) Key-operated valves in each connection into the building.

A-4-14.1.1.7 Where a system having only one dry pipe valve is supplied with city water and fire department connection, it will be satisfactory to install the main check valve in the water supply connection immediately inside of the building. In instances where there is no outside control valve, the system indicating valve should be placed at the service flange, on the supply side of all fittings.

A-4-14.1.1.8 See Figure A-4-14.1.1.8.

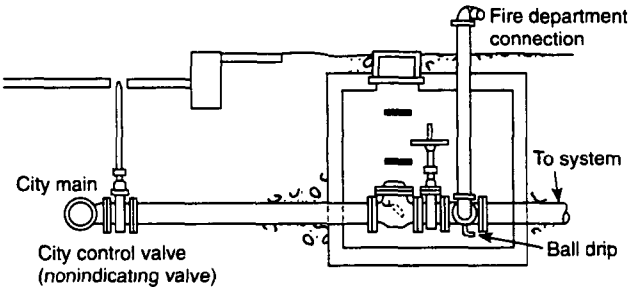


Figure A-4-14.1.1.8 Pit for gate valve, check valve, and fire department connection.

A-4-14.1.2.3 Where the relief valve operation would result in water being discharged onto interior walking or working surfaces, consideration should be given to piping the discharge from the valve to a drain connection or other safe location.

A-4-14.2.2.1 Where copper tube is to be installed in moist areas or other environments conducive to galvanic corrosion, copper hangers or ferrous hangers with an insulating material should be used.

A-4-14.2.3.1 Exception No. 1. See Figure A-4-14.2.3.1 Exception No. 1.

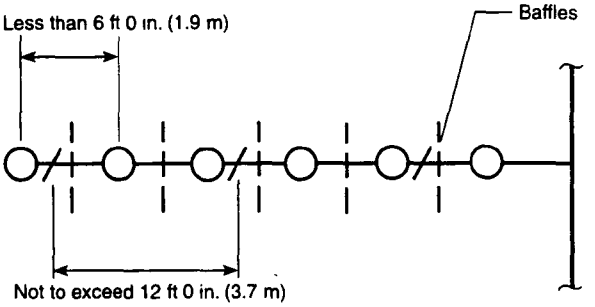


Figure A-4-14.2.3.1 Exception No. 1 Distance between hangers.

A-4-14.2.3.3 Sprinkler piping should be adequately secured to restrict the movement of piping upon sprinkler operation. The reaction forces caused by the flow of water through the sprinkler could result in displacement of the sprinkler, thereby adversely affecting sprinkler discharge. Listed CPVC pipe and listed polybutylene pipe have specific requirements for piping support to include additional pipe bracing of sprinklers. (*See Figure A-4-14.2.3.3.*)

A-4-14.2.3.3 Exception No. 1. See Figure A-4-14.2.3.3 Exception No. 1.

A-4-14.2.3.3 Exception No. 2. See Figure A-4-14.2.3.3 Exception No. 2.

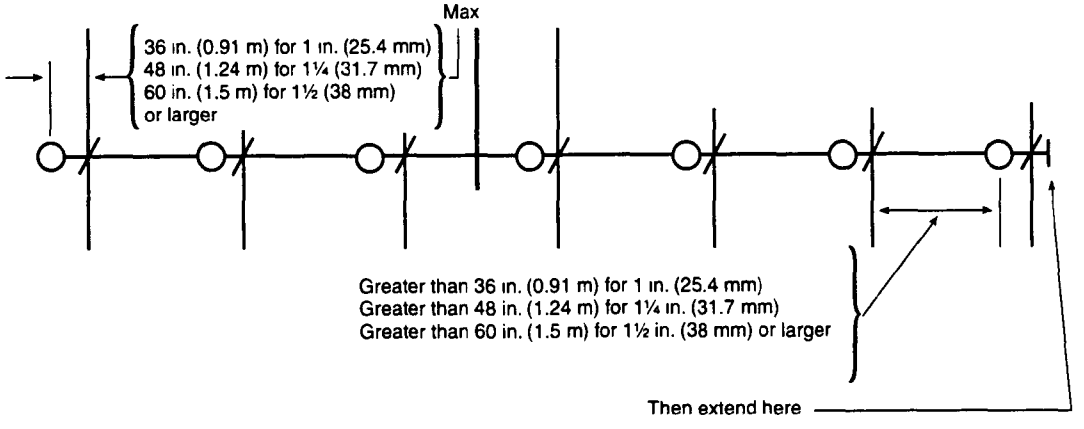


Figure A-4-14.2.3.3 Distance from sprinkler to hanger.

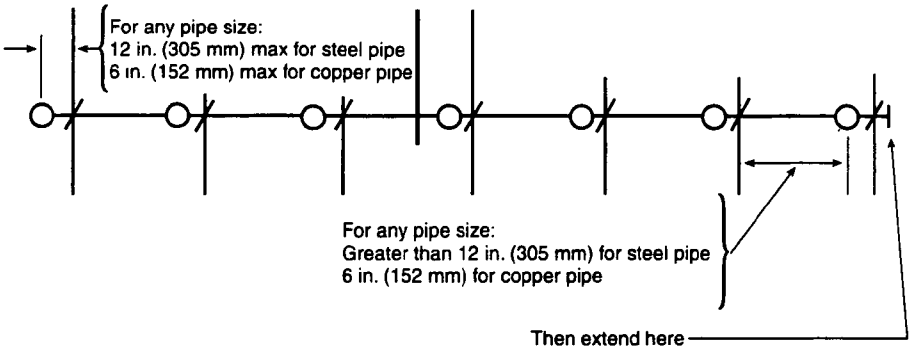
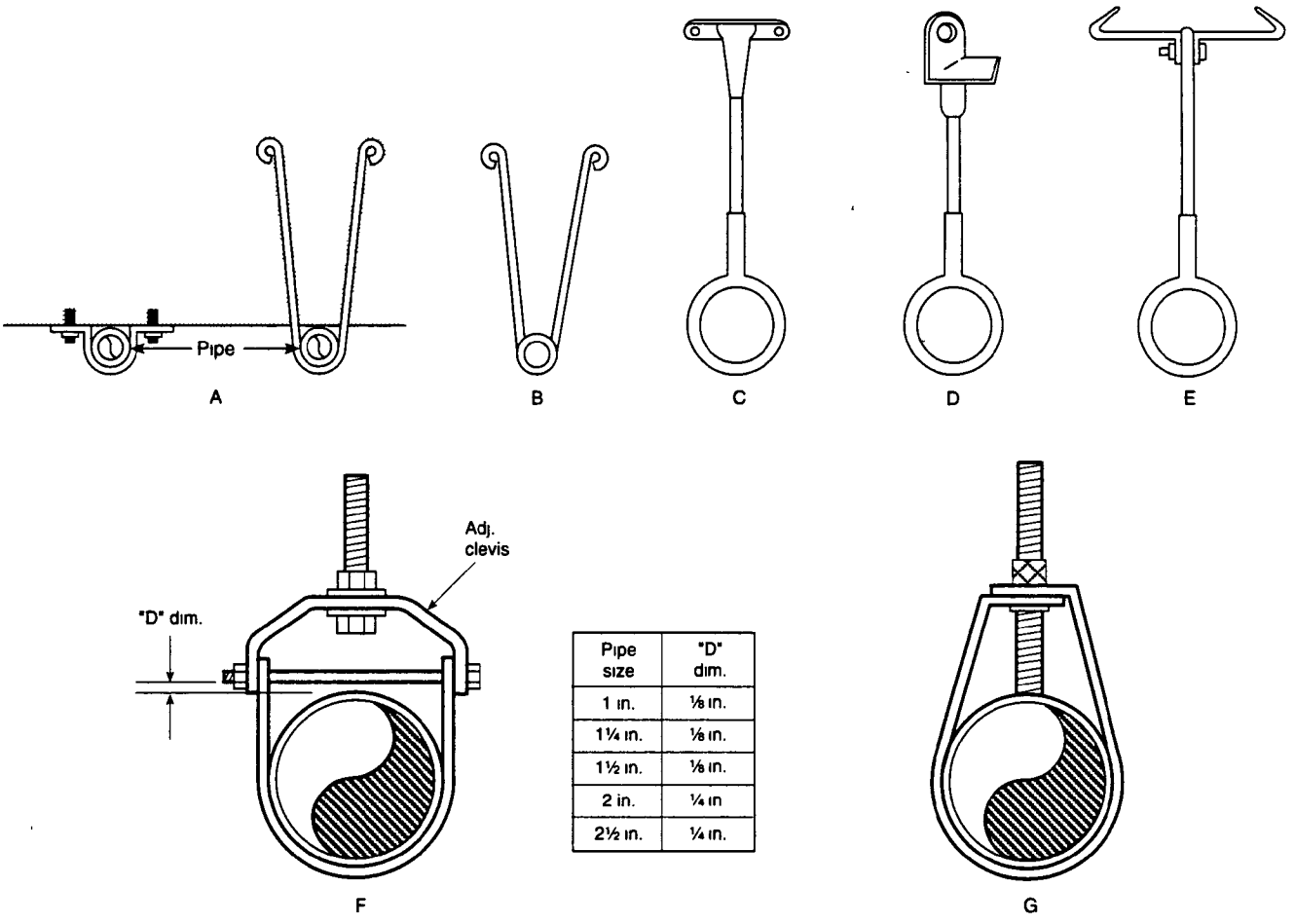


Figure A-4-14.2.3.3 Exception No. 1 Distance from sprinkler to hanger where maximum pressure exceeds 100 psi (6.9 bars) and a branch line above a ceiling supplies pendent sprinklers below the ceiling.



Pipe size	"D" dim.
1 in.	⅛ in.
1¼ in.	⅛ in.
1½ in.	⅛ in.
2 in.	¼ in
2½ in.	¼ in.

A. U-type hangers for branch lines
B. Wrap-around U-hook
C. Adjustable clip for branch lines
D. Side beam adjustable hanger
E. Adjustable coach screw clip for branch lines
F. Clevis hanger
G. Adjustable swivel loop hanger

Figure A-4-14.2.3.3 Exception No. 2 Examples of acceptable hangers for end of line (or armover) pendent sprinklers.

A-4-14.2.3.4 See Figure A-4-14.2.3.4.

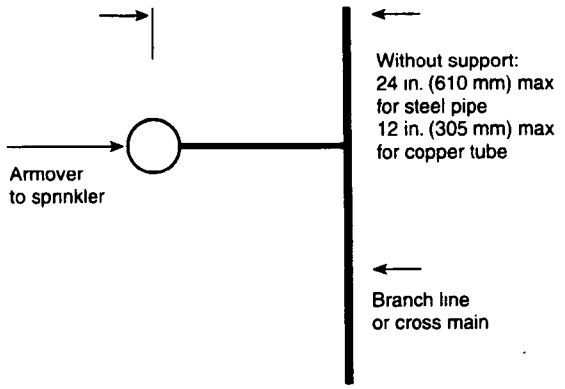
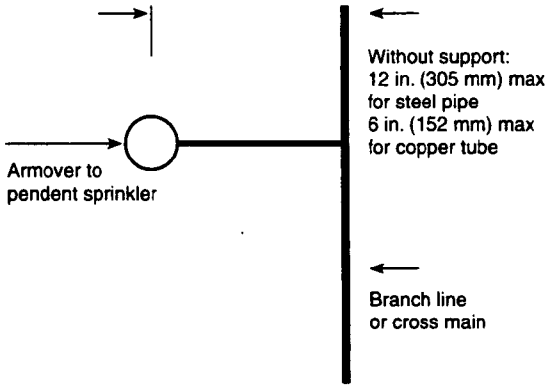


Figure A-4-14.2.3.4 Maximum length for unsupported armover.

A-4-14.2.3.4 Exception See Figure A-4-6.2.3.4 Exception.



Note: The pendent sprinkler may be installed either directly in the fitting at the end of the armover or in a fitting at the bottom of a drop nipple.

Figure A-4-14.2.3.4 Exception Maximum length of unsupported armover where the maximum pressure exceeds 100 psi (6.9 bars) and a branch line above a ceiling supplies pendent sprinklers below the ceiling.

A-4-14.3.1 All piping should be arranged where practicable to drain to the main drain valve.

A-4-14.3.5.2.3 An example of an accessible location would be a valve located approximately 7 ft (2 m) above the floor level to which a hose could be connected to discharge the water in an acceptable manner.

A-4-14.3.6.1 Where possible, the main sprinkler riser drain should discharge outside the building at a point free from the possibility of causing water damage. Where it is not possible to discharge outside the building wall, the drain should be piped to a sump, which in turn should discharge by gravity or be pumped to a waste water drain or sewer. The main sprinkler riser drain connection should be of a size sufficient to carry off water from the fully open drain valve while it is discharging under normal water system pressures. Where this is not possible, a supplementary drain of equal size should be provided for test purposes with free discharge, located at or above grade.

A-4-14.4.2.1 Types of locations where corrosive conditions can exist include bleacheries, dye houses, metal plating processes, animal pens, and certain chemical plants.

If corrosive conditions are not of great intensity and humidity is not abnormally high, good results can be obtained by a protective coating of red lead and varnish or by a good grade of commercial acid-resisting paint. The paint manufacturer's instructions should be followed in the preparation of the surface and in the method of application.

Where moisture conditions are severe but corrosive conditions are not of great intensity, copper tube or galvanized steel pipe, fittings, and hangers might be suitable. The exposed threads of steel pipe should be painted.

In instances where the piping is not readily accessible and where the exposure to corrosive fumes is severe, either a protective coating of high quality can be employed or some form of corrosion-resistant material used.

A-4-14.4.3.1 Sprinkler systems are protected against earthquake damage by means of the following:

(a) Stresses that would develop in the piping due to differential building movement are minimized through the use of flexible joints or clearances.

(b) Bracing is used to keep the piping fairly rigid when supported from a building component expected to move as a unit, such as a ceiling.

Areas known to have a potential for earthquakes have been identified in building code and insurance maps. Examples of two such maps are shown in Figures A-4-14.4.3.1(a) and A-4-14.4.3.1(b).

A-4-14.4.3.2 Strains on sprinkler piping can be greatly lessened and, in many cases, damage prevented by increasing the flexibility between major parts of the sprinkler system. One part of the piping should never be held rigidly and another part allowed to move freely without provision for relieving the strain. Flexibility can be provided by using listed flexible couplings, by joining grooved end pipe at critical points, and by allowing clearances at walls and floors.

Tank or pump risers should be treated the same as sprinkler risers for their portion within a building. The discharge pipe of tanks on buildings should have a control valve above the roof line so any pipe break within the building can be controlled.

Piping 2 in. (50 mm) or smaller in size is pliable enough so that flexible couplings are not usually necessary. "Rigid-type" couplings that permit less than 1 degree of angular movement at the grooved connections are not considered to be flexible couplings. [*See Figures A-4-14.4.3.2(a) and (b).*]

A-4-14.4.3.2(d) A building expansion joint is usually a bituminous fiber strip used to separate blocks or units of concrete to prevent cracking due to expansion as a result of temperature changes. In this case, the flexible coupling required on one side by 4-14.4.3.2(d) will suffice.

For seismic separation joints, considerably more flexibility is needed, particularly for piping above the first floor. Figure A-4-14.4.3.3 shows a method of providing additional flexibility through the use of swing joints.

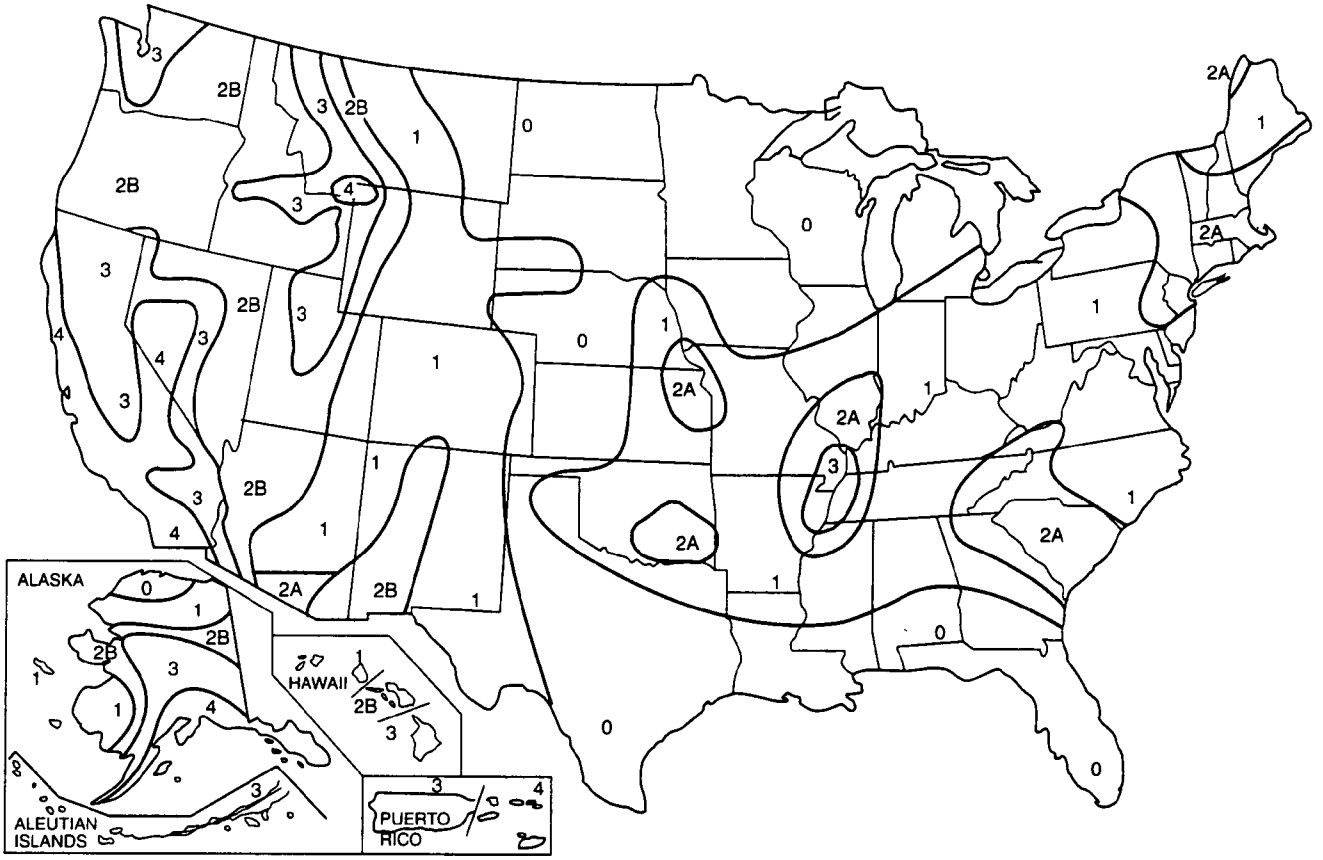


Figure A-4-14.4.3.1(a) Seismic zone map of the United States.

A-4-14.4.3.3 Plan and elevation views of a seismic separation assembly assembled with flexible elbows are shown in Figure A-4-14.4.3.3.

A seismic separation assembly is considered to be an assembly of fittings, pipe, and couplings or an assembly of pipe and couplings that permits movement in all directions. The extent of permitted movement should be sufficient to accommodate calculated differential motions during earthquakes. In lieu of calculations, permitted movement can be made at least twice the actual separations, at right angles to the separation as well as parallel to it.

A-4-14.4.3.4 While clearances are necessary around the sprinkler piping to prevent breakage due to building movement, suitable provision should also be made to prevent passage of water, smoke, or fire.

Drains, fire department connections, and other auxiliary piping connected to risers should not be cemented into walls or floors; similarly, pipes that pass horizontally through walls or foundations should not be cemented solidly or strains will accumulate at such points.

Where risers or lengths of pipe extend through suspended ceilings, they should not be fastened to the ceiling framing members.

A-4-14.4.3.5.2 Exception. The investigation of tension only bracing using materials, connection methods, or both, other than those described in Table 4-14.4.3.5.5 should involve consideration of:

(a) Corrosion resistance.

(b) Prestretching to eliminate permanent construction stretch and to obtain a verifiable modulus of elasticity.

(c) Color coding of each different size cable for field verification.

(d) The capacity of all components of the brace assemblies, including the field connections, to maintain the manufacturer's minimum certified break strength.

(e) Manufacturer's published design data sheets/manual showing product design guidelines, including connection details, load calculation procedures for sizing of braces, and the maximum recommended horizontal load-carrying capacity of the brace assemblies including the associated fasteners as described in Table 4-14.4.3.5.6. The maximum allowable horizontal loads shall not exceed the manufacturer's minimum certified break strength of the brace assemblies, excluding fasteners, after taking a safety factor of 1.5 and then adjusting for the brace angle.

(f) Brace product shipments accompanied by the manufacturer's certification of the minimum break strength, and prestretching and installation instructions.

(g) The manufacturer's literature, including any special tools or precautions required to ensure proper installation.

(h) The installation should include a means to prevent vertical motion due to seismic forces.

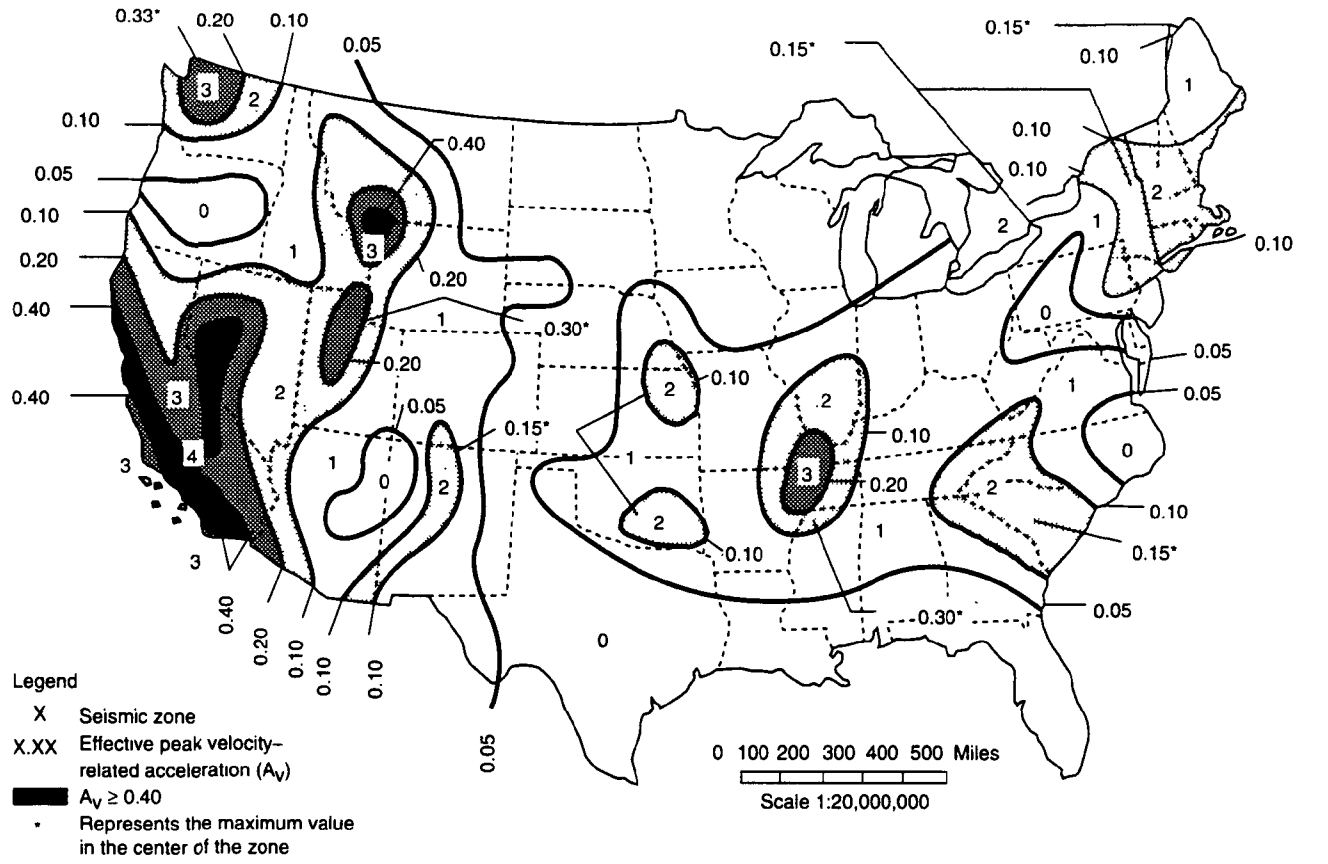
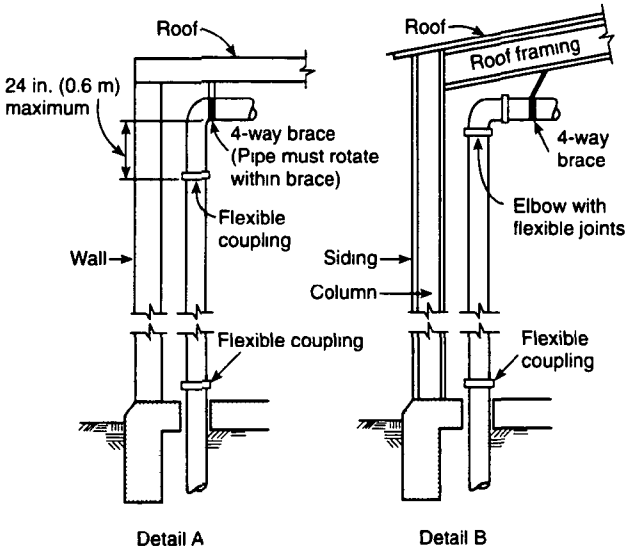


Figure A-4-14.4.3.1(b) Map of seismic zones and effective peak velocity-related acceleration (A_V) for contiguous 48 states. Linear interpolation between contours is acceptable.



Note to Detail A: The four-way brace should be attached above the upper flexible coupling required for the riser and preferably to the roof structure if suitable. The brace should not be attached directly to a plywood or metal deck.

Figure A-4-14.4.3.2(a) Riser details.

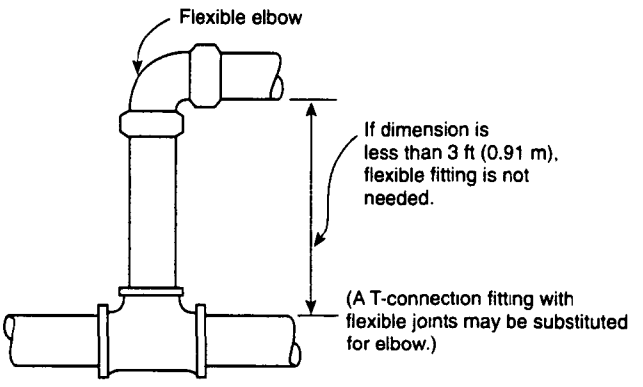


Figure A-4-14.4.3.2(b) Detail at short riser.

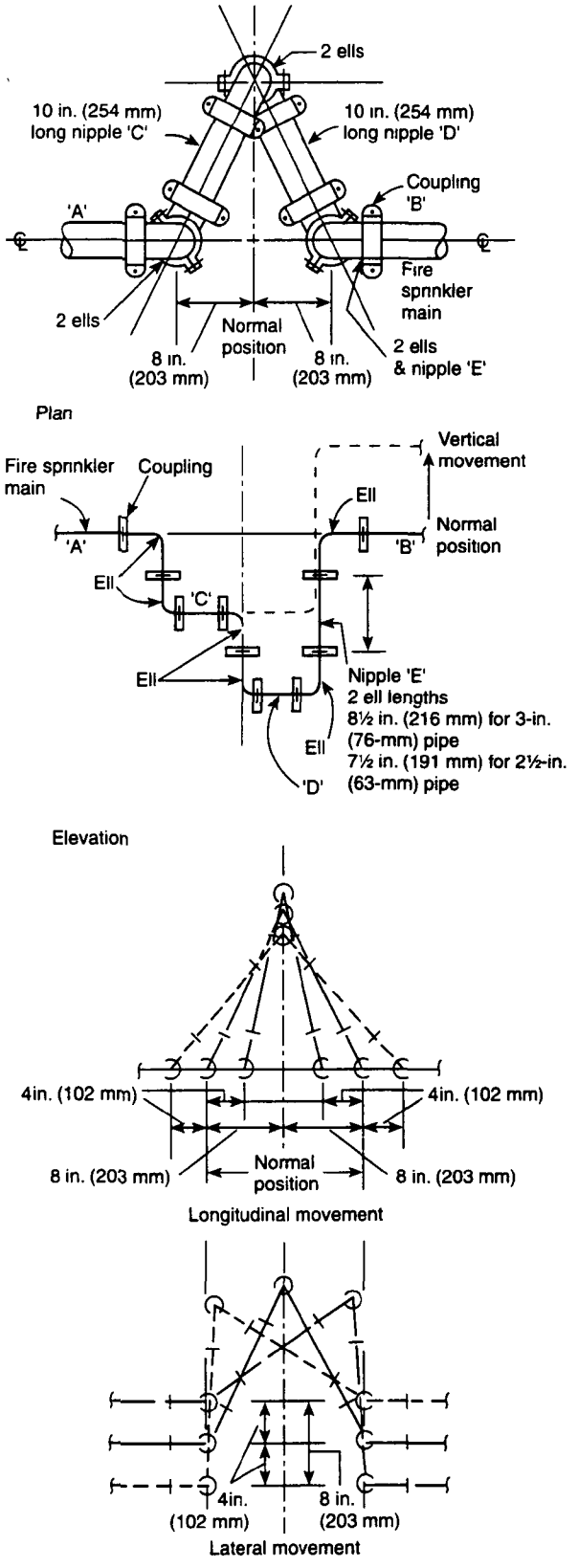


Figure A-4-14.4.3.3 Seismic separation assembly. Illustrates an 8-in. (203-mm) separation crossed by pipes up to 4 in. (102 mm) in nominal diameter. For other separation distances and pipe sizes, lengths and distances should be modified proportionally.

Table A-4-14.4.3.5.2 Exception Specially Listed Tension Only Seismic Bracing

Materials and Dimensions	Standard
Manual for Structural Application of Steel Cables Wire Rope Users Manual of the	AISI
Wire Rope Technical Board	AISI
Mechanical Strength Requirements	ASTM A 603
Breaking Strength Failure Testing	ASTM E 8

A-4-14.4.3.5.3 Location of Sway Bracing. Two-way braces are either longitudinal or lateral depending on their orientation with the axis of the piping. [*See Figures A-4-14.4.3.5.3(a), (b), (c), and (d).*] The simplest form of two-way brace is a piece of steel pipe or angle. Because the brace must act in both compression and tension, it is necessary to size the brace to prevent buckling.

An important aspect of sway bracing is its location. In Building 1 of Figure A-4-14.4.3.5.3(a), the relatively heavy main will pull on the branch lines when shaking occurs. If the branch lines are held rigidly to the roof or floor above, the fittings can fracture due to the induced stresses.

Bracing should be on the main as indicated at Location B. With shaking in the direction of the arrows, the light branch lines will be held at the fittings. Where necessary, a lateral brace or other restraint should be installed to prevent a branch line from striking against building components or equipment.

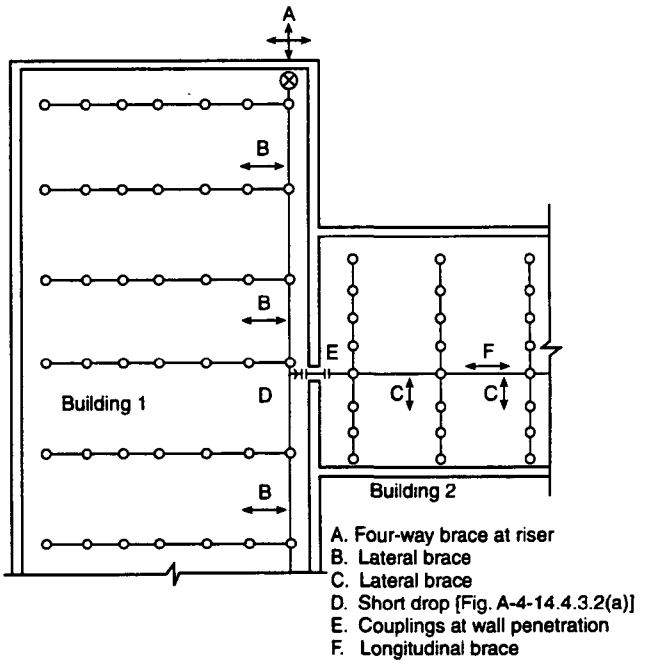


Figure A-4-14.4.3.5.3(a) Earthquake protection for sprinkler piping.

A four-way brace is indicated at Location A. This keeps the riser and main lined up and also prevents the main from shifting.

In Building 1, the branch lines are flexible in a direction parallel to the main, regardless of building movement. The heavy main cannot shift under the roof or floor, and it also steadies the branch lines. While the main is braced, the flexible couplings on the riser allow the sprinkler system to move with the floor or roof above, relative to the floor below.

Figures A-4-14.4.3.5.3(b), (c), and (d) show typical locations of sway bracing.

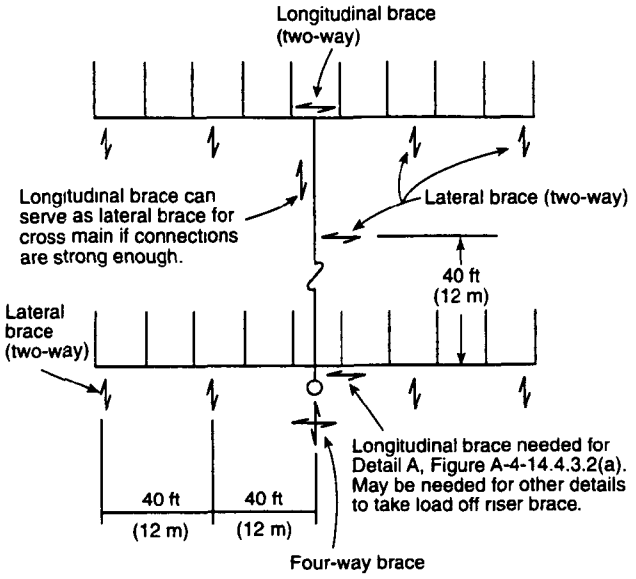


Figure A-4-14.4.3.5.3(b) Typical location of bracing on a tree system.

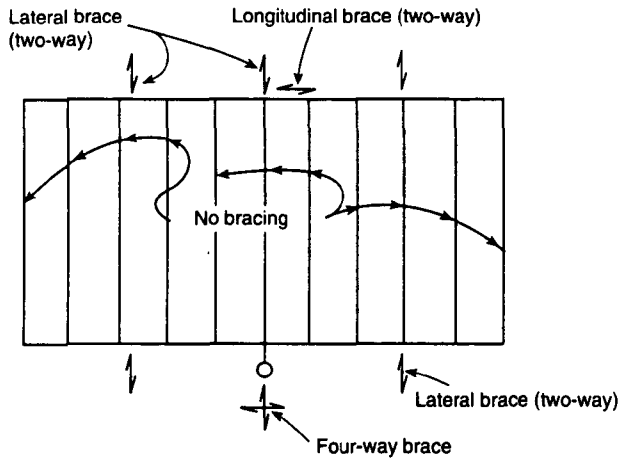


Figure A-4-14.4.3.5.3(c) Typical location of bracing on a gridded system.

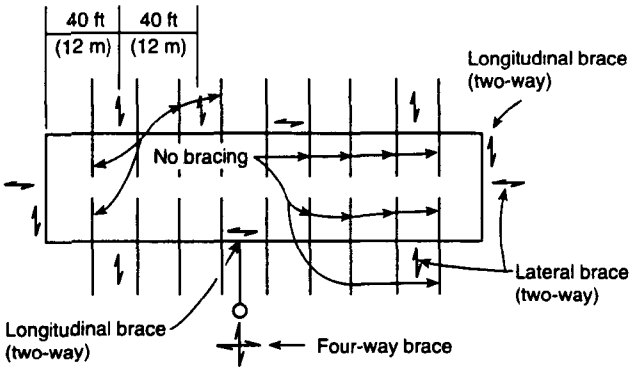


Figure A-4-14.4.3.5.3(d) Typical location of bracing on a looped system.

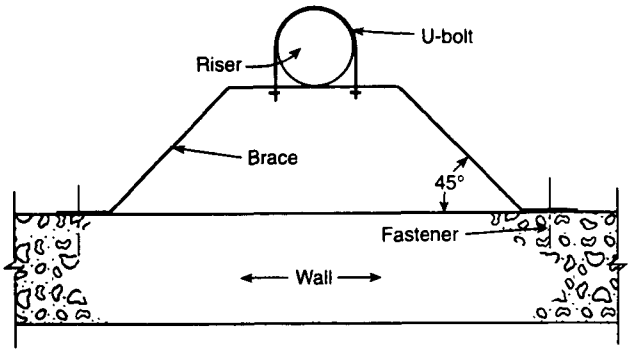


Figure A-4-14.4.3.5.3(e) Detail of four-way brace at riser.

Listed devices permitting connection of braces to both the pipe and the building structure are available and are recommended. However, alternate means of attachment capable of handling the expected loads are acceptable.

Connection of the brace to the pipe can be made with a pipe clamp or U-bolt. One bolt of the pipe clamp can pass through a flattened end of pipe or one leg of an angle. (The other leg and filet of the angle can be cut away.) Pipe rings should be avoided because they result in a loose fit. Once the pipe is able to vibrate within a loose fitting, the bolts in the ring assembly can be fractured.

The brace can be attached to the structural system directly through a leg of an angle or a flattened portion of pipe. Figures A-4-14.4.3.5.3(e) and (f) show acceptable connections. Where dimensions are tight or some play must be allowed, a special fitting can be used. [*See Figure A-4-14.4.3.5.3(g).*] This threads on an end of pipe. Rotation of the flat around the bolt allows play in the angle of the brace without sacrificing snugness.

Some adjustment can be provided in a pipe brace by use of a left-hand/right-hand coupling. For all threaded connections, sight holes or other means should be provided to permit indication that sufficient thread is engaged.

To properly size and space braces, it is necessary to employ the following steps:

(a) Based on the distance of mains from the structural members that will support the braces, choose brace shapes and sizes from Table 4-14.4.3.5.5 such that the maximum slenderness ratios l/r do not exceed 300. The angle of the braces from the vertical should be at least 30 degrees and preferably 45 degrees or more.

(b) Tentatively space lateral braces at 40-ft (12-m) maximum distances along mains and tentatively space longitudinal braces at 80-ft (24-m) maximum distances along mains. Lateral braces should meet the piping at right angles, and longitudinal braces should be aligned with the piping.

(c) Determine the total load tentatively applied to each brace in accordance with the examples shown in Figure A-4-14.4.3.5.3(h) and the following:

1. For the loads on lateral braces on cross mains, add one-half the weight of the branch to one-half the weight of the portion of the cross main within the zone of influence of the brace. [*See examples 1, 3, 6, and 7 in Figure A-4-14.4.3.5.3(h).*]

2. For the loads on longitudinal braces on cross mains, consider only one-half the weight of the cross mains and feed mains within the zone of influence. Branch lines need not be included. (*See examples 2, 4, 5, 7, and 8.*)

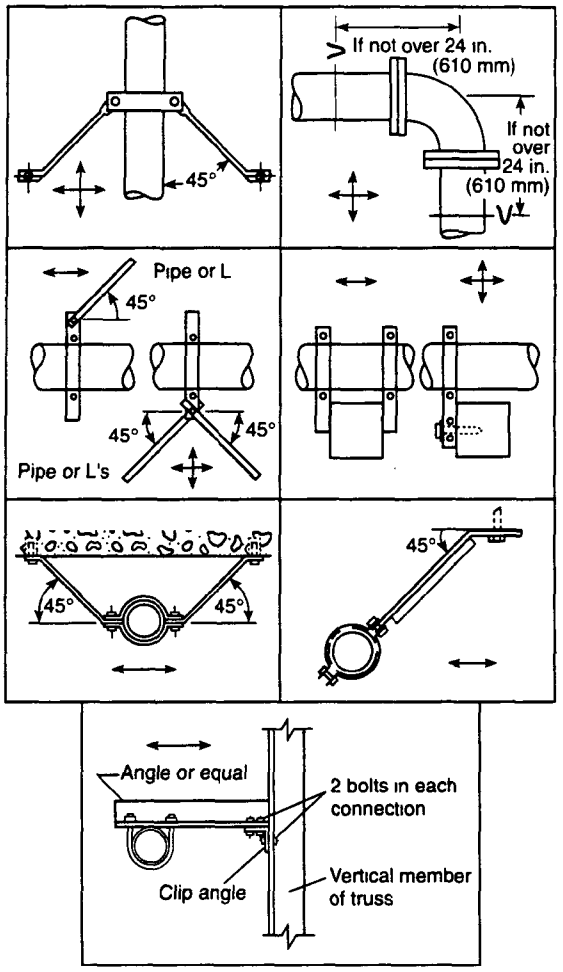


Figure A-4-14.4.3.5.3(f) Acceptable types of sway bracing.

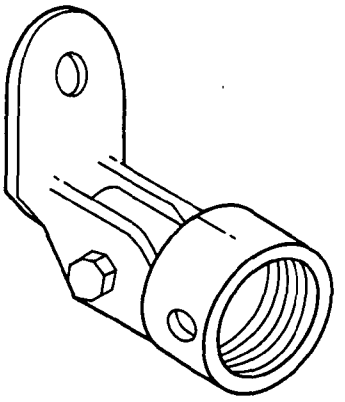


Figure A-4-14.4.3.5.3(g) Special fitting.

3. For the four-way brace at the riser, add the longitudinal and lateral loads within the zone of influence of the brace. [*See examples 2, 3, and 5 in Figure A-4-14.4.3.5.3(h).*]

Use the information on weights of water-filled piping contained within Table A-4-14.4.3.5.3.

(d) If the total expected loads are less than the maximums permitted in Table 4-14.4.3.5.5 for the particular brace and orientation, go on to step (e). If not, add additional braces to reduce the zones of influence of overloaded braces.

(e) Check that fasteners connecting the braces to structural supporting members are adequate to support the expected loads on the braces in accordance with Table 4-14.4.3.5.6. If not, again add additional braces or additional means of support.

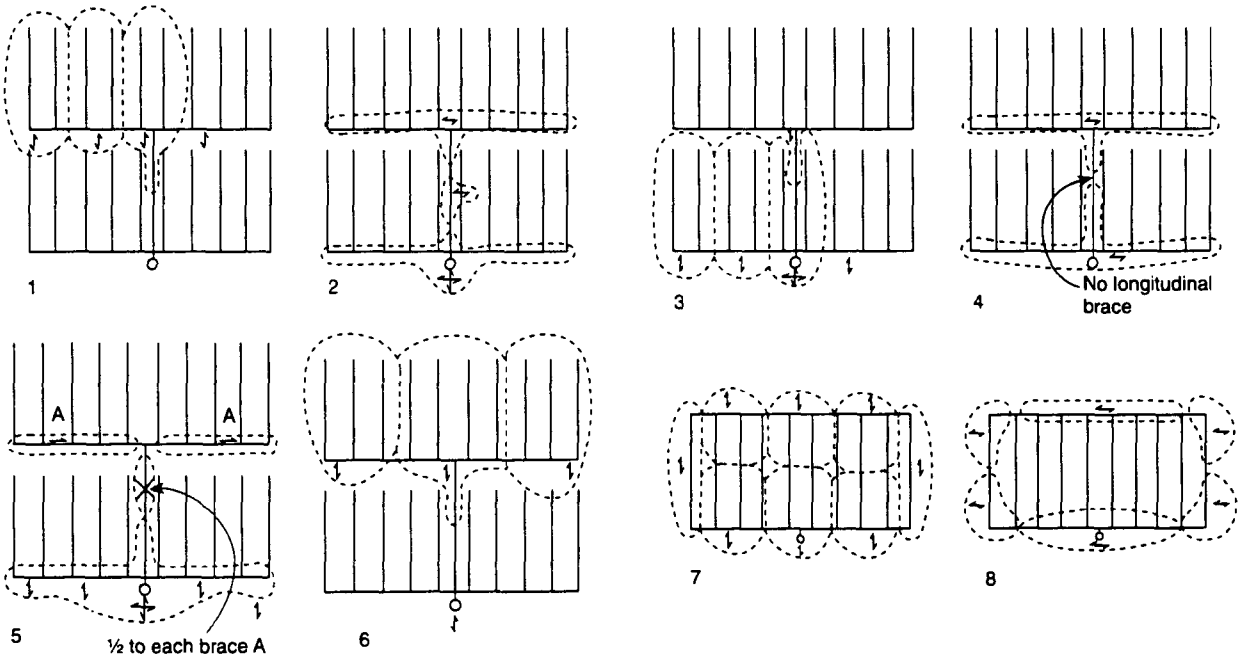


Figure A-4-14.4.3.5.3(h) Examples of load distribution to bracing.

Table A-4-14.4.3.5.3 Piping Weights for Determining Horizontal Load

Schedule 40 Pipe (in.)	Weight of Water-Filled Pipe (lb per ft)	½ Weight of Water-Filled Pipe (lb per ft)
1	2.05	1.03
1¼	2.93	1.47
1½	3.61	1.81
2	5.13	2.57
2½	7.89	3.95
3	10.82	5.41
3½	13.48	6.74
4	16.40	8.20
5	23.47	11.74
6	31.69	15.85
8*	47.70	23.85
Schedule 10 Pipe (in.)		
1	1.81	0.91
1¼	2.52	1.26
1½	3.04	1.52
2	4.22	2.11
2½	5.89	2.95
3	7.94	3.97
3½	9.78	4.89
4	11.78	5.89
5	17.30	8.65
6	23.03	11.52
8	40.08	20.04

For SI Units: 1 in. = 25.4 mm; 1 lb = 0.45 Kg; 1 ft = 0.3048 m.
* Schedule 30.

A-4-14.4.3.5.5 Sway brace members should be continuous. Where necessary, splices in sway bracing members should be designed and constructed to insure that brace integrity is maintained.

A-4-14.4.3.5.6 The criteria in Table 4-14.4.3.5.6 are based upon the use of a shield-type expansion anchor. Use of other anchors in concrete should be in accordance with the listing provisions of the anchor.

Current fasteners for anchoring to concrete are referred to as expansion anchors. Expansion anchors come in two types. Deformation-controlled anchors are set by driving a plug into the expansion port in the anchor or driving the anchor over a plug that expands the end of the anchor into the concrete. Torque-controlled expansion anchors are set by applying a torque to the anchor, usually to a nut, which causes the expansion sleeves to be pressed against the wall of the drilled hole.

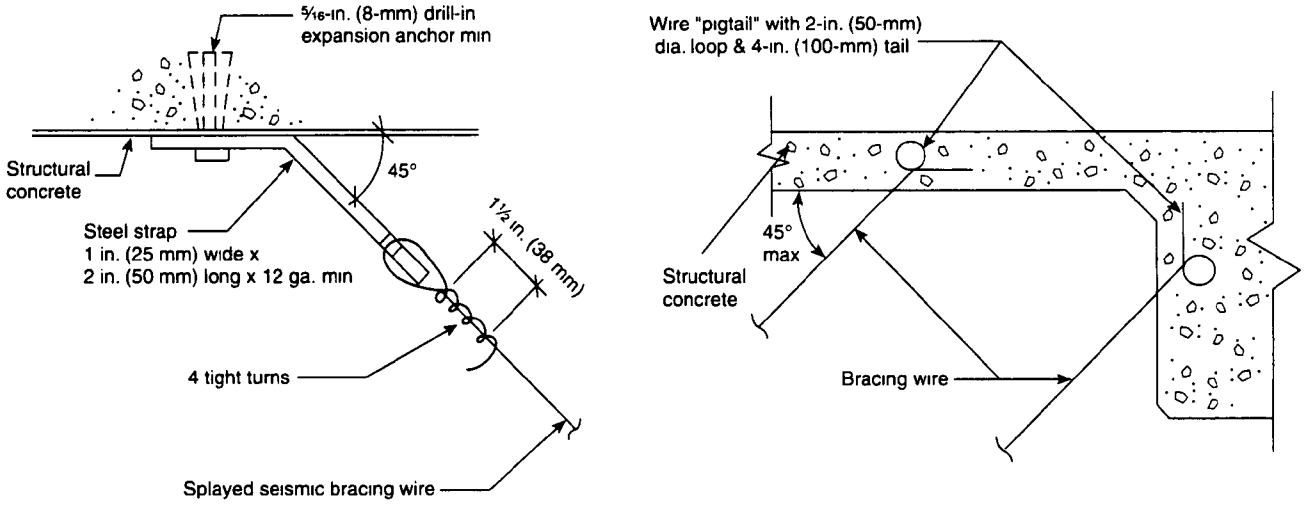
Consideration should be given with respect to the position near the edge of the concrete and to the type of bolts used in conjunction with the anchors.

A-4-14.4.3.5.9 The four-way brace provided at the riser may also provide longitudinal and lateral bracing for adjacent mains.

A-4-14.4.3.5.13 Wires used for piping restraints should be attached to the branch line with two tight turns around the pipe, and fastened with four tight turns within 1½ in. (37.5 mm), and should be attached to the structure in accordance with the details shown in Figures A-4-14.4.3.5.13(a) through (d) or other approved method.

A-4-14.4.3.5.13 Exception No. 2. The splayed seismic wire should be provided as close as possible to the hanger.

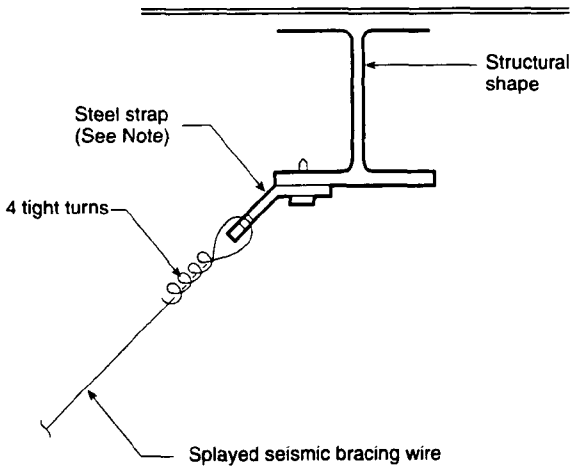
A-4-14.4.3.5.15 Such restraint can be provided by using the splayed seismic brace wire discussed in A-4-14.4.3.5.13 Exception No. 2.



Detail (A) Splayed seismic bracing wire attachment

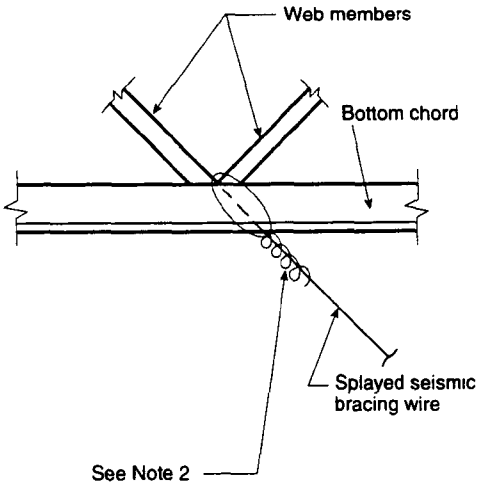
Detail (B)

Figure A-4-14.4.3.5.13(a) Wire attachment to cast-in-place concrete.



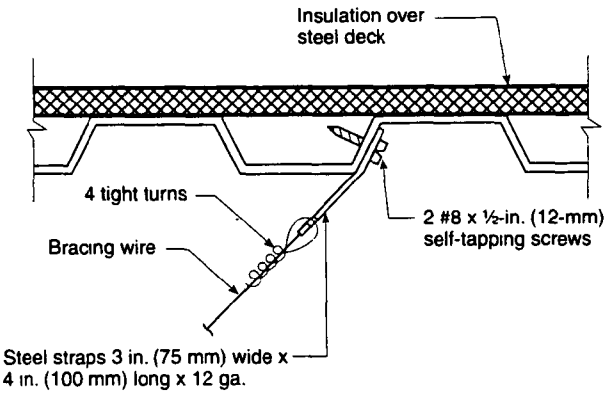
Note: See Figure A-4-14.4.3.5.13(a), Detail (B).

Detail (A) At steel beams



Note 1: Splay wires parallel to joist. Splay wires cannot be perpendicular to joist.
Note 2: See Figure A-4-14.4.3.5.13(a), Details (A) and (B).

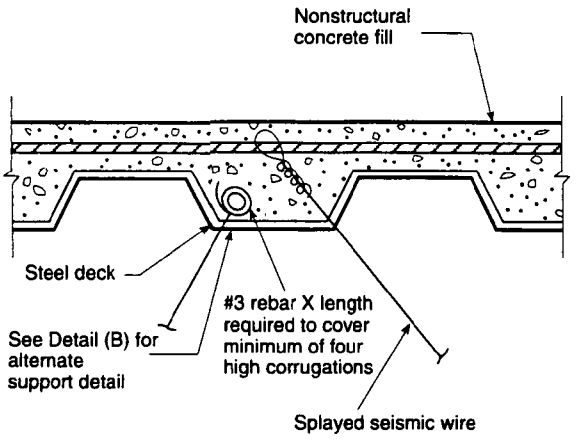
Detail (B) At open web steel joist



Note: If self-tapping screws are used with concrete fill, set screws before placing concrete.

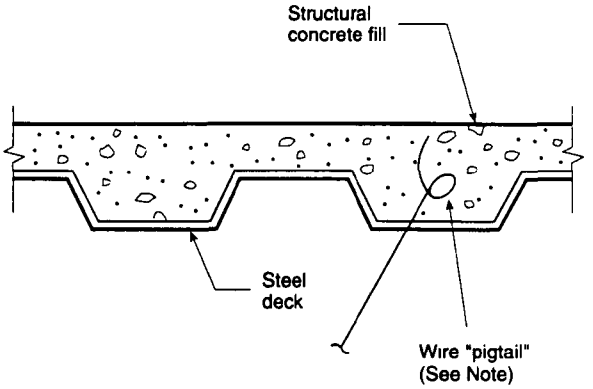
Detail (C) At steel roof deck

Figure A-4-14.4.3.5.13(b) Acceptable details—wire connections to steel framing.



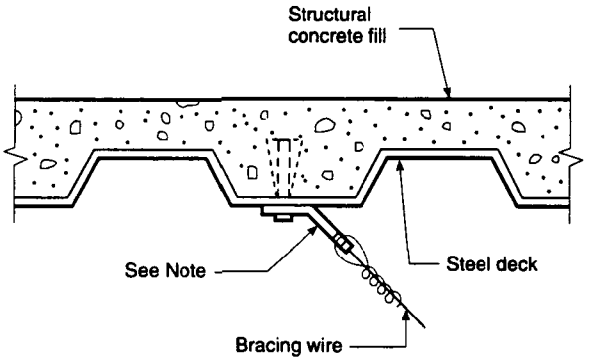
Note: Bracing wire detail similar.

Detail (A) At steel deck with insulating fill



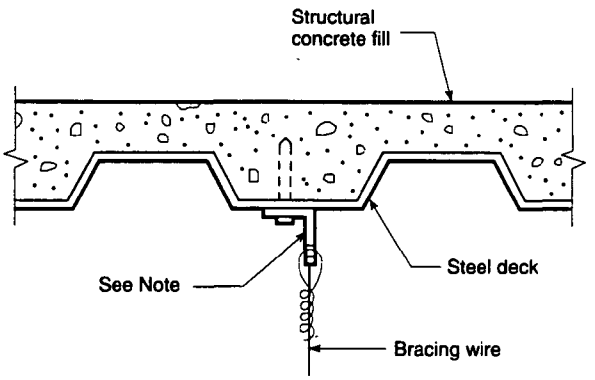
Note: See Figure A-4-14.4.3.5.13(a), Detail (B).

Detail (B) At steel deck with concrete fill



Note: See Figure A-4-14.4.3.5.13(a), Detail (B).

Detail (C) At steel deck with concrete fill

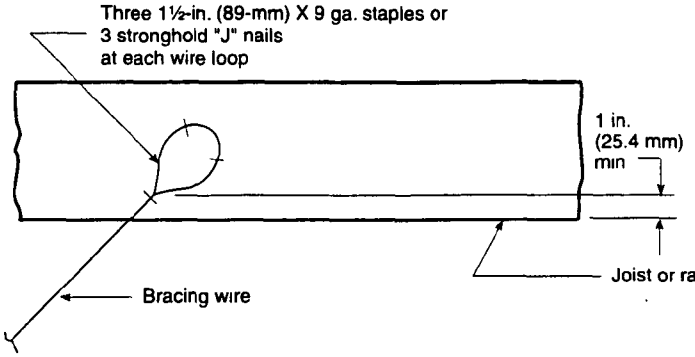


Note: See Figure A-4-14.4.3.5.13(a), Detail (A).

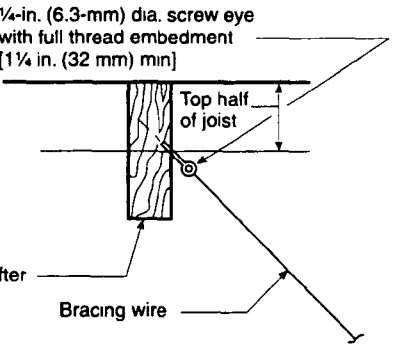
Detail (D) At steel deck with concrete fill

For SI units: 1 in. = 25.4 mm.
Note: If self-tapping screws are used with concrete fill, set screws before placing concrete.

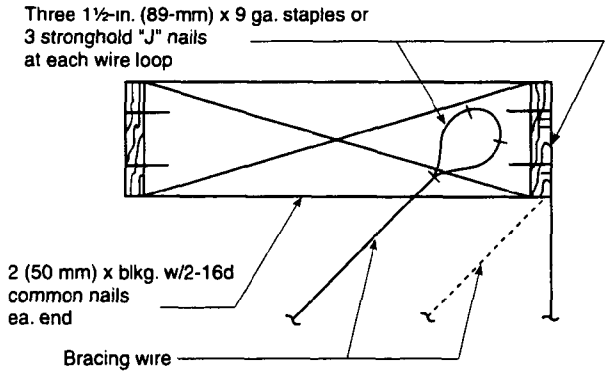
Figure A-4-14.4.3.5.13(c) Acceptable details — wire connections to steel framing.



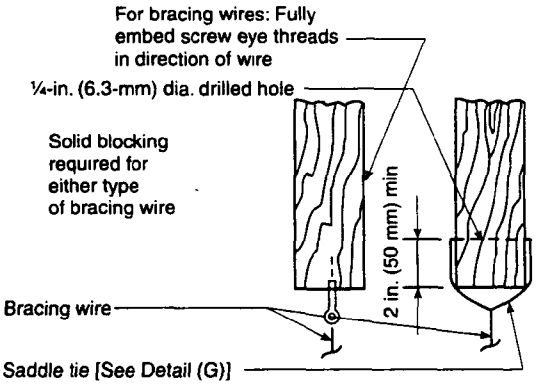
Detail (A) Wood joist or rafter



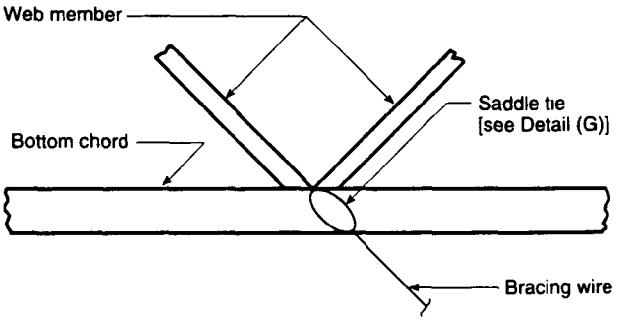
Detail (B) At wood joist or rafter



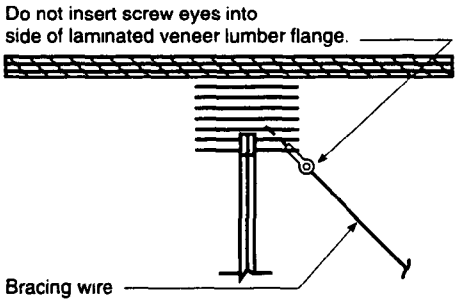
Detail (C) At wood joist or block



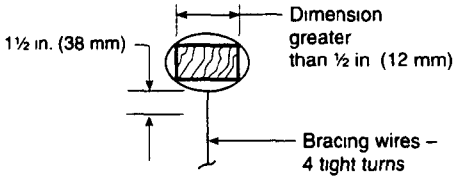
Detail (D) To bottom of joist



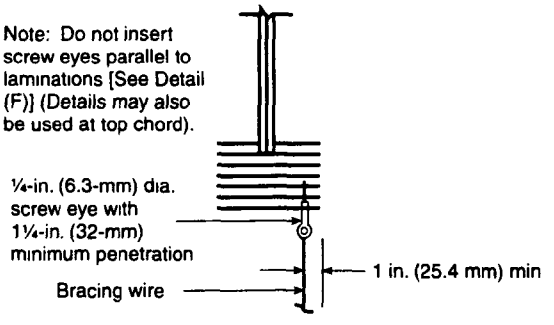
Detail (E) Bracing wire parallel to wood truss



Detail (F) Laminated veneer lumber upper flange



Detail (G) Typ saddle tie



(H) Laminated veneer lumber lower flange

Figure A-4-14.4.3.5.13(d) Acceptable details — wire connections to wood framing.

A-4-15.1.1 Central station, auxiliary, remote station, or proprietary protective signaling systems are a highly desirable supplement to local alarms, especially from a safety to life standpoint. (*See 4-15.1.1.6.*)

Identification Signs. Approved identification signs, as shown in Figure A-4-15.1.1, should be provided for outside alarm devices. The sign should be located near the device in a conspicuous position and should be worded as follows:

"SPRINKLER FIRE ALARM — WHEN BELL RINGS CALL FIRE DEPARTMENT OR POLICE."

Figure A-4-15.1.1 Identification sign.

A-4-15.1.1.5 Water-motor-operated devices should be located as near as practicable to the alarm valve, dry pipe valve, or other waterflow detecting device. The total length of the pipe to these devices should not exceed 75 ft (22.9 m), nor should the water-motor-operated device be located over 20 ft (6.1 m) above the alarm device or dry pipe valve.

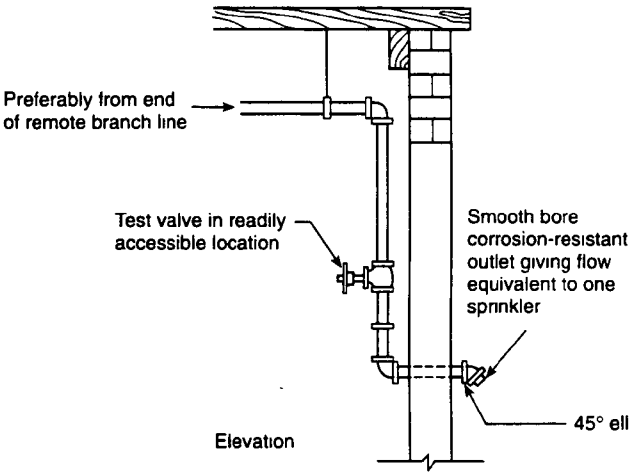
A-4-15.1.1.6 Monitoring should include but not be limited to control valves, building temperatures, fire pump power supplies and running conditions, and water tank levels and temperatures. Pressure supervision should also be provided on pressure tanks.

A-4-15.2 The fire department connection should be located not less than 18 in. (457 mm) and not more than 4 ft (1.22 m) above the level of the adjacent grade or access level.

A-4-15.2.1 Fire department connections should be located and arranged so that hose lines can be readily and conveniently attached without interference from nearby objects including buildings, fences, posts, or other fire department connections. Where a hydrant is not available, other water supply sources such as a natural body of water, a tank, or reservoir should be utilized. The water authority should be consulted when a nonpotable water supply is proposed as a suction source for the fire department.

A-4-15.2.3 The check valve should be located to maximize accessibility and minimize freezing potential.

A-4-15.4.2 This test connection should be in the upper story, and the connection preferably should be piped from the end of the most remote branch line. The discharge should be at a point where it can be readily observed. In locations where it is not practical to terminate the test connection outside the building, the test connection is permitted to terminate into a drain capable of accepting full flow under system pressure. In this event, the test connection should be made using an approved sight test connection containing a smooth bore corrosion-resistant orifice giving a flow equivalent to one sprinkler simulating the least flow from an individual sprinkler in the system. [*See Figures A-4-15.4.2(a) and A-4-15.4.2(b).*] The test valve should be located at an accessible point and preferably not over 7 ft (2.1 m) above the floor. The control valve on the test connection should be located at a point not exposed to freezing.



Note: Not less than 4 ft (1.2 m) of exposed test pipe in warm room beyond valve where pipe extends through wall to outside.

Figure A-4-15.4.2(a) System test connection on wet pipe system.

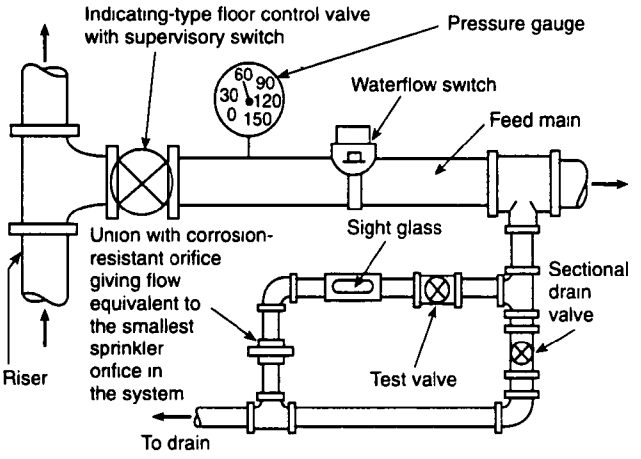
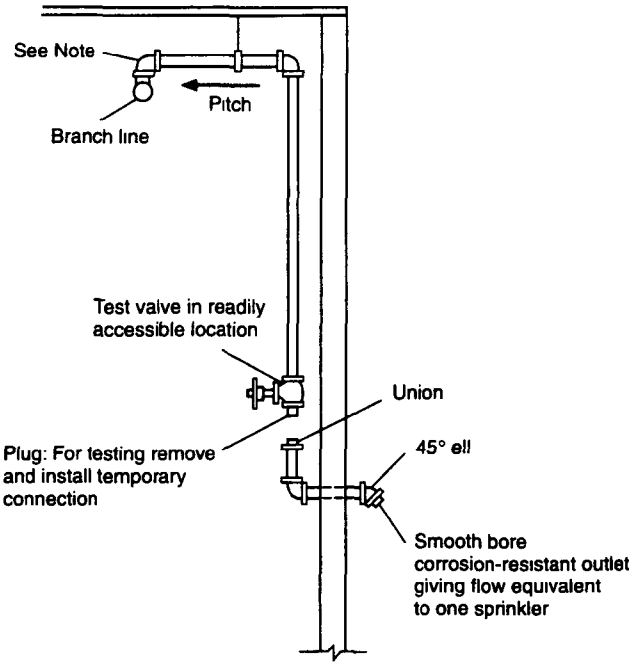


Figure A-4-15.4.2(b) Floor control valve.

A-4-15.4.3 See Figure A-4-15.4.3.

A-4-15.4.6.2 The full flow test of the backflow prevention valve can be performed with a test header or other connection downstream of the valve. A bypass around the check valve in the fire department connector line with a control valve in the normally closed position can be an acceptable arrangement. When flow to a visible drain cannot be accomplished, closed loop flow can be acceptable if a flow meter or site glass is incorporated into the system to ensure flow.

A-5-2.1.3 When renovations occur in an existing building and no changes are made in the existing sprinkler system, it is not intended to require the replacement of existing standard sprinklers with quick-response sprinklers.



Note: To minimize condensation of water in the drop to the test connection, provide a nipple-up off of the branch line.

Figure A-4-15.4.3 System test connection on dry pipe system.

A-5-2.2.3 The additional pressure that is needed at the level of the water supply to account for sprinkler elevation is 0.433 psi per ft (9.8 kPa/m) of elevation above the water supply. When backflow prevention valves are installed on pipe schedule systems, the friction losses of the device must be accounted for when determining acceptable residual pressure at the top level of sprinklers. The friction loss (in psi) should be added to the elevation loss and the residual pressure at the top row of sprinklers to determine the total pressure needed at the water supply.

A-5-2.3.1.1 Appropriate area/density, other design criteria, and water supply requirements should be based on scientifically based engineering analyses that may include submitted fire testing, calculations, or results from appropriate computational models.

A-5-2.3.1.3(b) This section is included to compensate for possible delay in operation of sprinklers from fires in combustible concealed spaces found in wood frame, brick veneer, and ordinary construction.

A-5-2.3.1.3(b) Exception No. 2. Composite wood joists are not considered solid wood joists for the purposes of this section. Their web members are too thin and easily penetrated to adequately compartment a fire in an unsprinklered space.

A-5-2.3.1.3(b) Exception No. 3. This exception is intended to apply only when the exposed materials in the space are limited combustible materials or fire retardant treated wood as defined in NFPA 703, *Standard for Fire Retardant Impregnated Wood and Fire Retardant Coatings for Building Materials.*

A-5-2.3.2.3 Exception No. 1. It is not the intent of this exception to restrict the use of quick-response sprinklers in Extra Hazard Occupancies, but rather to indicate that the areas and densities shown in Figure 5-2.3 might not be appropriate for use with quick-response sprinklers in those environments due to a concern with water supplies.

A-5-2.3.3.1 This section allows for calculation of the sprinklers in the largest room, so long as the calculation produces the greatest hydraulic demand among selection of rooms and communicating spaces. For example, in a case where the largest room has 4 sprinklers and a smaller room has 2 sprinklers but communicates through unprotected openings with 3 other rooms, each having 2 sprinklers, the smaller room and group of communicating spaces should also be calculated.

Corridors are rooms and should be considered as such.

Walls can terminate at a substantial suspended ceiling and need not be extended to a rated floor slab above for this section to be applied.

A-5-3.2.1 The protection area for residential sprinklers with extended coverage areas is defined in the listing of the sprinkler as a maximum square or rectangular area. Listing information is presented in even 2-ft (.61-m) increments from 12 ft to 20 ft (3.6 m to 6.1 m) for residential sprinklers. When a sprinkler is selected for an application, its area of coverage must be equal to or greater than both the length and width of the hazard area. For example, if the hazard to be protected is a room 14 ft 6 in. (4.3 m) wide and 20 ft 8 in. (6.2 m) long, a sprinkler that is listed to protect an area of 16 ft × 22 ft (4.9 m x 6.8 m) must be selected. The flow used in the calculations is then selected as the flow required by the listing for the selected coverage. (*See Figure A-5-3.2.1.*)

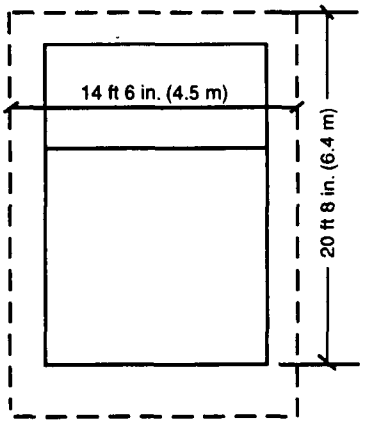


Figure A-5-3.2.1 Determination of protection area of coverage for residential sprinklers.

A-5-3.2.2 See Figure A-5-3.2.2.

A-5-3.4 See Table A-5-3.4.

A-5-3.5 See Table A-5-3.5.

A-5-3.5.1.1 While these sprinklers are intended primarily for use in high-pile storage situations, this section permits their use and extension into adjacent portions of an occupancy that might have a lesser classification.

A-5-3.6.1 If the system is a deluge type, then all the sprinklers need to be calculated even if they are located on different building faces.

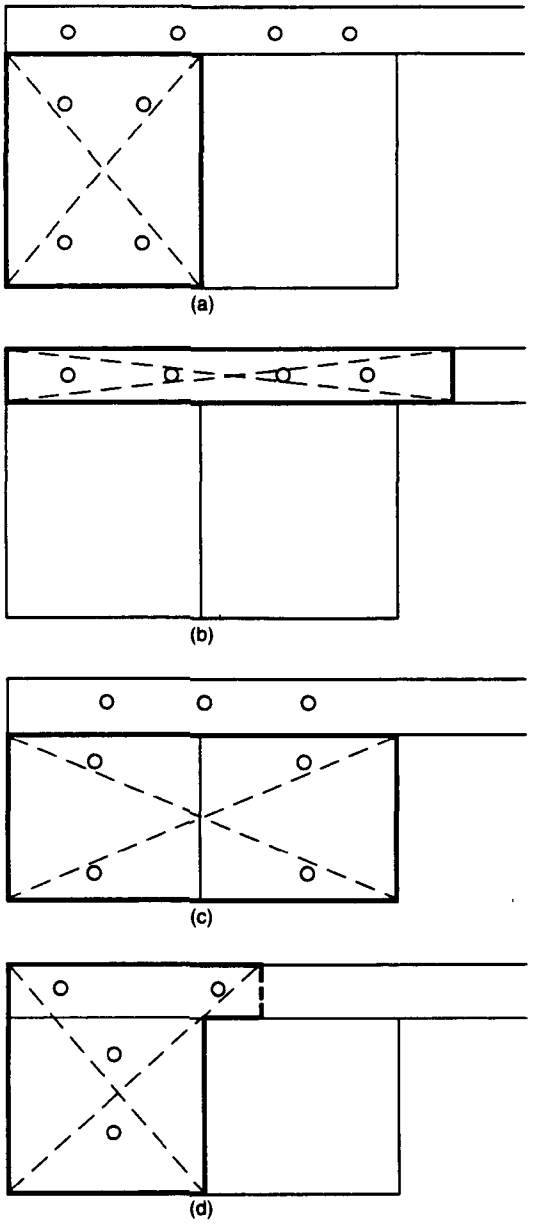


Figure A-5-3.2.2 Examples of design area for dwelling units. Calculate area indicated by heavy outline and X. Circle indicates sprinklers.

A-6-1 Preliminary layouts should be submitted for review to the authority having jurisdiction before any equipment is installed or remodeled in order to avoid error or subsequent misunderstanding. (*See Figure A-6-1.*) Any material deviation from approved plans will require permission of the authority having jurisdiction.

Preliminary layouts should show as much of the following information as is required to provide a clear representation of the system, hazard, and occupancy:

(a) Name of owner and occupant.

(b) Location, including street address.

(c) Point of compass.

(d) Construction and occupancy of each building.

NOTE: Data on special hazards should be submitted as they may require special rulings.

(e) Building height in feet.

(f) If it is proposed to use a city main as a supply, whether the main is dead-end or circulating, size of main and pressure in psi, and, if dead-end, direction and distance to nearest circulating main.

(g) Distance from nearest pumping station or reservoir.

(h) In cases where reliable, up-to-date information is not available, a waterflow test of the city main should be conducted in accordance with A-7-2.1. The preliminary plans should specify the person who conducted the test, date and time, the location of the hydrants where flow was taken, and where static and residual pressure readings were recorded; the size of main supplying these hydrants, and the results of the test, giving size and number of open hydrant butts flowed; also, data covering minimum pressure in the connection with the city main should be included.

(i) Data covering waterworks systems in small towns in order to expedite the review of plans.

(j) Fire walls, fire doors, unprotected window openings, large unprotected floor openings, and blind spaces.

(k) Distance to and construction and occupancy of exposing buildings—e.g., lumber yards, brick mercantiles, fire-resistive office buildings, etc.

(l) Spacing of sprinklers, number of sprinklers in each story or fire area and total number of sprinklers, number of sprinklers on each riser and on each system by floors, total area protected by each system on each floor, total number of sprinklers on each dry pipe system or preaction or deluge system and if extension to present equipment, sprinklers already installed.

(m) Capacities of dry pipe systems with bulk pipe included, see Table A-3-2.3; and, if an extension is made to an existing dry pipe system, the total capacity of the existing and also the extended portion of the system.

(n) Weight or class, size, and material of any proposed underground pipe.

(o) Whether property is located in a flood or earthquake area requiring consideration in the design of sprinkler system.

(p) Name and address of party submitting the layout.

A-6-1.1 See Figure A-6-1.1.

A-6-1.1.3 See Figures A-6-1.1.3(a) and (b).

A-6-2.2 See Figures A-6-2.2(a) through (d).

A-6-2.3 See Figure A-6-2.3.

A-6-2.3(o) See Figure A-6-2.3(o).

A-6-2.4 See Figure A-6-2.4.

A-6-4.1 When additional sprinkler piping is added to an existing system, the existing piping does not have to be increased in size to compensate for the additional sprinklers, provided the new work is calculated and the calculations include that portion of the existing system as may be required to carry water to the new work.

A-6-4.4 See Figure A-6-4.4.

A-6-4.4.1 See Figures A-6-4.4.1(a) and (b).

A-6-4.4.2 See Figure A-6-4.4.2.

A-6-4.4.3(a) See Figure A-6-4.4.3(a).

Table A-5-3.4 Large-Drop Sprinkler Data

Pressure and Number of Design Sprinklers Required for Various Hazards for Large-Drop Sprinklers

Hazard	Type of System	Minimum Operating Pressure,[1] psi (bar) 25 (1.7)	50 (3.4)	75 (5.2)	Hose Stream Demand gal/min (dm³/min)	Water Supply Duration, hr
		Number Design Sprinklers				
Palletized[2] Storage						
Class I, II, and III commodities up to 25 ft (7.6 m) with maximum 10 ft (3.0 m) clearance to ceiling	Wet	15	Note 4	Note 4	500 (1900)	2
	Dry	25	Note 4	Note 4		
Class IV commodities up to 20 ft (6.1 m) with maximum 10 ft (3.0 m) clearance to ceiling	Wet	20	15	Note 4		
	Dry	Does not apply	Does not apply	Does not apply	500 (1900)	2
Unexpanded plastics up to 20 ft (6.1 m) with maximum 10 ft (3.0 m) clearance to ceiling	Wet	25	15	Note 4		
	Dry	Does not apply	Does not apply	Does not apply	500 (1900)	2
Expanded plastics commodities up to 18 ft (5.5 m) with maximum 8 ft (2.4 m) clearance to ceiling	Wet	Does not apply	15	Note 4	500 (1900)	2
	Dry	Does not apply	Does not apply	Does not apply		
Idle wood pallets up to 20 ft (6.1 m) with maximum 10 ft (3.0 m) clearance to ceiling	Wet	15	Note 4	Note 4		
	Dry	25	Note 4	Note 4	500 (1900)	1½
Solid Piled[2] Storage						
Class I, II, and III commodities up to 20 ft (6.1 m) with maximum 10 ft (3.0 m) clearance to ceiling	Wet	15	Note 4	Note 4		
	Dry	25	Note 4	Note 4	500 (1900)	1½
Class IV commodities and unexpanded plastics up to 20 ft (6.1 m) with maximum 10 ft (3.0 m) clearance to ceiling	Wet	Does not apply	15	Note 4		
	Dry	Does not apply	Does not apply	Does not apply	500 (1900)	1½
Double-Row Rack Storage[3] with Minimum 5.5 ft (1.7 m) Aisle Width and Multiple-Row Rack Storage with Minimum 8.0 ft (2.5 m) Aisle Width						
Class I and II commodities up to 25 ft (7.6 m) with maximum 5 ft (1.5 m) clearance to ceiling	Wet	20	Note 4	Note 4		
	Dry	30	Note 4	Note 4	500 (1900)	1½
Class I and II commodities up to 30 ft (9.2 m) with maximum 5 ft (1.5 m) clearance to ceiling	Wet	20 plus one level of in-rack sprinklers[5]	Note 4	Note 4		
	Dry	30 plus one level of in-rack sprinklers[5]	Note 4	Note 4	500 (1900)	1½
Class I, II, and III commodities up to 20 ft (6.1 m) with maximum 10 ft (3.0 m) clearance to ceiling	Wet	15	Note 4	Note 4		
	Dry	25	Note 4	Note 4	500 (1900)	1½
Class I, II, and III commodities up to 25 ft (7.6 m) with maximum 10 ft (3.0 m) clearance to ceiling	Wet	15 plus one level of in-rack sprinklers[5]	Note 4	Note 4		1½
	Dry	25 plus one level of in-rack sprinklers[5]	Note 4	Note 4	500 (1900)	
Class IV commodities up to 20 ft (6.1 m) with maximum 10 ft (3.0 m) clearance to ceiling	Wet	Does not apply	20	15		
	Dry	Does not apply	Does not apply	Does not apply	500 (1900)	2
Class IV commodities up to 25 ft (7.6 m) with maximum 10 ft clearance to ceiling	Wet	Does not apply	20 plus one level of in-rack sprinklers[5]	15 plus one level of in-rack sprinklers[5]	500 (1900)	2
	Dry	Does not apply	Does not apply	Does not apply		

Table A-5-3.4 (cont.)

Hazard	Type of System	Minimum Operating Pressure,[1] psi (bar) 25 (1.7)	50 (3.4)	75 (5.2)	Hose Stream Demand gal/min (dm³/min)	Water Supply Duration, hr
Unexpanded plastics up to 20 ft (6.1 m) with maximum 10 ft (3.0 m) clearance to ceiling	Wet	Does not apply	30	20	500 (1900)	2
	Dry	Does not apply	Does not apply	Does not apply		
Unexpanded plastics up to 25 ft (7.6 m) with maximum 10 ft (3.0 m) clearance to ceiling	Wet	Does not apply	30 plus one level of in-rack sprinklers[4]	20 plus one level of in-rack sprinklers[4]	500 (1900)	2
	Dry	Does not apply	Does not apply	Does not apply		
Class IV commodities and unexpanded plastics up to 20 ft (6.1 m) with maximum 5 ft (1.5 m) clearance to ceiling	Wet	Does not apply	15	Note 4	500 (1900)	2
	Dry	Does not apply	Does not apply	Does not apply		
Class IV commodities and unexpanded plastics up to 25 ft (7.6 m) with maximum 5 ft (1.5 m) clearance to ceiling	Wet	Does not apply	15 plus one level of in-rack sprinklers[4]	Note 4	500 (1900)	2
	Dry	Does not apply	Does not apply	Does not apply		
On-end Storage of Roll Paper[2]						
Heavyweight paper in closed array, banded in open array, or banded or unbanded in a standard array, up to 26 ft (7.9 m) with maximum 34 ft (10.4 m) clearance to ceiling	Wet	Does not apply	15	Note 4		
	Dry	Does not apply	Does not apply	Does not apply	0 (Note 6)	4 (Note 6)
Any grade of paper, except lightweight paper with stacks in closed array, or banded or unbanded in a standard array, up to 20 ft (6.1 m) with maximum 10 ft (3.0 m) clearance to ceiling	Wet	Does not apply	15	Note 4		
	Dry	Does not apply	25	Note 4	0 (Note 6)	4 (Note 6)
Medium weight paper completely wrapped (sides and ends) in one or more layers of heavyweight paper, or lightweight paper in two or more layers of heavyweight paper, with closed array, banded in open array, or unbanded in a standard array, up to 26 ft (7.9 m) with maximum 34 ft (10.4 m) clearance to ceiling	Wet	Does not apply	15	Note 4	Note 6	Note 6
	Dry	Does not apply	Does not apply	Does not apply	Does not apply	Does not apply
Record Storage						
Paper records and/or computer tapes in multitier steel shelving up to 5 ft (1.5 m) in width and with aisles 30 in. (76 cm) or wider, without catwalks in the aisles, up to 15 ft (4.6 m) with maximum 5 ft (1.5 m) clearance to ceiling	Wet	15	Note 4	Note 4	500 (1900)	1½
	Dry	25	Note 4	Note 4		
Same as above, but with catwalks of expanded metal or metal grid with minimum 50 percent open area in the aisles	Wet	Does not apply	15	Note 4	500 (1900)	1½
	Dry	Does not apply	15	Note 4		

For SI Units. 1 ft = 0 3048 m; 1 psi = 0 0689 bar.

NOTES:

1 Open wood joist construction. Fully firestop each joist channel to its full depth at intervals not exceeding 20 ft (6.2 m). In unfirestopped open wood joist construction, or if firestops are installed at intervals exceeding 20 ft (6.1 m), increase the minimum operating pressures of Table A-5-3.4 by 40 percent

2. See NFPA 231, *Standard for General Storage*.

3. With rack storage, use conventional wood pallets only; no slave pallets.

4. The high pressure may be used, but the required number of design sprinklers may not be reduced from that required for the lower pressure.

5 Install in-rack sprinklers in accordance with NFPA 231C, *Standard for Rack Storage*.

6 Hose stream demands and water supply durations may vary for roll paper storage depending on local conditions. See NFPA 231F, *Standard for the Storage of Roll Paper*

Table A-5-3.5 ESFR Sprinkler Data

Type of Storage	Commodity	Maximum Ht. of Storage in ft	Maximum Ht. of Building in ft (Note 1)	Nominal K Factor	Sprinkler Design Pressure in psi	Commodity Limitation
Palletized and solid pile storage and single, double, and multiple row rack storage (no open top containers or solid shelves)	Cartoned unexpanded plastic; cartoned, expanded plastic; uncartoned, unexpanded plastic; and Class I, II, III, or IV commodities encapsulated or unencapsulated	25 (7.6 m)	30 (9.1 m)	13.5–14.5	50 (3.4 bars)	
	Cartoned, unexpanded plastic; and Class I, II, III, or IV commodities, encapsulated or unencapsulated	35 (10.7 m)	40 (12.2 m)	13.5–14.5	75 (5.2 bars)	Note 2
		20 (6.1 m)	25 (7.6 m)	11.0–11.5	50 (3.4 bars)	
Roll paper on end, open/standard or closed array, banded or unbanded	Heavy weight or medium weight	20 (6.1 m)	30 (9.1 m)	13.5–14.5	50 (3.4 bars)	
Aerosol storage	See NFPA 30B					

For SI Units: 1 ft = 0.3048 m.

NOTE 1: Maximum building height is to be measured to the underside of the roof deck or ceiling.
NOTE 2: Only ESFR sprinklers specifically listed for 40-ft (12.2-m) high buildings should be used in buildings higher than 30 ft (9.1 m) up to 40 ft (12.2 m).

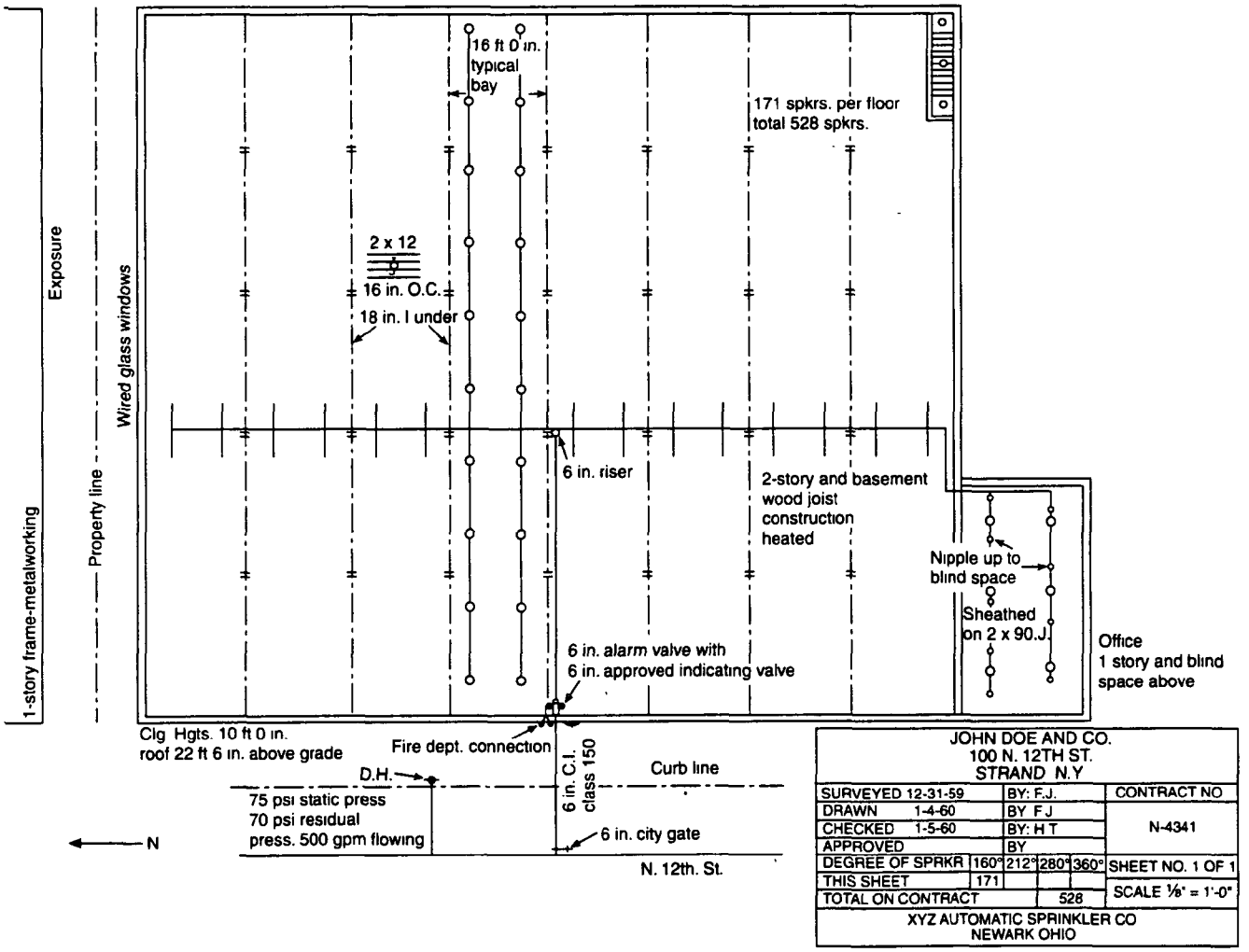
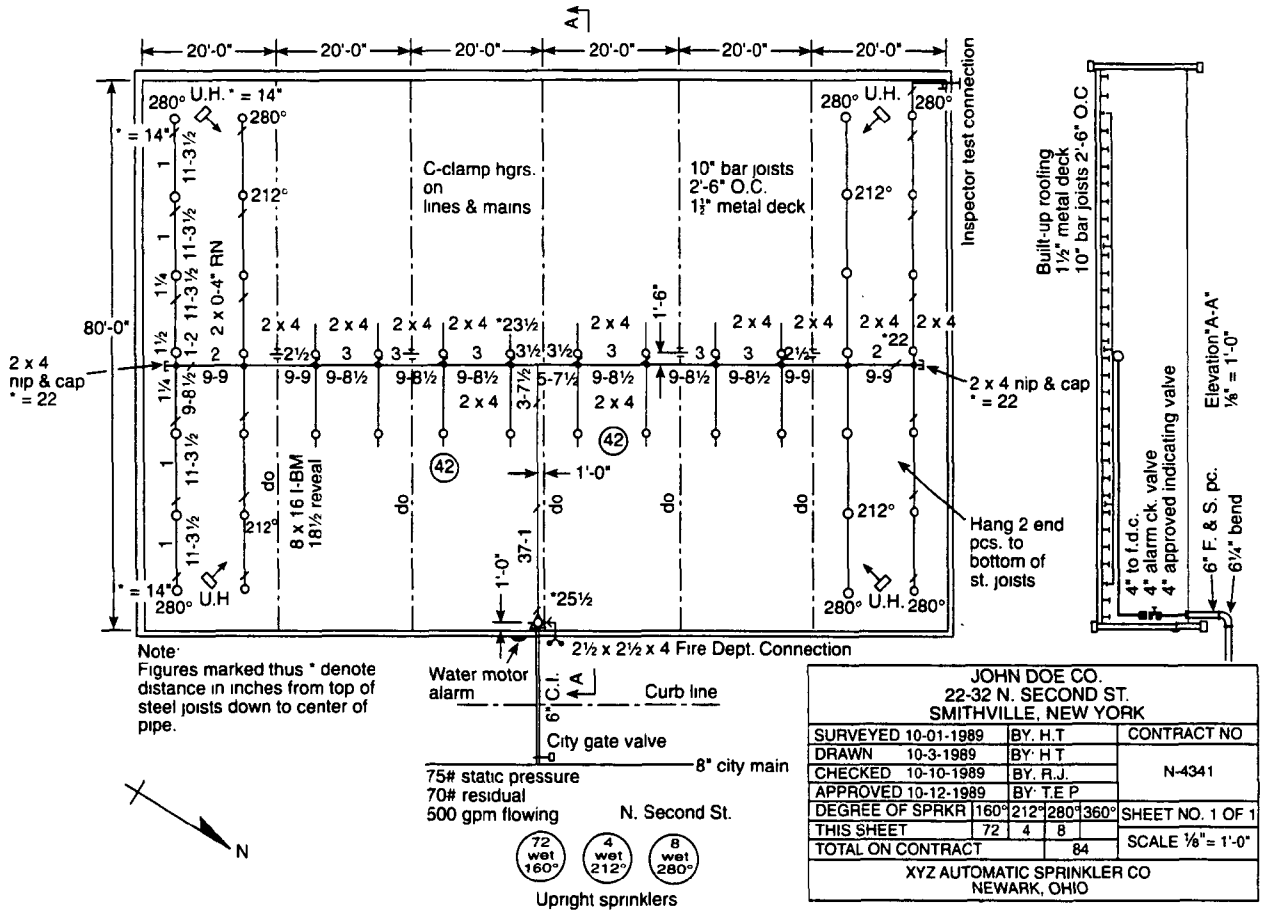


Figure A-6-1 Typical preliminary plan.



Note:
Figures marked thus * denote distance in inches from top of steel joists down to center of pipe.

JOHN DOE CO. 22-32 N. SECOND ST. SMITHVILLE, NEW YORK					
SURVEYED 10-01-1989	BY. H.T				CONTRACT NO
DRAWN 10-3-1989	BY. H T				N-4341
CHECKED 10-10-1989	BY. R.J.				
APPROVED 10-12-1989	BY. T.E P				
DEGREE OF SPRKR	160°	212°	280°	360°	SHEET NO. 1 OF 1
THIS SHEET	72	4	8		SCALE ⅛" = 1'-0"
TOTAL ON CONTRACT			84		
XYZ AUTOMATIC SPRINKLER CO NEWARK, OHIO					

Figure A-6-1.1 Typical working plans.

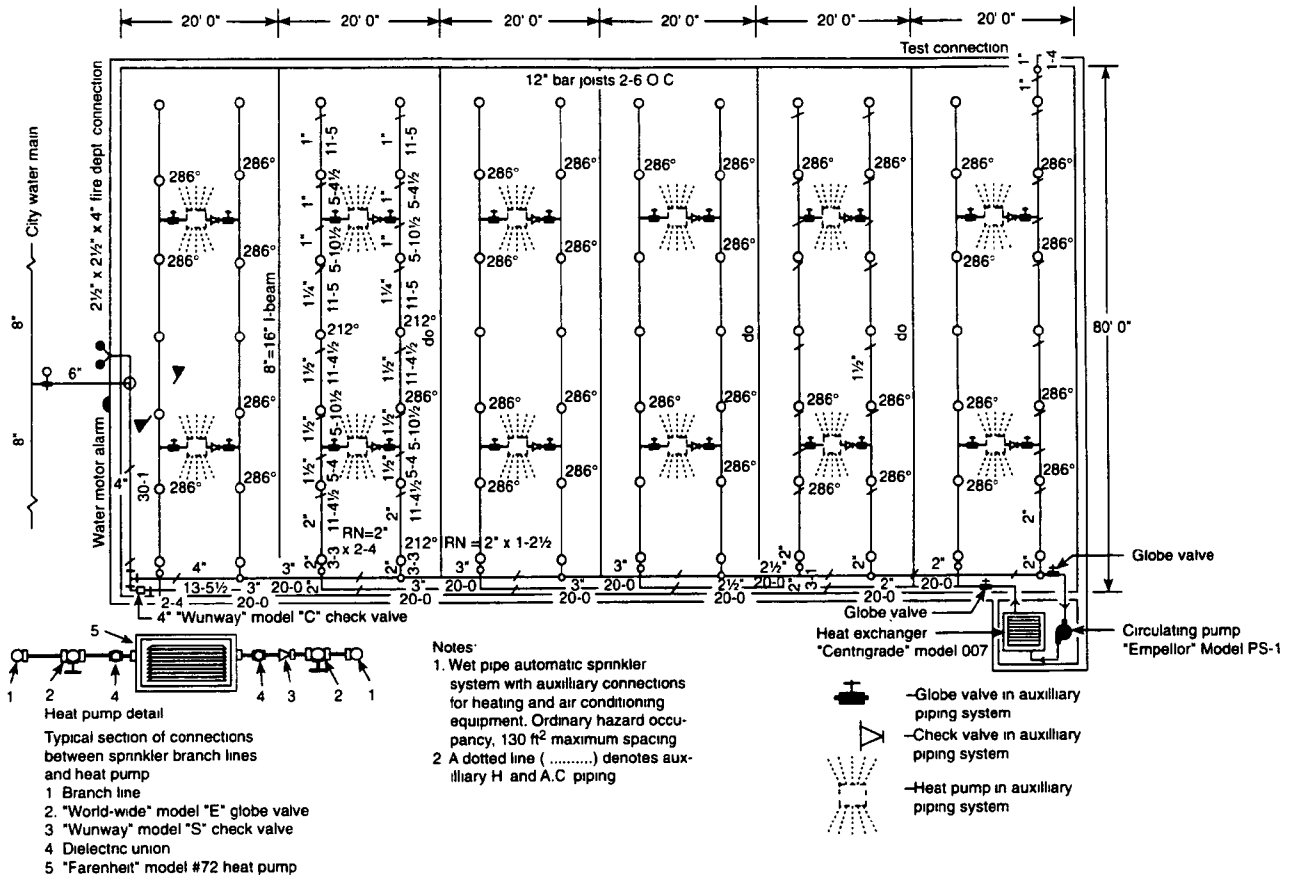


Figure A-6-1.1.3(a) Working plans for circulating closed-loop systems.

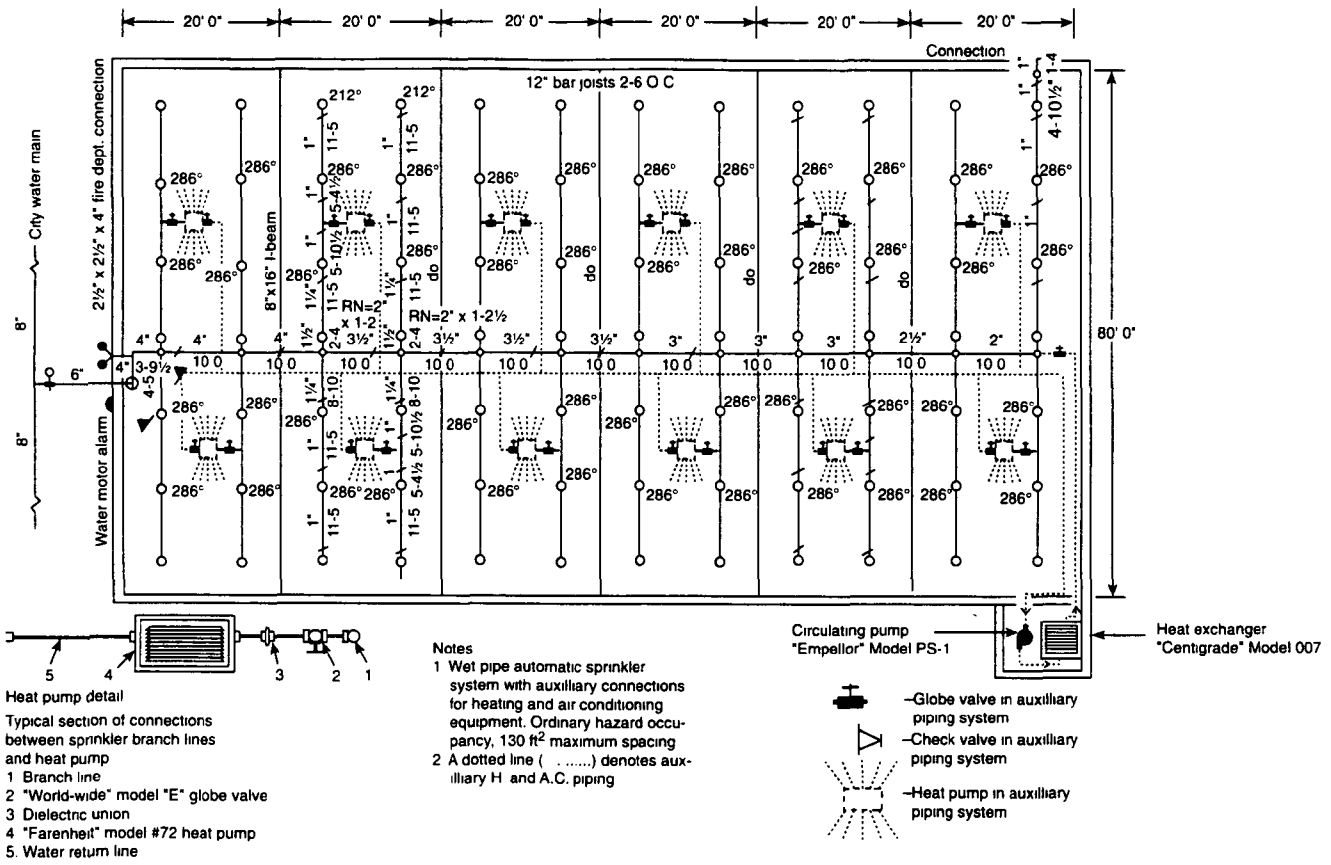


Figure A-6-1.1.3(b) Working plans for circulating closed-loop systems.

Hydraulic Calculations

for

ABC Company, Employee Garage

7499 Franklin Road

Charleston, SC

Contract No. 4001

Date 1-7-91

Design data:

Occupancy Classification ORD. GR. 1

Density 0.15 GPM/ft²

Area of Application 1500 ft²

Coverage per Sprinkler 130 ft²

Special Sprinklers —

No. of Sprinklers Calculated 12

In-rack Demand —

Hose streams 250 GPM

Total Water Required 510.4 GPM
Including hose streams

Name of Contractor _____

Name of Designer _____

Address _____

Authority Having Jurisdiction _____

Figure A-6-2.2(a) Summary sheet.

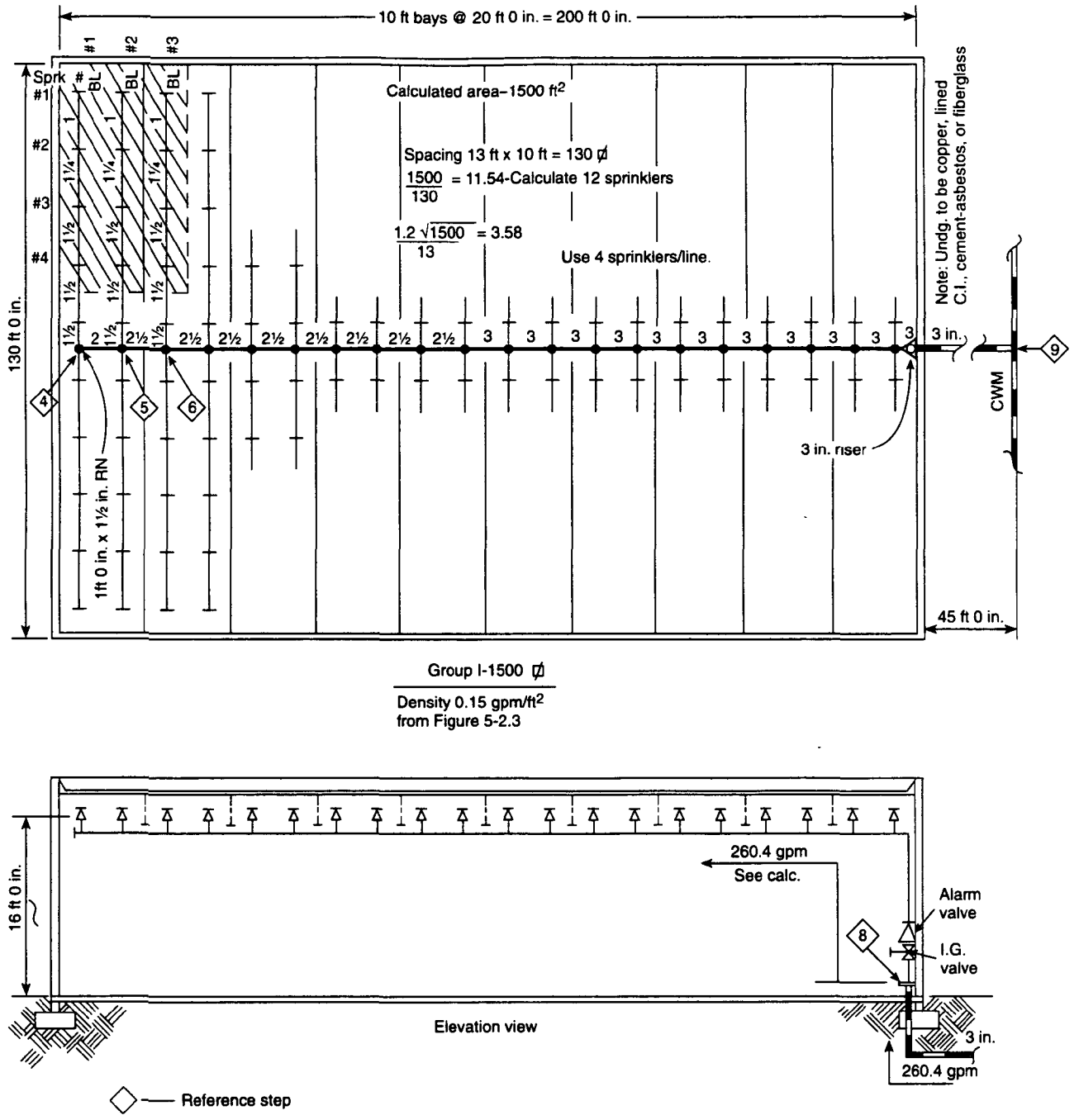


Figure A-6-2.2(b) Hydraulic calculation example (plan view and elevation view).

Contract Name GROUP I 1500 ℄ Sheet 2 Of 3

Step No	Nozzle Ident and Location		Flow in gpm	Pipe Size	Pipe Fittings and Devices	Equiv. Pipe Length	Friction Loss psi Foot	Pressure Summary	Normal Pressure	D=0.15 GPM/℄ Notes K=5.65	Ref. Step
1	1	BL-1	q	1		L 13.0	C=120	Pt 11.9	Pt	q=130x.15=19.5	
						F		Pe	Pv		
			Q 19.5			T 13.0	0.124	Pf 1.6	Pn		
2	2		q 20.7	$1^1/_4$		L 13.0		Pt 13.5	Pt	$q=5.65\sqrt{13.5}$	
						F		Pe	Pv		
			Q 40.2			T 13.0	0.125	Pf 1.6	Pn		
3	3		q 22	$1^1/_2$		L 13.0		Pt 15.1	Pt	$q=5.65\sqrt{15.1}$	4
						F		Pe	Pv		
			Q 62.2			T 13.0	0.132	Pf 1.7	Pn		
4	4	DN RN	q 23.2	$1^1/_2$	2T-16	L 20.5		Pt 16.8	Pt	$q=5.65\sqrt{16.8}$	5
						F 16.0		Pe	Pv		
			Q 85.4			T 36.5	0.237	Pf 8.6	Pn		
5		CM TO BL-2	q	2		L 10.0		Pt 25.4	Pt	K= 85.4 / $\sqrt{25.4}$ K=16.95	
						F		Pe	Pv		
			Q 85.4			T 10.0	0.07	Pf .7	Pn		
6		BL-2 CM TO BL-3	q 86.6	$2^1/_2$		L 10.0		Pt 26.1	Pt	$q=16.95\sqrt{26.1}$	6
						F		Pe	Pv		
			Q 172.0			T 10.0	0.109	Pf 1.1	Pn		
7		BL-3 CM	q 88.4	$2^1/_2$		L 70.0		Pt 27.2	Pt	$q=16.95\sqrt{27.2}$	
						F		Pe	Pv		
			Q 260.4			T 70.0	0.233	Pf 16.3	Pn		
8		CM TO FIS	q	3	E5	L 119.0		Pt 43.5	Pt	$P_e = 15 \times .433$	8
					AV15	F		Pe 6.5	Pv		
			Q 260.4		GV1	T 140.0	.081	Pf 11.3	Pn		
9		THROUGH UNDER-GROUND TO CITY MAIN	q	3	E5	L 50.0	C=150	Pt 61.3	Pt	COPPER 21 x 1.51=32	9
					GV1	F 32.0	TYPE'M'	Pe	Pv		
			Q 260.4		T15	T 82.2	0.061	Pf 5.0	Pn		
			q			L		Pt 66.3	Pt		
						F		Pe	Pv		
			Q			T		Pf	Pn		
			q			L		Pt	Pt		
						F		Pe	Pv		
			Q			T		Pf	Pn		
								Pt			

Figure A-6-2.2(c) Hydraulic calculations.

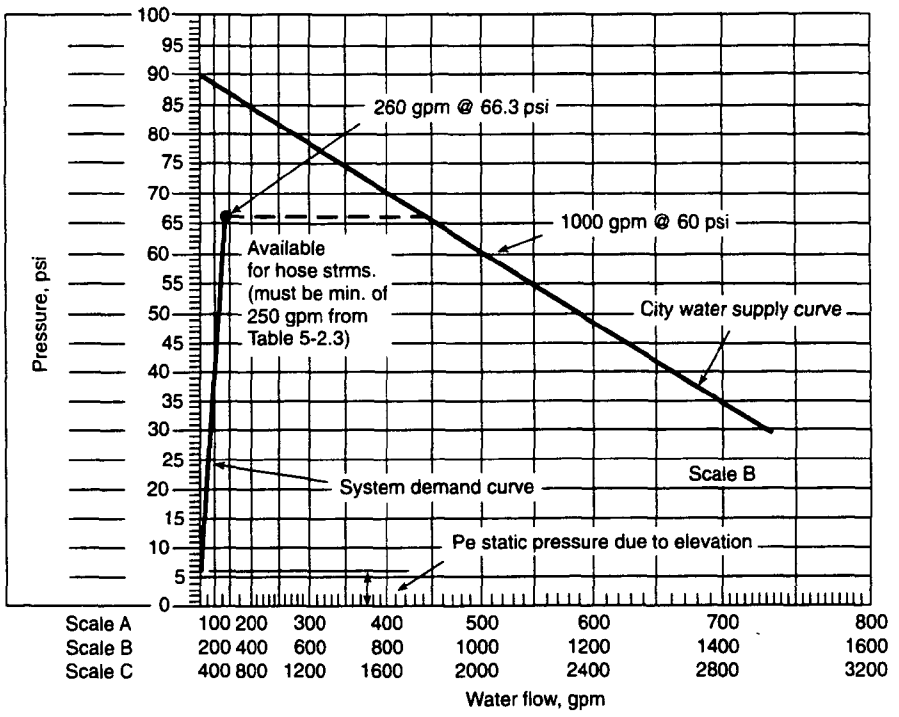


Figure A-6-2.2(d) Hydraulic graph.

Contract no. _____ Sheet no. _____ of _____

Name & location _____

Reference	Nozzle type & location	Flow in gpm (L/min)	Pipe size in.	Fitting & Devices	Pipe equiv. length	Friction loss psi/ft (bar/m)	Req. psi (bar)	Normal Pressure	Notes
		q			lgth.		Pt	Pt	
					ftg		Pf	Pv	
		Q			tot.		Pe	Pn	
		q			lgth.		Pt	Pt	
					ftg		Pf	Pv	
		Q			tot.		Pe	Pn	
		q			lgth.		Pt	Pt	
					ftg		Pf	Pv	
		Q			tot.		Pe	Pn	
		q			lgth		Pt	Pt	
					ftg		Pf	Pv	
		Q			tot.		Pe	Pn	
		q			lgth.		Pt	Pt	
					ftg.		Pf	Pv	
		Q			tot		Pe	Pn	
		q			lgth.		Pt	Pt	
					ftg.		Pf	Pv	
		Q			tot.		Pe	Pn	
		q			lgth.		Pt	Pt	
					ftg.		Pf	Pv	
		Q			tot.		Pe	Pn	
		q			lgth.		Pt	Pt	
					ftg		Pf	Pv	
		Q			tot.		Pe	Pn	
		q			lgth.		Pt	Pt	
					ftg.		Pf	Pv	
		Q			tot.		Pe	Pn	
		q			lgth.		Pt	Pt	
					ftg.		Pf	Pv	
		Q			tot.		Pe	Pn	
		q			lgth.		Pt	Pt	
					ftg		Pf	Pv	
		Q			tot.		Pe	Pn	
		q			lgth.		Pt	Pt	
					ftg.		Pf	Pv	
		Q			tot.		Pe	Pn	
		q			lgth.		Pt	Pt	
					ftg.		Pf	Pv	
		Q			tot		Pe	Pn	
		q			lgth.		Pt	Pt	
					ftg		Pf	Pv	
		Q			tot.		Pe	Pn	
		q			lgth.		Pt	Pt	
					ftg		Pf	Pv	
		Q			tot.		Pe	Pn	
		q			lgth.		Pt	Pt	
					ftg.		Pf	Pv	
		Q			tot		Pe	Pn	

Figure A-6-2.3 Sample work sheet.

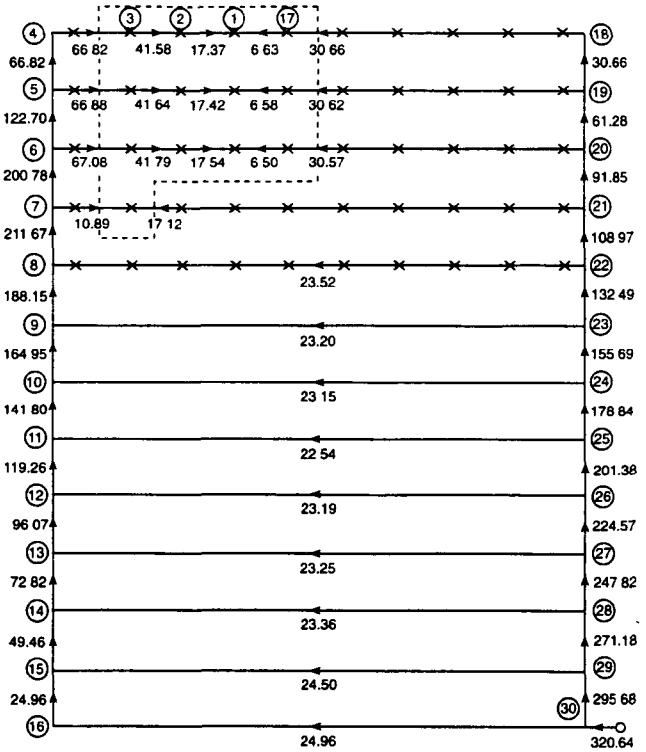


Figure A-6-2.3(o) Example of hydraulically remote area — grid system.

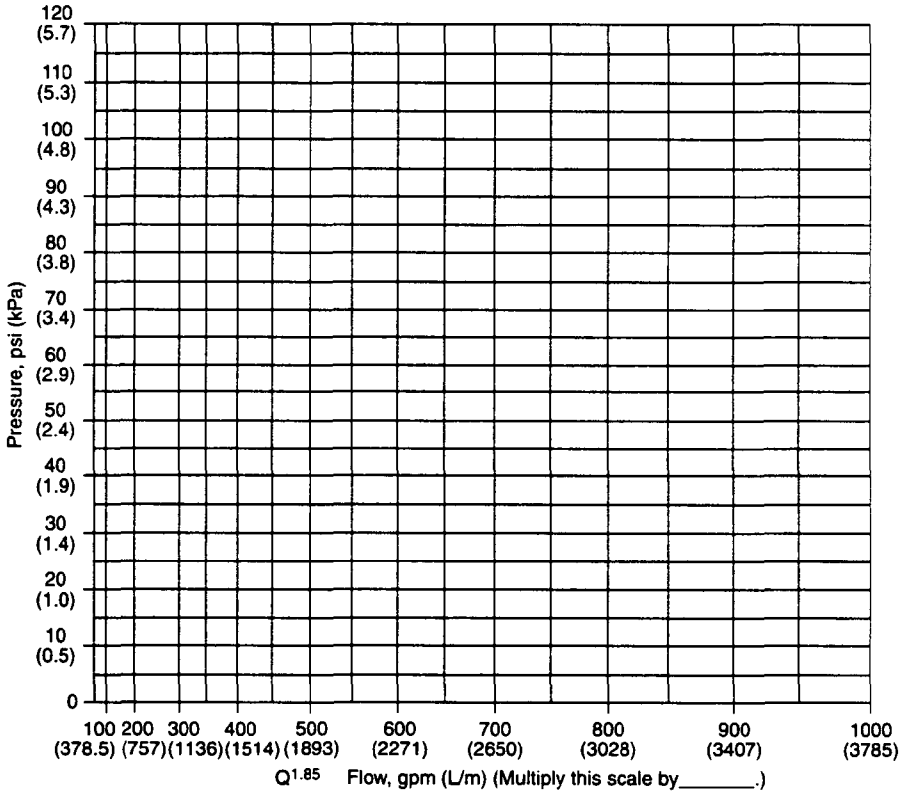
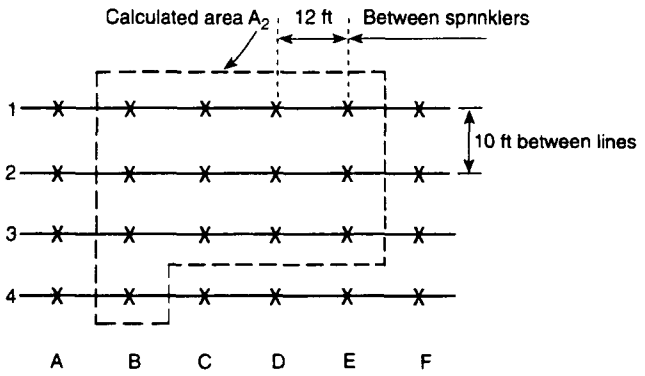


Figure A-6-2.4 Sample graph sheet.



NOTE 1: For gridded systems, the extra sprinkler (or sprinklers) on branch line 4 may be placed in any adjacent location from B to E at the designer's option.
NOTE 2. For tree and looped systems, the extra sprinkler on line 4 should be placed closest to the cross main.

Assume a remote area of 1500 ft^2 with sprinkler coverage of 120 ft^2

$$\text{Total sprinklers to calculate} = \frac{\text{Design area}}{\text{Area per sprinkler}}$$

$$= \frac{1500}{120} = 12.5, \text{ calculate } 13$$

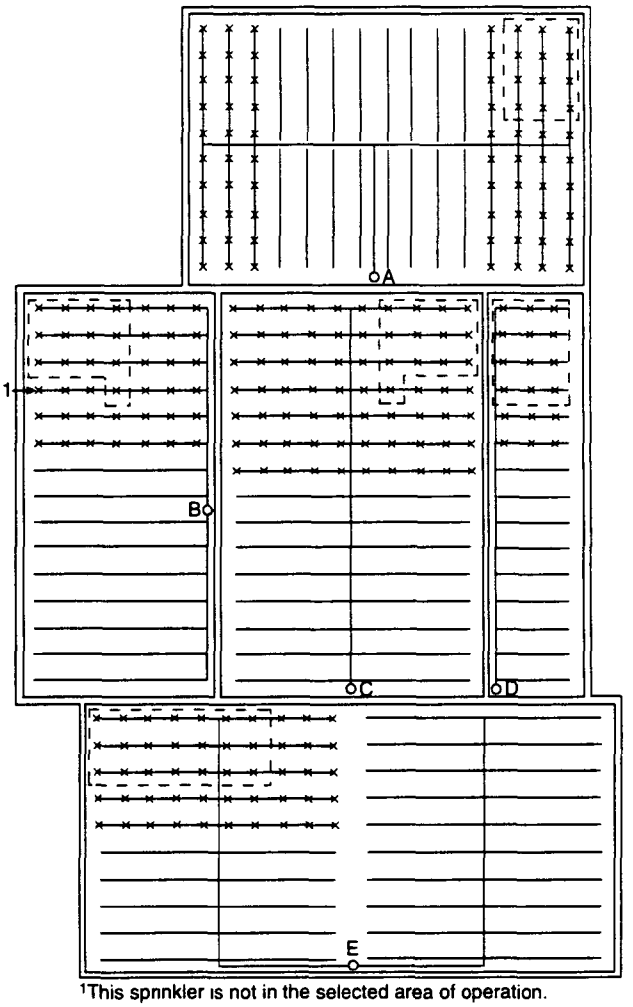
$$\text{Number of sprinklers on branch line} = \frac{1.2\sqrt{A}}{S}$$

Where A = Design area
S = Distance between sprinklers on branch line

$$\text{Number of sprinklers on branch line} = \frac{1.2\sqrt{1500}}{12} = 3.87.$$

For SI units: 1 ft = 0.3048 m; 1 ft^2 = 0.0929 m^2.

Figure A-6-4.4 Example of determining the number of sprinklers to be calculated.



[1]This sprinkler is not in the selected area of operation.

Figure A-6-4.4.1(a) Example of hydraulically most demanding area.

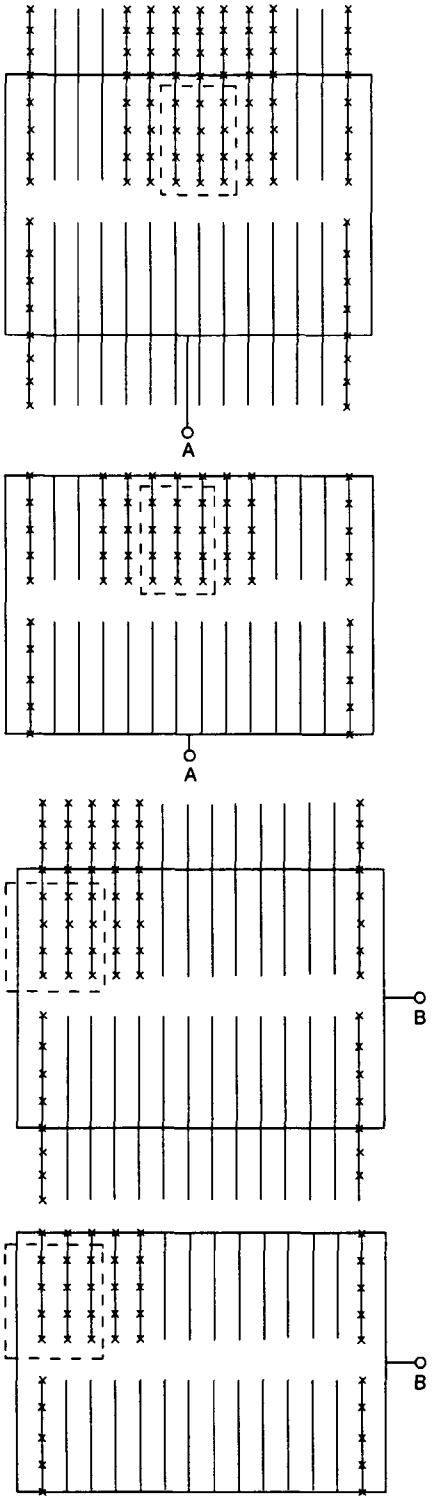


Figure A-6-4.4.1(b) Example of hydraulically most demanding area.

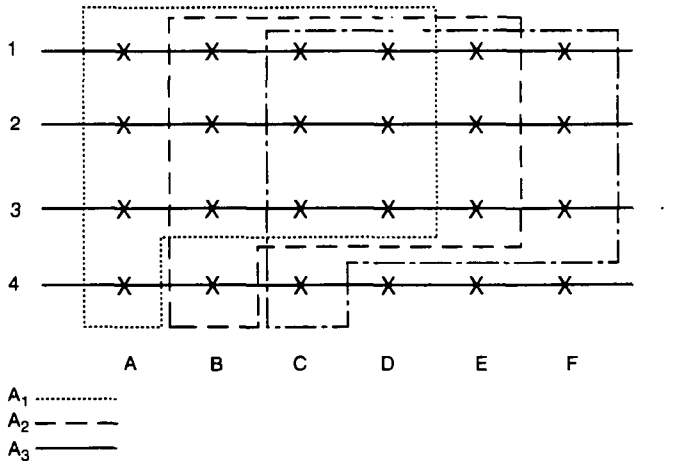


Figure A-6-4.4.2 Example of determining the most remote area for a gridded system.

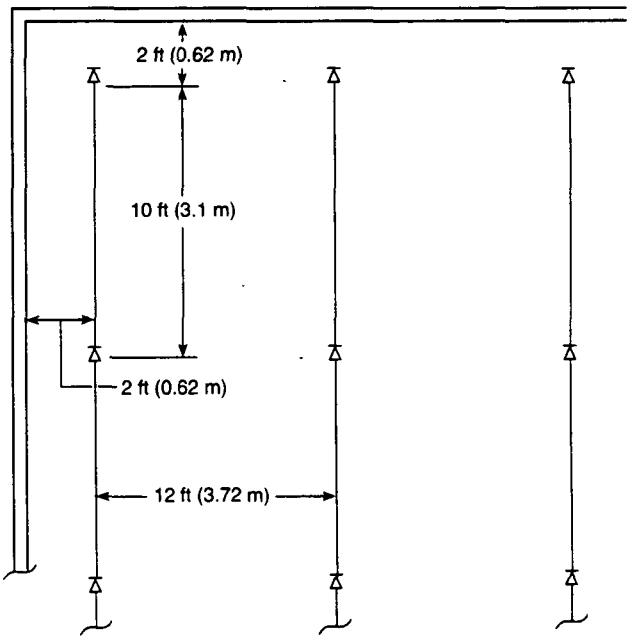


Figure A-6-4.4.3(a) Sprinkler design area.

A-6-4.4.3(b) This subsection assumes a ceiling constructed so as to reasonably assure that a fire on one side of the ceiling will operate sprinklers on one side only. Where a ceiling is sufficiently open, or of such construction that operation of sprinklers above and below the ceiling may be anticipated, the operation of such additional sprinklers should be considered in the calculations.

A-6-4.4.4 When it is not obvious by comparison that the design selected is the hydraulically most remote, additional calculations should be submitted. The most distant area is not necessarily the hydraulically most remote.

A-6-4.4.6 The use of sprinklers with differing orifice sizes in situations where different protection areas are needed is not considered balancing. An example would be a room that could be protected with sprinklers having different orifice size in closet, foyer, and room areas. However, this procedure introduces difficulties when restoring a system to service after operation since it is not always clear which sprinklers go where.

A-6-4.4.7 Where the normal pressure (P_n) is used to calculate the flow from an orifice, the following assumptions should be used.

(a) At any flowing outlet along a pipe, except the end outlet, only the normal pressure (P_n) can act on the outlet. At the end outlet the total pressure (P_t) can act. The following should be considered end outlets:

1. The last flowing sprinkler on a dead-end branch line
2. The last flowing branch line on a dead-end cross main
3. Any sprinkler where a flow split occurs on a gridded branch line
4. Any branch line where a flow split occurs on a looped system.

(b) At any flowing outlet along a pipe, except the end outlet, the pressure acting to cause flow from the outlet is equal to the total pressure (P_t) minus the velocity pressure (P_v) on the upstream (supply) side.

(c) To find the normal pressure (P_n) at any flowing outlet, except the end outlet, assume a flow from the outlet in question and determine the velocity pressure (P_v) for the total flow on the upstream side. Because normal pressure (P_n) equals total pressure (P_t) minus velocity pressure (P_v), the value of the normal pressure (P_n) so found should result in an outlet flow approximately equal to the assumed flow; if not, a new value should be assumed, and the calculations repeated.

A-6-5.1 The demonstrated effectiveness of pipe schedule systems is limited to their use with 1/2-in. (13-mm) orifice sprinklers. The use of other size orifices may require hydraulic calculations to prove their ability to deliver the required amount of water within the available water supply.

A-6-5.1.2 Long Runs of Pipe. Where the construction or conditions introduce unusually long runs of pipe or many angles in risers or feed or cross mains, an increase in pipe size over that called for in the schedules may be required to compensate for increased friction losses.

A-6-5.2.3.1 For example, a 2 1/2-in. (64-mm) steel pipe, which is permitted to supply 30 sprinklers, may supply a total of 50 sprinklers where not more than 30 sprinklers are above, or below, a ceiling.

A-6-5.3.3.1 For example, a 3-in. (76-mm) steel pipe, which is permitted to supply 40 sprinklers in an Ordinary Hazard area, may supply a total of 60 sprinklers where not more than 40 sprinklers protect the occupied space below the ceiling.

A-6-5.4 Schedule for Extra Hazard Occupancies. The piping schedule shown in Table A-6-5.4 is reprinted only as a guide for existing systems. New systems for Extra Hazard Occupancies should be hydraulically calculated as required in 6-5.4.

Table A-6-5.4 Extra Hazard Pipe Schedule

Steel		Copper	
1 in.	1 sprinkler	1 in.	1 sprinkler
1 1/4 in.	2 sprinklers	1 1/4 in.	2 sprinklers
1 1/2 in.	5 sprinklers	1 1/2 in.	5 sprinklers
2 in.	8 sprinklers	2 in.	8 sprinklers
2 1/2 in.	15 sprinklers	2 1/2 in.	20 sprinklers
3 in.	27 sprinklers	3 in.	30 sprinklers
3 1/2 in.	40 sprinklers	3 1/2 in.	45 sprinklers
4 in.	55 sprinklers	4 in.	65 sprinklers
5 in.	90 sprinklers	5 in.	100 sprinklers
6 in.	150 sprinklers	6 in.	170 sprinklers

For SI Units: 1 in. = 25.4 mm.

A-6-5.6 In the design of an exposure protection system, the flow rate from window and cornice sprinklers is shown in Table 6-5.6. The flow rates are based on the guide numbers selected from Table 2-3 of NFPA 80A, *Recommended Practice for Protection of Buildings from Exterior Fire Exposures.*

Section A of the table is for window sprinklers. The orifice size is selected according to the level on which the sprinkler is located.

Section B of the table is for cornice sprinklers.

A-7-1.2.3 Where the system riser is close to an outside wall, underground fittings of proper length should be used in order to avoid pipe joints located in or under the wall. Where the connection passes through the foundation wall below grade, a 1- to 3-in. (25- to 76-mm) clearance should be provided around the pipe and the clear space filled with asphalt mastic or similar flexible waterproofing material.

A-7-2.1 Water Supplies. Care should be taken in making water tests to be used in designing or evaluating the capability of sprinkler systems. The water supply tested should be representative of the supply that may be available at the time of a fire. For example, testing of public water supplies should be done at times of normal demand on the system. Public water supplies are likely to fluctuate widely from season to season and even within a 24-hour period. Allowance should be made for seasonal or daily fluctuations, for drought conditions, for possibility of interruption by flood, or for ice conditions in winter. Testing of water supplies also normally used for industrial use should be done while water is being drawn for industrial use. The range of industrial-use demand should be taken into account. In special situations where the domestic water demand could significantly reduce the sprinkler water supply, an increase in the size of the pipe supplying both the domestic and sprinkler water may be justified.

Future changes in water supplies should be considered. For example a large, established, urban supply is not likely to change greatly within a few years. However, the supply in a growing suburban industrial park might deteriorate quite rapidly as greater numbers of plants draw more water.

Testing of Water Supply. To determine the value of public water as a supply for automatic sprinkler systems, it is generally necessary to make a flow test to determine how much water can be discharged at a residual pressure at a rate sufficient to give the required residual pressure under the roof (with the volume flow hydraulically translated to the base of the riser), i.e., a pressure head represented by the height of the building plus the required residual pressure.

The proper method of conducting this test is to use two hydrants in the vicinity of the property. The static pressure should be measured on the hydrant in front of or nearest to the property and the water allowed to flow from the hydrant next nearest the property, preferably the one farthest from the source of supply if the main is fed only one way. The residual pressure will be that indicated at the hydrant where water is not flowing.

Referring to Figure A-7-2.1, the method of conducting the flow tests is as follows:

1. Attach gauge to hydrant (A) and obtain static pressure.
2. Either attach second gauge to hydrant (B) or use Pitot tube at outlet. Have hydrant (B) opened wide and read pressure at both hydrants.
3. Use the pressure at (B) to compute the gal flowing and read the gauge on (A) to determine the residual pressure or that which will be available on the top line of sprinklers in the property.

Water pressure in psi for a given height in ft equals height multiplied by 0.434.

In making flow tests, whether from hydrants or from nozzles attached to hose, always measure the size of the orifice. While hydrant outlets are usually 2½ in. (64 mm), they are sometimes smaller and occasionally larger. The UL play pipe is 1⅛ in. (29 mm) and 1¾ in. (44 mm) with tip removed, but occasionally nozzles will be 1 in. (25.4 mm) or 1¼ in. (33 mm), and with the tip removed the opening may be only 1½ in. (38 mm).

The Pitot tube should be held approximately one-half the diameter of the hydrant or nozzle opening away from the opening. It should be held in the center of the stream, except that in using hydrant outlets the stream should be explored to ascertain the average pressure.

For further information on water supply testing, see NFPA 291, *Recommended Practice for Fire Flow Testing and Marking of Hydrants*.

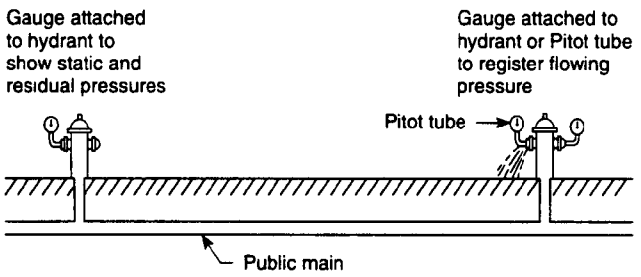


Figure A-7-2.1 Method of conducting flow tests.

A-7-2.2.1 An automatically controlled vertical turbine pump taking suction from a reservoir, pond, lake, river, or well complies with 7-2.2.1.

A-7-2.3.3 For pipe schedule systems, the air pressure to be carried and the proper proportion of air in the tank may be determined from the following formulas, in which

P = air pressure carried in pressure tank
A = proportion of air in tank
H = height of highest sprinkler above tank bottom.

When tank is placed above highest sprinkler

$$P = \frac{30}{A} - 15.$$

If A = ⅓ then P = 90 − 15 = 75 lb psi.
If A = ½ then P = 60 − 15 = 45 lb psi.
If A = ⅔ then P = 45 − 15 = 30 lb psi.

When tank is below level of the highest sprinkler

$$P = \frac{30}{A} - 15 + \frac{0.434H}{A}.$$

If A = ⅓ then P = 75 + 1.30H.
If A = ½ then P = 45 + 0.87H.
If A = ⅔ then P = 30 + 0.65H.

The respective air pressures above are calculated to ensure that the last water will leave the tank at a pressure of 15 psi (1.03 bars) when the base of the tank is on a level with the highest sprinkler, or at such additional pressure as is equivalent to a head corresponding to the distance between the base of the tank and the highest sprinkler when the latter is above the tank.

For hydraulically calculated systems, the following formula should be used to determine the tank pressure and ratio of air to water.

$$P_t = \frac{P_f + 15}{A} - 15$$

where:

P_t = tank pressure
P_f = pressure required from hydraulic calculations
A = proportion of air.

Example: Hydraulic calculations indicate 75 psi is required to supply the system. What tank pressure will be required?

$$P_t = \frac{75 + 15}{0.5} - 15$$

$$P_t = 180 - 15 = 165 \text{ psi}$$

For SI Units: 1 ft = 0.3048 m; 1 psi = 0.0689 bar.

In this case the tank would be filled with 50 percent air and 50 percent water and the tank pressure would be 165 psi (11.4 bars). If the pressure is too high, the amount of air carried in the tank will have to be increased.

Location of Pressure Tanks. Pressure tanks should be located above the top level of sprinklers, but may be located in the basement or elsewhere.

A-8-2.1 Underground mains and lead-in connections to system risers should be flushed through hydrants at dead ends of the system or through accessible aboveground flushing outlets allowing the water to run until clear. Figure A-8-2.1 shows acceptable examples of flushing the system. If water is supplied from more than one source or from a looped system, divisional valves should be closed to produce a high-velocity flow through each single line. The flows specified in Table 8-2.1 will produce a velocity of at least 10 ft/sec (3 m/s), which is necessary for cleaning the pipe and for lifting foreign material to an aboveground flushing outlet.

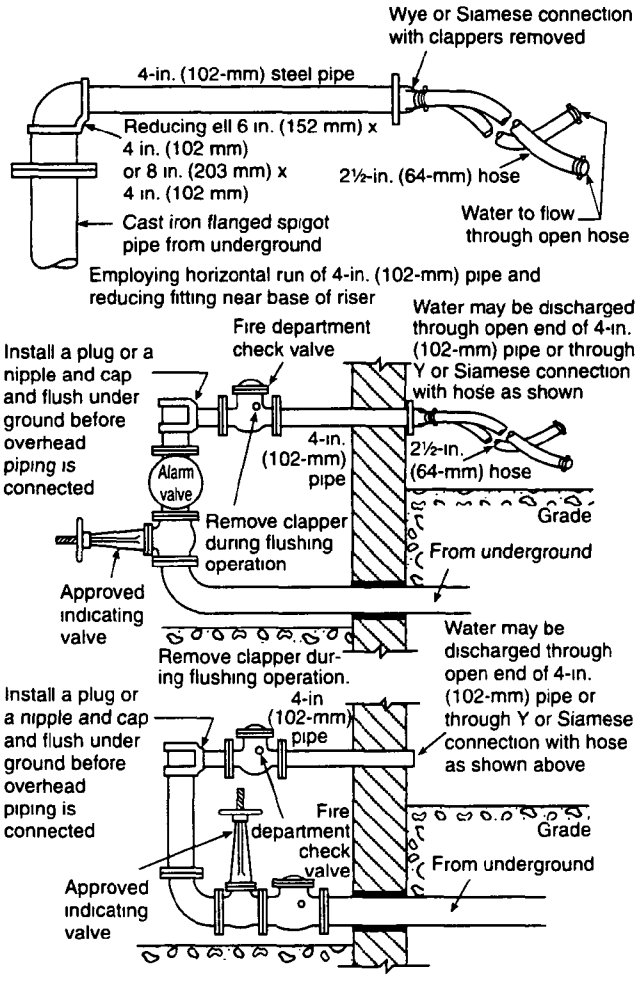


Figure A-8-2.1 Methods of flushing water supply connections.

A-8-2.2.1 A sprinkler system has for its water supply a connection to a public water service main. A 100-psi (6.9-bar) rated pump is installed in the connection. With a maximum normal public water supply of 70 psi (4.8 bars) at the low elevation point of the individual system or portion of the system being tested and a 120-psi (8.3-bar) pump (churn) pressure, the hydrostatic test pressure is 70 + 120 + 50 or 240 psi (16.5 bars).

To reduce the possibility of serious water damage in case of a break, pressure may be maintained by a small pump, the main controlling gate meanwhile being kept shut during the test.

Polybutylene pipe will undergo expansion during initial pressurization. In this case, a reduction in gauge pressure may not necessarily indicate a leak. The pressure reduction should not exceed the manufacturer's specifications and listing criteria.

When systems having rigid thermoplastic piping such as CPVC are pressure tested, the sprinkler system should be filled with water. The air should be bled from the highest and farthest sprinklers. Compressed air or compressed gas should never be used to test systems with rigid thermoplastic pipe.

A-8-2.2.7 Valves isolating the section to be tested may not be "drop-tight." When such leakage is suspected, test blanks of the type required in 8-2.2.7 should be used in a manner that includes the valve in the section being tested.

A-8-5 See Figure A-8-5.

This system as shown on ..... company

print no ..... dated .....

for .....

at ..... contract no .....

is designed to discharge at a rate of ..... gpm/ft^2

(L/min/m^2) of floor area over a maximum area of .....

..... ft^2 (m^2) when supplied

with water at a rate of ..... gpm (L/min)

at ..... psi (bars) at the base of the riser.

Hose stream allowance of ..... gpm (L/min)

is included in the above.

Occupancy classification .....

Commodity classification .....

Maximum storage height .....

Figure A-8-5 Sample nameplate.

A-9-1.1 Heat-Sensitive Material. The backbone of the fire protection philosophy for U.S. flagged vessels and passenger vessels that trade internationally is limiting a fire to the compartment of origin by passive means. Materials that do not withstand a 1-hr fire exposure when tested in accordance with ASTM E 119, *Standard Test Methods for Fire Tests of Building Construction and Materials,* are considered "heat sensitive."

A-9-1.1 Marine Thermal Barrier. A marine thermal barrier is typically referred to as a B-15 boundary.

A-9-1.2 In addition to the examples provided in Appendix A-1-4.7 of the standard, Table A-9-1.2 provides additional examples of occupancy definitions of typical shipboard spaces.

The classifications in Table A-9-1.2 are not meant to be applied without giving consideration to the definition of each occupancy hazard given in the standard. Table A-9-1.2

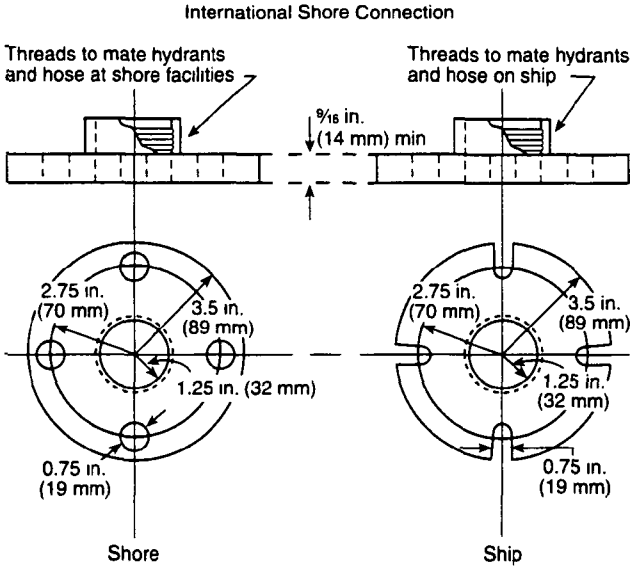


Figure A-9-1.1 International shore fire connection.

is general guidance for classification of typical spaces. Where a space is outfitted such that the occupancy definitions indicate that another classification would be more appropriate, the most representative and most demanding occupancy classification should be used. For example, it would certainly be possible to outfit a stateroom to require upgrading the occupancy to Ordinary Hazard Group 1.

When a vessel undergoes modifications, alterations, or service changes that significantly affect the fire risk of the occupancy of one or more compartments, the occupancy classification should be reevaluated to determine if it has changed.

A-9-1.3 Experience has shown that structures that are partially sprinklered can be overrun by well-developed fires originating in unsprinklered areas. Therefore, the entire vessel should be sprinklered whenever sprinkler systems are considered.

A-9-2.1 Sprinklers with a nominal orifice size 3/8 in. (9.5 mm) or less coupled with a system strainer minimize the potential for clogging. Attention is called to the minimum 10-psi (68.9-kPa) design and operating pressure requirement, which exceeds the typical 7 psi (48.3 kPa) required for land-based systems.

A-9-2.2 Where a marine thermal barrier is penetrated, limiting the opening around the sprinkler pipe to 1/16 in. (1.6 mm) is considered as meeting this requirement.

A-9-2.4.3(b) Materials that are not listed are permitted provided that they are shown to meet the performance requirements of International Maritime Organization Maritime Safety Committee Circular 580, *Guidelines for the Application of Plastic Pipes on Ships.*

A-9-2.5.1 When designing supports, the selection and spacing of pipe supports should take into account the pipe dimensions, mechanical and physical properties of piping materials and supports, operating temperature, thermal expansion effects, external loads, thrust forces, vibration, maximum accelerations, and differential motions to which the system might be subjected, and the type of support.

The route of the vessel is intended to be descriptive of its usual operating area. For example, expected motion of the system on an ocean vessel is expected to be considerably greater than the motion of a vessel that operates on a river. A vessel that operates within the confines of any of the Great Lakes is expected to subject the system pipe to greater motion than would a vessel that operates on a lake such as Lake Tahoe.

Table A-9-1.2 Examples of Shipboard Space Occupancy Classification

Occupancy Type	Space Types Included		Examples
	CFR[1]	SOLAS[2]	
Light Hazard	1[3], 2, 3, 4, 5, 8, 13	1[3], 2, 3, 4, 5, 9, 10	Public spaces Control stations
Ordinary Hazard (Group 1)	1[3], 6, 7, 8, 9	1[3], 3, 5, 9	Galleys Storage areas Laundries Pantries with high heat source equipment
Ordinary Hazard (Group 2)	9[4], 11[4]	5[4], 8[4], 9, 11	Sales shops Stages (with sets) Machine shops
Extra Hazard (Group 1)	1, 9[4], 10, 11[4]	1, 5[4], 7, 8[4]	Auxiliary machinery – limited combustible liquids Steering rooms – combustible hydraulic fluid in use
Extra Hazard (Group 2)	1, 9[4], 10, 11[4]	1, 5[4], 6, 7, 8[4]	Auxiliary machinery – with combustible liquids Machinery spaces

[1]Space type definitions are given in 46 CFR 72.05-5.
[2]Space type definitions are given in the *International Convention for the Safety of Life at Sea*, 1974 (SOLAS 74), as amended, regulations II-2/3 and II-2/26.
[3]Primarily for accommodation type control stations. This would not include generator or other similar type spaces.
[4]Depends on storage type, quantity and height and distance below sprinkler deflectors [must maintain 0.46 m (18 in.) clearance]

It is recommended that the designer review the requirements for automatic sprinkler systems that are subject to earthquakes. While it is obvious that shipboard motions and accelerations differ from those that occur during an earthquake, the general principle of protecting the piping system against damage applies. Individual hanger design, however, will be very similar. (*See 4-14.4.3.*)

Earthquake protection does not apply to ships; however, motions are similar to those that a ship will experience in a seaway. The design principles discussed in this section should be used as a guide for shipboard system design. See 2-6.1.

A-9-2.5.3 Use of heat sensitive materials for pipe hangers and supports might be desirable in some cases. Where heat-sensitive materials are used, the hangers and supports should be adequately protected by either the direct application of insulation or installation behind a marine thermal barrier. Insulation materials applied directly to hangers should be insulated in accordance with the method provided in Society of Naval Architects and Marine Engineers Technical Research Bulletin 2-21, "Aluminum Fire Protection Guidelines."

A-9-2.5.4 Consideration should be given to increasing the size of rods and U-hooks as necessary, to account for service and operational loading, including ship motion and vibrations.

A-9-2.6.1 Shipboard installations will normally require more than one valve per water supply. Locking valves in the open position is not an acceptable substitute for the requirement of 9-2.6.1 but can be done in addition to the supervision requirement.

A-9-2.7.1 International shore connections are portable universal couplings that permit connections of shipboard sprinkler or firemain systems between one ship and another or between a shore facility and a ship. Both the ship and the shore facility are expected to have an international shore connection fitting such that in an emergency they can be attached to their respective fire hoses and bolted together to permit charging the ship's system. It must be portable to accommodate hose-to-hose connection and allow assistance from any position.

Installation of an additional fire boat connection might be required on-board vessels whose route is such that regular access to fire boats is possible. An additional fire boat connection might not be necessary where fire boats are equipped to connect to the regular fire department connection. (*See A-9-2.7.3*).

A-9-2.7.3 Selection of the pipe thread for the fire department connection should be done very carefully. It is recommended that a 2½-in. Siamese connection with National Standard Hose Thread be used since a majority of fire department hose lines will be compatible with this thread. However, it must be noted that some fire jurisdictions might not be compatible with a connection of this type. Serious consideration should be given to the vessel's typical operating area. Precautions and planning should avert the possibility of the vessel being forced ashore by fire at a location where the fire department equipment is not compatible with this connection. Carriage of extra fittings and pre-voyage arrangements with all applicable jurisdictions should be considered. The international shore connection is required to ensure that all vessels fitted with sprinkler systems have at least one type of common connection.

A-9-3.1 Special consideration should be given to the installation of relief valves in all wet pipe systems. Ambient ship temperatures can vary greatly depending on operating environment, duration of voyage, and failure of climate control systems.

A-9-4.2 Areas fitted primarily with multiple staterooms and corridors should be considered sleeping accommodation areas.

A-9-4.4 If combustibles are present such that they constitute a threat, the space should be sprinklered. One example would be the presence of large bundles of unsheathed computer or electrical cable. Typical amounts of lighting or control cabling should not be considered to constitute a fire threat.

A-9-4.10 The objective of these requirements is to protect risers and cross mains, and to ensure that fire damage within one space or group of spaces will not inhibit the performance of the remainder of the sprinkler system. Heat-sensitive piping, as restricted by this section, should not be led between two spaces that are required to be separated by 60-min-rated divisions.

A-9-4.12.1 While not required, a dual annunciator alarm panel system is recommended. One panel should show the piping system layout and indicate status of zone valves, tank pressures, water supply valves, pump operation, etc. The second panel should show the vessel's general arrangement and indicate status of water flow (i.e., fire location) alarms.

A-9-5.2 For example, a design area of 1500 ft^2 (139.3 m^2) is used to design a sprinkler system for an unobstructed Light Hazard occupancy. In this case, the system must supply at least 7 sprinklers that are installed within that area. If 8 sprinklers are installed to protect windows within this design area, the water demand of these sprinklers is added to the total water demand. Thus, 15 sprinklers must be supplied by this system.

A-9-5.3 Hose stream flow need not be added to the water demand. The water supply for fire streams is supplied by separate fire pump(s) that supply the vessel's fire main.

A-9-6.2.6 The purpose of this is to ensure that the pressure tank air supply will not keep the tank "fully" pressurized while water is expelled, thus preventing pump actuation.

A-9-6.3.6(a) Pumps should not be located within the same compartment. However, where this is not reasonable or practical, special attention should be given to protecting pumps such that a single failure will not render the sprinkler system inoperative.

A-9-6.4.5 This procedure should be used to qualify each water supply to which the vessel is to be attached. For example, this might require testing of multiple hydrants or connections in the same mooring area. The pressure loss effect of the hose or piping leading from the water supply to the ship should also be considered when qualifying each hydrant.

A-10-1.1 Impairments. Before shutting off a section of the fire service system to make sprinkler system connections, notify the authority having jurisdiction, plan the work carefully, and assemble all materials to enable completion in the shortest possible time. Work started on connections should be completed without interruption and protection restored as promptly as possible. During the impairment, provide emergency hose lines and extinguishers and maintain extra watch service in the areas affected.

When changes involve shutting off water from any considerable number of sprinklers for more than a few hours, temporary water supply connections should be made to sprinkler systems so that reasonable protection can be maintained. In adding to old systems or revamping them, protection should be restored each night so far as possible. The members of the private fire brigade as well as public fire departments should be notified as to conditions.

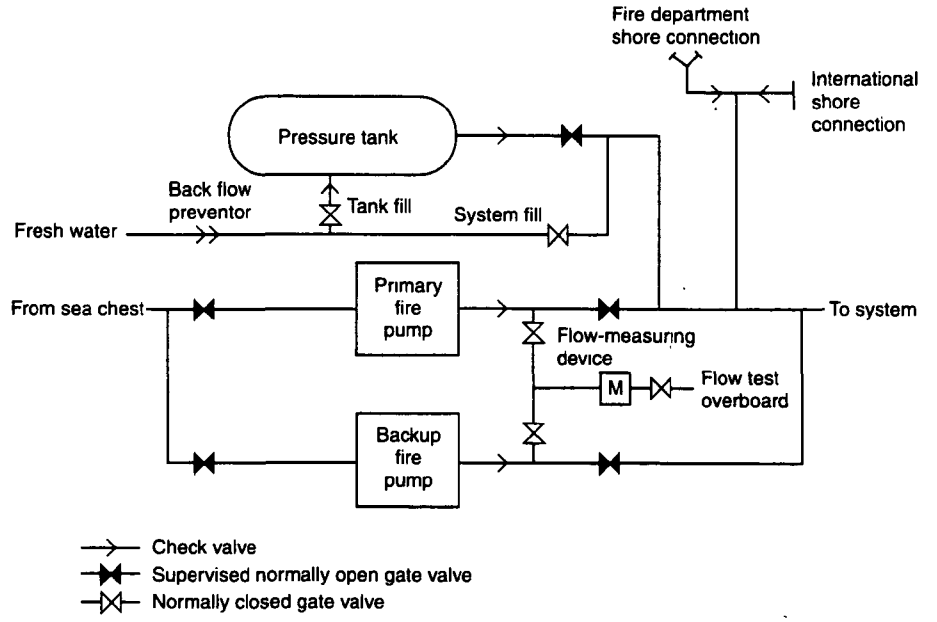


Figure A-9-6.3.6(a) Abbreviated example of a dual fire pump water supply.

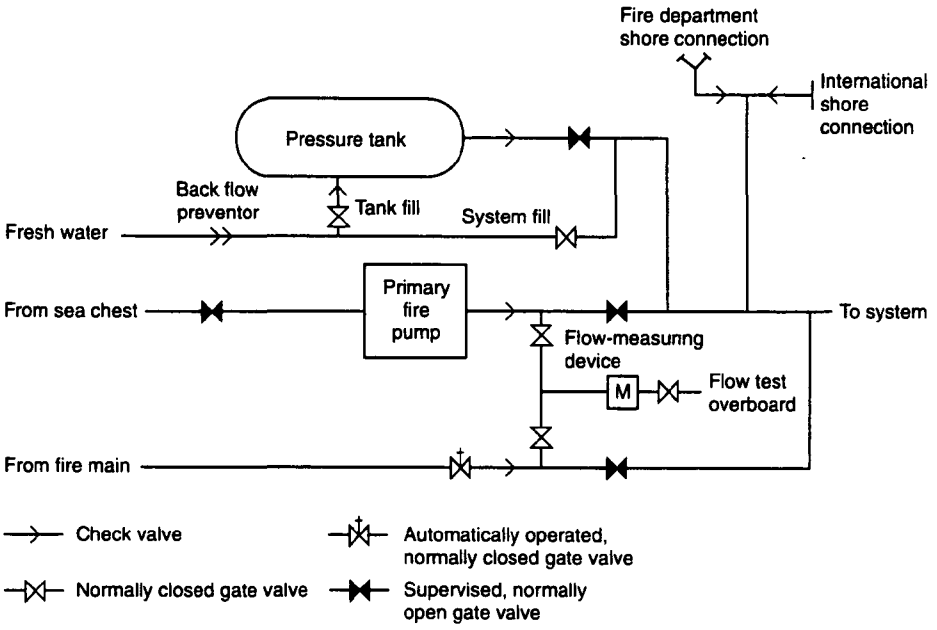


Figure A-9-6.3.7 Abbreviated example of a water supply with fire pump backup.

Maintenance Schedule. The items shown in Table A-10-1.1 should be checked on a routine basis.

Table A-10-1.1 Maintenance Schedule

Parts	Activity	Frequency
Flushing piping	Test	5 years
Fire department connections	Inspection	Monthly
Control valves	Inspection	Weekly—sealed
	Inspection	Monthly—locked
	Inspection	Monthly—tamper switch
	Maintenance	Yearly
Main drain	Flow test	Quarterly
Open sprinklers	Test	Annual
Pressure gauge	Calibration test	
Sprinklers	Test	50 years
Sprinklers—high temp	Test	5 years
Sprinklers—residential	Test	20 years
Waterflow alarms	Test	Quarterly
Preaction/deluge detection system	Test	Semiannually
Preaction/deluge systems	Test	Annually
Antifreeze solution	Test	Annually
Cold weather valves	Open and close valves	Fall, close; spring, open
Dry/preaction/deluge systems		
Air pressure and water pressure	Inspection	Weekly
Enclosure	Inspection	Daily—cold weather
Priming water level	Inspection	Quarterly
Low—point drains	Test	Fall
Dry pipe valves	Trip test	Annual—spring
Dry pipe valves	Full flow trip	3 years—spring
Quick-opening devices	Test	Semiannually

Appendix B Miscellaneous Topics

This Appendix is not a part of the requirements of this NFPA document, but is included for information purposes only.

B-1 Figure B-1 shows acceptable methods for interconnection of the fire protection and domestic water supply.

B-2 Sprinkler System Performance Criteria.

B-2.1 Sprinkler system performance criteria have been based on test data. The factors of safety are generally small and are not definitive, and can depend on expected (but not guaranteed) inherent characteristics of the sprinkler systems involved. These inherent factors of safety consist of the following:

(a) The flow-declining pressure characteristic of sprinkler systems whereby the initial operating sprinklers discharge at a higher flow than with all sprinklers operating within the designated area.

(b) The flow-declining pressure characteristic of water supplies. This is particularly steep where fire pumps are the water source. This characteristic similarly produces higher than design discharge at the initially operating sprinklers.

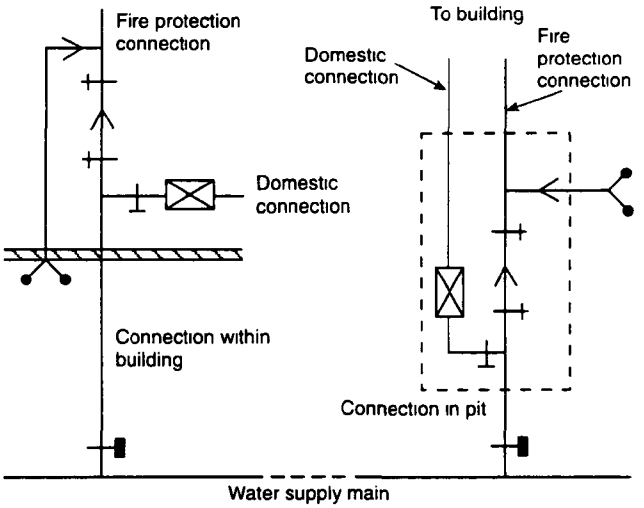


Figure B-1 Permitted arrangements between the fire protection water supply and the domestic water supply.

The user of these standards may elect an additional factor of safety if the inherent factors are not considered adequate.

B-2.1.1 Performance-specified sprinkler systems as opposed to scheduled systems can be designed to take advantage of multiple loops or gridded configurations. This results in minimum line losses at expanded sprinkler spacing, in contrast to the older tree-type configurations, where advantage cannot be taken of multiple path flows.

Where the water supply characteristics are relatively flat with pressures being only slightly above the required sprinkler pressure at the spacing selected, gridded systems with piping designed for minimal economic line losses can all but eliminate the inherent flow-declining pressure characteristic generally assumed to exist in sprinkler systems. In contrast, the economic design of a tree-type system would likely favor a system design with closer sprinkler spacing and greater line losses, demonstrating the inherent flow-declining pressure characteristic of the piping system.

Elements that enter into the design of sprinkler systems include:

(a) Selection of density and area of application.

(b) Geometry of the area of application (remote area).

(c) Permitted pressure range at sprinklers.

(d) Determination of the water supply available.

(e) Ability to predict expected performance from calculated performance.

(f) Future upgrading of system performance.

(g) Size of sprinkler systems.

In developing sprinkler specifications, each of these elements needs to be considered individually. The most conservative design will be based on the application of the most stringent conditions for each of the elements.

B-2.1.2 Selection of Density and Area of Application. Specifications for density and area of application are developed from NFPA and other standards. It is desirable to specify densities rounded upward to the nearest 0.005 gpm/sq ft (0.20 Lpm/m^2).

Prudent design should consider reasonable-to-expect variations in occupancy. This would include not only variations in type of occupancy, but also, in the case of warehousing, the anticipated future range of materials to be stored, clearances, types of arrays, packaging, pile height, and pile stability, as well as other factors.

Design also considers some degree of adversity at the time of a fire. To take this into account, the density and/or area of application may be increased. Another way is to use a dual-performance specification where, in addition to the normal primary specifications, a secondary density and area of application is specified. The objective of such a selection is to control the declining pressure-flow characteristic of the sprinkler system beyond the primary design flow.

A case can be made for designing feed and cross mains to lower velocities than branch lines to achieve the same result as specifying a second density and area of application.

B-2.1.3 Geometry of the Area of Application (Remote Area). It is expected that, over any portion of the sprinkler system equivalent in size to the area of application, the system will achieve the minimum specified density for each sprinkler within that area.

Where a system is computer-designed, ideally the program should verify the entire system by shifting the area of application the equivalent of one sprinkler at a time so as to cover all portions of the system. Such a complete computer verification of performance of the system is most desirable, but unfortunately not all available computer verification programs currently do this.

This selection of the proper Hazen-Williams coefficient is important. New unlined steel pipe has a Hazen-Williams coefficient close to 140. However, it quickly deteriorates to 130 and, after a few years of use, to 120. Hence, the basis for normal design is a Hazen-Williams coefficient of 120 for steel-piped wet systems. A Hazen-Williams coefficient of 100 is generally used for dry pipe systems because of the increased tendency for deposits and corrosion in these systems. However, it should be realized that a new system will have fewer line losses than calculated, and the distribution pattern will be affected accordingly.

Conservatism can also be built into systems by intentionally designing to a lower Hazen-Williams coefficient than that indicated.

B-2.1.4 Ability to Predict Expected Performance from Calculated Performance. Ability to accurately predict the performance of a complex array of sprinklers on piping is basically a function of the pipe line velocity. The greater the velocity, the greater is the impact on difficult-to-assess pressure losses. These pressure losses are presently determined by empirical means that lose validity as velocities increase. This is especially true for fittings with unequal and more than two flowing ports.

The inclusion of velocity pressures in hydraulic calculations improves the predictability of the actual sprinkler system performance. Calculations should come as close as practicable to predicting actual performance. Conservatism in design should be arrived at intentionally by known and deliberate means. It should not be left to chance.

B-2.1.5 Future Upgrading of System Performance. It may be desirable in some cases to build into the system the capability to achieve a higher level of sprinkler performance than needed at present. If this is to be a consideration in conservatism, consideration needs to be given to maintaining sprinkler operating pressures on the lower side of the optimum operating range, and/or designing for low pipe line velocities, particularly on feed and cross mains, to facilitate future reinforcement.

Appendix C Referenced Publications

C-1 The following documents or portions thereof are referenced within this standard for informational purposes only and thus are not considered part of the requirements of this document. The edition indicated for each reference is the current edition as of the date of the NFPA issuance of this document.

C-1.1 NFPA Publications. National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101.

NFPA 14, *Standard for the Installation of Standpipe and Hose Systems*, 1996 edition.

NFPA 20, *Standard for the Installation of Centrifugal Fire Pumps*, 1996 edition.

NFPA 22, *Standard for Water Tanks for Private Fire Protection*, 1996 edition.

NFPA 24, *Standard for the Installation of Private Fire Service Mains and Their Appurtenances*, 1995 edition.

NFPA 25, *Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems*, 1995 edition.

NFPA 30, *Flammable and Combustible Liquids Code*, 1996 edition.

NFPA 30B, *Code for the Manufacture and Storage of Aerosol Products*, 1994 edition.

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At this exclusive NFPA seminar, you learn directly from the experts who work with sprinkler systems standards. You can discuss specific problems and issues one-on-one with instructors. You'll gain the training you need to avoid mistakes, determine compliance of sprinkler designs and installations, understand various design approaches, and learn about proper system inspection, testing, and maintenance criteria.

NFPA 25: Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems

This informative document provides instruction on how to conduct inspections, tests, and maintenance activities to help ensure the successful operation of water-based fire protection systems. Requirements are provided for impairment procedures, notification processes, and system restoration.

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UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of CENTRAL SPRINKLER CORP., and CENTRAL SPRINKLER CO., Respondents	CPSC DOCKET NO. 98-2

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION
1998 APR 20 P 5:10

FIRST REQUESTS FOR PRODUCTION OF DOCUMENTS AND THINGS TO RESPONDENTS CENTRAL SPRINKLER CORP. AND CENTRAL SPRINKLER CO.

Complaint Counsel hereby propounds its First Requests for Production of Documents and Things upon Respondents Central Sprinkler Corp. and Central Sprinkler Co.

PLEASE TAKE NOTICE that pursuant to 16 C.F.R. § 1025.33, Respondents must respond to these Requests within 30 days after service of same; inspection of the items requested shall take place on that same day at the office of Complaint Counsel, Consumer Product Safety Commission, Office of Compliance, 4330 East West Highway, Bethesda, MD 20814.

PLEASE TAKE FURTHER NOTICE that pursuant to 16 C.F.R. § 1025.31, Respondents are under a continuing duty to supplement their responses to the staff's discovery requests to include information later obtained, regardless of whether the response to the discovery request was complete when made.

DEFINITIONS

Throughout the following Requests and Definitions, unless the context otherwise requires, the singular includes the plural, the masculine includes the feminine, and neuter, or vice versa.

As used herein, the terms below are defined as follows:

"Activate" in the context of Omega sprinklers means full opening (as opposed to partial opening) of the sprinkler -- i.e., full release of the plunger housing -- upon exposure to the Omega's triggering temperature.

"Adhesion" and "Adhered," in the context of a sprinkler "o" ring, refers to adhesion or adhered to the plunger housing and/or main housing of the sprinkler.

"Cause" means to bring about, effect, make happen, contribute to, induce, produce, and/or compel.

"Claim" refers to all lawsuits, governmental actions or orders, disputes, demands for payment, indemnification or reimbursement, complaints, and/or potential lawsuits that contain allegations against you and/or your agents and/or employees.

"Communication" means any transfer of information, ideas, opinions or thought by any means at any time or place under any circumstances, including any transfer of data from one location to another by electrical, electronic or similar means.

"Distribute" means to deliver, sell, give, allot, or otherwise provide, and includes the giving away of free samples and promotional items.

"Document" or "Record" shall have the broadest meanings permissible, and shall include the original and any non-identical copy of any written, graphic, photographic, audio,

electronic or visual material, however produced or reproduced, of any kind or description, whether sent or received or neither, including, but not limited to: papers, books, letters, facsimiles, photographs, motion pictures, video tapes, audio recordings, correspondence, drawings, sketches, schematics, manuals, blueprints, work papers, intra- and interoffice communications, memoranda, notes, transcripts, minutes, reports, recordings of telephone or other conversations, or of interviews, conferences, or meetings, affidavits, statements, summaries, opinions, court pleadings, reports, indices, studies, analyses, evaluations, contracts, licenses, agreements, questionnaires, answers to questionnaires, statistical records, desk calendars, appointment books, diaries, telephone logs, lists, tabulations, charts, graphs, data sheets, computer tapes, disks, printouts or programs, microfilms, all other records kept by electronic, photographic, or mechanical means, and things similar to any of the foregoing, regardless of their author or origin, however denominated, no matter how produced or maintained, regardless of whether in your actual or constructive possession, custody or control, and regardless of whether or not communicated to any person other than the maker. A draft is a separate document or record within the meaning of this term.

If you claim that any document or record is privileged, specify the privilege claimed and the factual basis you contend supports the assertion of the privilege. If any document or record was, but is no longer, in your possession, custody, or control, provide the following information:

(a) state the disposition of the document or record;

(b) state the date such disposition was made;

(c) identify the present custodian of the document or record and state his or her

address or, if the document or record no longer exists, so state;

(d) identify the person who made the decision regarding the disposition of the document or record; and

(e) state the reason for the disposition and describe the document or record and the contents of the document or record, including the title, the author, the position or title of the author, addressee, the position or title of the addressee, whether indicated or blind copies were made, date, subject matter, number of pages, attachments or appendices, and all persons to whom the document was distributed, shown or explained.

"Field test," for purposes of these Interrogatories, shall mean any test performed on a sprinkler while it is installed in a sprinkler system.

"Identify" or "identity" shall mean, when referring to an individual person, the person's full name, present or last known employer, present or last known address, occupation, business position, and telephone number, and the relationship or association, if any, to a Respondent in this action.

When referring to an entity, the terms "identify" or "identity" shall mean its present and any former name(s), the business address of its principal place of business, its state of incorporation, registration, or organization, the identity and address of its registered agent in each state where it is present and doing business or has a place of business, its present officers, directors, and shareholders, and its relationship, if any, to a Respondent in this action. Once a person or entity has been identified in accordance with this paragraph, only the name of that person or entity need be listed in response to subsequent discovery

requesting the identification of that person or entity.

When referring to a document or record, the terms "identify" or "identity" shall mean a description of the document or record including its date of preparation and transmission, the author, sender and recipient, the custodian of the record, and a summary of the subject matter.

When referring to an Omega or other brand sprinkler, "identify" or "identity means to provide the following information:

(a) the sprinkler manufacturer

(b) model name and number;

(c) manufacture date;

(d) activation temperature;

(e) "o" ring type (if applicable)

(f) all dates of UL listing;

(g) the UL standards for safety under which the sprinkler is/was listed;

(h) the type of piping in which the sprinkler is or was installed (if applicable);

(i) the name, address and telephone number of the building in which the sprinkler was installed (if applicable); and the name, address and telephone number of the owner of that building;

"Manufacture" means to make, produce, assemble, fabricate, or work into usable form.

"Omega" means any and all models and makes (variations within a model) of Omega series or brand automatic fire sprinklers.

"Relating to" shall mean consisting of, referring to, describing, discussing, constituting, evidencing, containing, mentioning, concerning, pertaining to, citing, summarizing, analyzing,

or bearing any logical or factual connection with the matter discussed.

"UL" or "Underwriters Laboratories, Inc." means Underwriters Laboratories, Inc., 333 Pfingsten Road, Northbrook, IL 60062 and any subsidiaries, divisions, or agents of Underwriters Laboratories, Inc.

"You," "your," "yourself" means the Respondent to whom this discovery is directed, including any officer, director, representative, insurer, agent or employee thereof, and also includes any agent, person or entity acting on your behalf.

INSTRUCTIONS

1. Each Request shall be answered completely, separately, and fully.

2. The following Requests are to be regarded as continuing. You are required to supplement or modify any response as additional or different information becomes known to you.

3. Each person consulted in answering any Response shall be identified in the body of the response to the particular Response.

4. If you cannot answer any Response in full after exercising due diligence, so state and answer or produce to the extent possible, specifying your inability to answer or produce the remainder, stating whatever information or knowledge you have concerning the unanswered portion or unproduced documents, and describing your efforts to secure the unknown information or unproduced documents.

5. If you assert any privilege in responding to any Response, state the type of privilege asserted and the basis for its assertion. In addition, briefly identify the document or record with respect to which the privilege is asserted. For any document or record with

respect to which a privilege is asserted, state:

(a) The type of document or record (e.g., letter, memorandum, contract, etc.), the date of the document, and the subject matter of the document or record;

(b) The name, address and position of the author of the document or record and of any person who assisted in its preparation;

(c) The name, address and position of each addressee or recipient of the document or record, or any copies of it; and

(d) The present location of the document or record and the name, address and position of the person having custody of it.

For any communication with respect to which a privilege is asserted, identify the persons or entities among whom the communication took place, the date of the communication, and the subject.

REQUESTS FOR PRODUCTION

REQUEST NO. 1

Provide all records relating in any way to your sale of any Omega sprinkler, including but not limited to purchase orders, shipping documents, billing statements and sales receipts.

REQUEST NO. 2

Provide all records relating in any way to your provision of any Omega sprinkler as a free sample or promotional item.

REQUEST NO. 3

Provide all records relating in any way to marketing and/or sale of Omega sprinklers by you.

REQUEST NO. 4

For each year in which you manufactured and/or distributed Omega sprinklers, provide all records relating in any way to

(a) your gross income;

(b) your net income;

(c) the amount in revenues generated from product sales;

(d) the amount in revenues generated from sales of Omega sprinklers.

REQUEST NO. 5

Provide all records relating in any way to the number of Omega sprinklers installed in the United States and/or its territories in:

(a) steel piping systems;

(b) copper piping systems;

(c) plastic piping systems;

(d) polybutylene piping systems;

(e) other piping systems not listed above (specify the type of piping system)?

REQUEST NO. 6

Provide all records relating in any way to the number of Omega sprinklers installed in the United States and/or its territories in:

a) private homes

b) apartment buildings

c) schools (including universities and colleges, public or private)

d) nursing homes

e) hospitals

f) detention facilities (including jails, juvenile detention facilities, etc.)

g) homeless shelters

h) facilities used for recreation (e.g., health clubs, gymnasiums, sports arenas, public pools, country clubs, etc.)

i) hotels

j) museums

k) offices (including office buildings)

l) warehouses with no public access areas

m) industrial facilities with no public access areas

REQUEST NO. 7

Provide all records relating in any way to the current sales price for each Omega make and/or model listed in your response to Complaint Counsel's Interrogatory No. 13.

REQUEST NO. 8

Provide the complete personnel files for all persons identified in your response to Complaint Counsel's Interrogatory No. 15.

REQUEST NO. 9

Provide the complete personnel files for all persons involved in design and/or development of each make and/or model Omega sprinkler.

REQUEST NO. 10

Provide all records relating in any way to the design of and/or specifications for each component part and each chemical (including lubricants), tool and/or substance used in the

Omega manufacturing process.

REQUEST NO. 11

Provide all records relating in any way to your acquisition of any component part, chemical (including lubricants, etc.), tool and/or substance identified in your response to Complaint Counsel's Interrogatory No. 17.

REQUEST NO. 12

Provide the complete personnel files of any persons who were/are employed by you who in any way took part or were involved in the design, specifications, and/or development of each component part, chemical (including lubricants, etc.), tool and/or substance identified in your response to Complaint Counsel's Interrogatory No. 17.

REQUEST NO. 13

Provide all records relating in any way to the procedures and specifications for the manufacture of each different make and/or model Omega sprinkler, including any changes in such procedures and/or specifications over time, including all tools, chemicals and substances used in the manufacture of same, including but not limited to cut sheets, drawings, and manufacturing instructions.

REQUEST NO. 14

Provide three samples of each make and model of Omega sprinkler that you have ever manufactured.

REQUEST NO. 15

Provide three samples of each tool, chemical and/or substance used in the manufacture of each make and model of Omega sprinkler. (If any such tools, chemicals and/or substances

are used for more than one make and/or model of Omega, you need only provide one set of three samples).

REQUEST NO. 16

Provide all records relating in any way to any chemical or substance used in the manufacture of Omega sprinkler(s) to prevent leaking of those sprinklers when they are later installed into a sprinkler system.

REQUEST NO. 17

Provide all records relating in any way to any tests performed by you or anyone else to assess whether and/or how each chemical and/or substance listed in your response to Complaint Counsel's Interrogatory No. 23 affects the operation of Omega sprinkler(s) or any Omega component part.

REQUEST NO. 18

Provide all records relating in any way to each communication between you and any persons and/or entities (including your employees, agents, and consultants) regarding each chemical and/or substance listed in your response to Complaint Counsel's Interrogatory No. 23.

REQUEST NO. 19

Provide all records relating in any way to each prototypes and/or precursors of any of the Omega sprinklers listed in your response to Complaint Counsel's Interrogatory No. 5.

REQUEST NO. 20

Provide the complete personnel files of any and all employees who were in any way involved in designing, developing and/or reviewing any and all prototypes and/or precursors

of any of the Omega sprinklers listed in your response to Complaint Counsel's Interrogatory No. 5.

REQUEST NO. 21

Provide all records relating in any way to any and all measures and/or procedures taken by you or anyone on your behalf at any time before, during, and/or after each Omega sprinkler is manufactured, to ensure that each Omega sprinkler will fully and properly activate when exposed to its activation (triggering) temperature.

REQUEST NO. 22

Provide all records relating in any way to any actual or alleged problems with, imperfections or flaws in, defects or deficiencies in or associated with any component part(s) of any Omega sprinkler, or any chemical, tool or substance used in manufacturing Omegas (including whether any component part has been or alleged to have been out of tolerance) of which you have knowledge or have been advised.

REQUEST NO. 23

Provide all records relating in any way to the mechanism of proper operation of each different make and model of Omega sprinkler, once exposed to its activation (triggering) temperature.

REQUEST NO. 24

Provide all records relating in any way to whether pressure (not internal to or part of the Omega itself) is required for activation of any make and/or model of Omega sprinkler.

REQUEST NO. 25

Provide all records relating in any way to the amount of pressure (not internal to or

part of the Omega itself) required for activation of each make and/or model of Omega sprinkler.

REQUEST NO. 26

Provide all records relating in any way to any non-Omega sprinklers that contain an "o" ring.

.REQUEST NO. 27

Provide all records relating in any way to the approval, listing and/or certification of each Omega make and/or model, and each adaptation or device to be used with any Omega make and/or model (such as the "helper spring"), including testing or submission for approval, listing and/or certification by a certifying laboratory or institution (such as UL or FM), and including all records relating in any way to whether approval, listing or certification was ever refused, withdrawn, discontinued or cancelled for any Omega sprinkler, sprinkler component part or allegedly assistive operating device (such as the helper spring), and/or whether any certifying laboratory or institution has ever objected to your sale and/or distribution of any Omega sprinkler.

REQUEST NO. 28

Provide all records relating in any way to any advertisement, representation, indication and/or suggestion in any marketing material that Omega sprinklers that are not listed or certified by FM are listed or certified by FM.

REQUEST NO. 29

Provide all records relating in any way to any advertisement, representation, indication and/or suggestion in any marketing material that Omega sprinklers that are not listed or

certified by UL are listed or certified by UL.

REQUEST NO. 30

Provide all records relating in any way to any Omega that did not or allegedly did not activate in a fire.

REQUEST NO. 31

Provide all records relating in any way to anyone who was injured or allegedly was injured as a result of or in association with a fire (including death incurred or allegedly incurred in attempting to escape the fire) in which any Omega did not or allegedly did not activate.

REQUEST NO. 32

Provide all records relating in any way to anyone who died or allegedly died as a result of or in association with a fire (including death incurred or allegedly incurred in attempting to escape the fire) in which any Omega did not or allegedly did not activate.

REQUEST NO. 33

Provide all records relating in any way to any property damage or allegedly property damage as a result of or in association with a fire (including death incurred or allegedly incurred in attempting to escape the fire) in which any Omega did not or allegedly did not activate.

REQUEST NO. 34

Provide all records relating in any way to any testing and/or examination of each Omega that failed to activate or allegedly failed to activate in a fire, the system in which that

Omega was installed, and/or any other sprinkler from the same site.

REQUEST NO. 35

Provide all records relating in any way to each Omega sprinkler of which you are aware or have been notified that, when tested, did not activate at 7 psig or below when exposed to its activation/triggering temperature.

REQUEST NO. 36

Provide all records relating in any way to any examination and/or test on any Omega of which you are aware that failed to activate or allegedly failed to activate at 7 psig or below when exposed to its activation/triggering temperature in testing, the system in which it was installed, and/or any other sprinkler from the same site.

REQUEST NO. 37

Provide all records relating in any way to any Omega sprinkler of which you are aware that, when tested in the field, did not activate or allegedly did not activate when exposed to its activation/triggering temperature.

REQUEST NO. 38

Provide all records relating in any way to any examination and/or test on any Omega of which you are aware that failed to activate or allegedly failed to activate when exposed to its activation/triggering temperature when tested in the field.

REQUEST NO. 39

Provide all records relating in any way to the design and/or development of the Omega "helper spring," and/or specifications for the manufacture of the "helper spring."

REQUEST NO. 40

If you contend that an Omega that is installed into a sprinkler system containing water at a pressure of at least 7 psig, that does not activate upon being exposed to its activation (triggering) temperature for long enough for its fusible like to melt, will activate if fitted with the "helper spring" (that Central has proposed for use with the Omega), provide all records that you claim or believe support your contention.

REQUEST NO. 41

Provide all records relating in any way to the method of operation of "helper spring."

REQUEST NO. 42

Provide all records relating in any way to any and all tests performed by you or anyone else to assess whether and/or how the "helper spring" affects the operation of an Omega sprinkler or any Omega component part.

REQUEST NO. 43

Provide all records relating in any way to your communications with any persons and/or entities (including your employees, agents, and consultants) regarding the operation and/or efficacy of the helper spring.

REQUEST NO. 44

Provide all records relating in any way to any Omega sprinkler or component of which you are aware or have been notified has cracked or broken, or allegedly cracked or broken.

REQUEST NO. 45

Provide all records relating in any way to any Omega sprinkler or component of which you are aware or have been notified has exhibited corrosion.

REQUEST NO. 46

Provide all records relating in any way to any Omega sprinkler or component of which you are aware or have been notified has leaked and/or weeped when tested or in a fire.

REQUEST NO. 47

Provide all records relating in any way to any Omega sprinkler or component of which you are aware or have been notified has activated unnecessarily or prematurely (either without or before being exposed to its activation/triggering temperature) when tested or in a fire

REQUEST NO. 48

If you contend that dezincification may cause an Omega to:

(a) leak and/or weep;

(b) activate prematurely and/or unnecessarily;

(c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or

(d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or

(e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature),

provide all records that you claim or believe support your contention.

REQUEST NO. 49

Provide all records relating in any way to any Omega with a plunger housing made of an alloy other than CDA 35330, from a plastic or copper piping system, that has exhibited or allegedly exhibited dezincification.

REQUEST NO. 50

Provide all records relating in any way to testing and/or examination of the system in which any Omega with a plunger housing made of an alloy other than CDA 35330, from a plastic or copper piping system, that has exhibited or allegedly exhibited dezincification, was installed, and/or testing and/or examination of any other sprinkler from the same site.

REQUEST NO. 51

Provide all records relating in any way to any Omega with a plunger housing made of CDA 35330 alloy, from a plastic or copper piping system, that has exhibited or allegedly exhibited dezincification.

REQUEST NO. 52

Provide all records relating in any way to testing and/or examination of the system in which any Omega with a plunger housing made of CDA 35330 alloy, from a plastic or copper piping system, that has exhibited or allegedly exhibited dezincification was installed, and/or testing and/or examination of any other sprinkler from the same site.

REQUEST NO. 53

Provide all records relating in any way to any Omega from a piping system that is neither copper or plastic that has exhibited or allegedly exhibited dezincification.

REQUEST NO. 54

Provide all records relating in any way to testing and/or examination of the system in which any Omega from a piping system that is neither copper or plastic, that has exhibited or allegedly exhibited dezincification, was installed, and/or testing and/or examination of any other sprinkler from the same site.

REQUEST NO. 55

Provide all records relating in any way to any Omega sprinkler from a copper or plastic piping system that did not exhibit dezincification, and that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire.

REQUEST NO. 56

Provide all records relating in any way to testing and/or examination of the system in which any Omega that did not exhibit dezincification, and that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire, was installed, and/or testing and/or examination of any other sprinkler from the same site.

REQUEST NO. 57

Provide all records relating in any way to any and all changes listed in your response to Complaint Counsel's Interrogatory No. 47.

REQUEST NO. 58

Provide all records relating in any way to any and all tests and/or examinations conducted to determine whether an Omega manufactured after any and all changes listed in your response to Complaint Counsel's Interrogatory No. 47 exhibits dezincification.

REQUEST NO. 59

Provide all records relating in any way to any and all substances that you contend have been used by sprinkler installers/contractors, plumbers and/or others directly involved in installation and/or maintenance of sprinkler systems, that may cause an Omega to:

(a) leak and/or weep;

(b) activate prematurely and/or unnecessarily;

(c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or

(d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or

(e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature).

REQUEST NO. 60

If you contend that the use of stop leak or other sealant, leakage prevention substance or pipe cement by sprinkler installers/contractors, plumbers and/or others directly involved in installation and/or maintenance of sprinkler systems may cause an Omega to:

(a) leak and/or weep;

(b) activate prematurely and/or unnecessarily;

(c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or

(d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or

(e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature),

provide all records that you claim or believe support your contention.

REQUEST NO. 61

Provide all records relating in any way to any and all Omegas that were exposed or were allegedly exposed to stop leak or any other sealant, leakage prevention substance or pipe cement.

REQUEST NO. 62

Provide all records relating in any way to testing and/or examination of the system in which any and all Omegas that have been exposed or allegedly have been exposed to stop leak or any other sealant, leakage prevention substance or pipe cement, were installed, and/or testing and/or examination of any other sprinkler from the same site.

REQUEST NO. 63

Provide all records relating in any way to any and all Omegas that were not exposed to stop leak or any other sealant, leakage prevention substance or pipe cement, but that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire?

REQUEST NO. 64

Provide all records relating in any way to any and all changes listed in your response to Complaint Counsel's Interrogatory No. 51.

REQUEST NO. 65

Provide all records relating in any way to any and all tests and/or examinations conducted to determine whether an Omega manufactured after any and all changes listed in your response to Complaint Counsel's Interrogatory No. 51 was affected by the use of stop

leak or any other sealant, leakage prevention substance or pipe cement.

REQUEST NO. 66

If you contend that the use of cutting oil or other substances used by sprinkler installers/contractors, plumbers and/or others directly involved in installation and/or maintenance of sprinkler systems to cut pipe may cause an Omega to:

(a) leak and/or weep;

(b) activate prematurely and/or unnecessarily;

(c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or

(d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or

(e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature),

provide all records that you claim or believe support your contention.

REQUEST NO. 67

Provide all records relating in any way to any Omega that was exposed or was allegedly exposed to cutting oils or other substances used to cut pipe.

REQUEST NO. 68

Provide all records relating in any way to testing and/or examination of the system in which any Omega that has been exposed or allegedly has been exposed to cutting oils or other substances used to cut pipe, was installed, and/or testing and/or examination of any other sprinkler from the same site.

REQUEST NO. 69

Provide all records relating in any way to any Omega sprinkler that was not exposed to cutting oil or other substance used to cut pipe, but that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire.

REQUEST NO. 70

Provide all records relating in any way to testing and/or examination of the system in which any Omega that was not exposed or allegedly exposed to cutting oils or other substances used to cut pipe, but that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire, was installed, and/or testing and/or examination of any other sprinkler from the same site.

REQUEST NO. 71

Provide all records relating in any way to any and all changes listed in your response to Complaint Counsel's Interrogatory No. 55.

REQUEST NO. 72

Provide all records relating in any way to the testing and/or examination of any Omega manufactured after any and all changes listed in your response to Complaint Counsel's Interrogatory No. 55, to determine whether it was exposed to cutting oil or other substance used to cut pipe

REQUEST NO. 73

If you contend that swelling of the "o" ring in an Omega sprinkler may cause the

Omega to:

(a) leak and/or weep;

(b) activate prematurely and/or unnecessarily;

(c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or

(d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or

(e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature),

provide all records that you believe or claim support your contention.

REQUEST NO. 74

Provide all records relating in any way to any and all Omegas containing an EPDM "o" ring, from a steel piping system, that have exhibited or allegedly exhibited "o" ring swelling.

REQUEST NO. 75

Provide all records relating in any way to testing and/or examination of the system in which any Omega containing an EPDM "o" ring, from a steel piping system, that has exhibited or allegedly exhibited "o" ring swelling, was installed, and/or testing and/or examination of any other sprinkler from the same site.

REQUEST NO. 76

Provide all records relating in any way to any Omega containing a silicone "o" ring, from a steel piping system, that has exhibited or allegedly exhibited "o" ring swelling.

REQUEST NO. 77

Provide all records relating in any way to testing and/or examination of the system in which any Omega containing a silicone "o" ring, from a steel piping system, that has exhibited or allegedly exhibited "o" ring swelling, was installed, and/or testing and/or examination of any other sprinkler from the same site.

REQUEST NO. 78

Provide all records relating in any way to any Omega from a piping system that is not steel that has exhibited or allegedly exhibited "o" ring swelling.

REQUEST NO. 79

Provide all records relating in any way to testing and/or examination of the system in which any Omega, from a steel piping system, that has exhibited or allegedly exhibited "o" ring swelling, was installed, and/or testing and/or examination of any other sprinkler from the same site.

REQUEST NO. 80

Provide all records relating in any way to any Omega from a steel piping system that did not exhibit "o" ring swelling, but that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire.

REQUEST NO. 81

Provide all records relating in any way to testing and/or examination of the system in which any Omega that did not exhibit "o" ring swelling, but that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at

a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire, was installed, and/or testing and/or examination of any other sprinkler from the same site.

REQUEST NO. 82

Provide all records relating in any way to any and all changes listed in your response to Complaint Counsel's Interrogatory No. 61.

REQUEST NO. 83

Provide all records relating in any way to the testing and/or examination of any Omega manufactured after any and all changes listed in your response to Complaint Counsel's Interrogatory No. 61, to determine whether it exhibits "o" ring swelling.

REQUEST NO. 84

Provide all records relating in any way to the methods used by you or anyone on your behalf to determine whether an Omega has a swollen "o" ring.

REQUEST NO. 85

If you contend that adhesion of an Omega sprinkler's "o" ring to the plunger housing or main housing of the Omega may cause the Omega to:

(a) leak and/or weep;

(b) activate prematurely and/or unnecessarily;

(c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or

(d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or

(e) fail to activate in a fire (when the Omega is exposed to its activation/triggering

temperature),

provide all records that you claim or believe support your contention.

REQUEST NO. 86

Provide all records relating in any way to any Omega that has exhibited or allegedly exhibited "o" ring adhesion.

REQUEST NO. 87

Provide all records relating in any way to any and all changes listed in your response to Complaint Counsel's Interrogatory No. 64.

REQUEST NO. 88

Provide all records relating in any way to the testing and/or examination of any Omega manufactured after any and all changes listed in your response to Complaint Counsel's Interrogatory No. 64, to determine whether the Omega exhibits "o" ring adhesion.

REQUEST NO. 89

Provide all records relating in any way to the methods used by you or anyone on your behalf to determine whether an Omega exhibits "o" ring adhesion.

REQUEST NO. 90

Provide all records relating in any way to any and all fires in which all Omegas exposed to temperatures at or in excess of their activation/triggering temperature activated.

REQUEST NO. 91

Provide all records relating in any way to any testing and/or examination of any Omegas from sites in which all Omegas exposed to temperatures at or in excess of their activation/triggering temperature activated.

REQUEST NO. 92

Provide all records relating in any way to any tests and/or examinations of Omega sprinklers conducted by you or anyone on your behalf.

REQUEST NO. 93

Provide all records relating in any way to any and all tests and/or examinations of Omega sprinklers conducted pursuant to the protocol in UL 199 or UL 1626, that one or more Omegas did not pass (according to the criteria listed in UL 199 for that test).

REQUEST NO. 94

Provide all records relating in any way to any testing of any Omega conducted by you or on your behalf in which the Omega that, upon being exposed to its activation/triggering temperature, did not activate within 5 seconds at a pressure at or below 7 psig pressure.

REQUEST NO. 95

Provide all records relating in any way to any meetings, discussions and/or communications in which you were in any way involved, and/or which you have received, in which the following were discussed:

a) failure of Omega sprinklers to activate in testing or in a fire;

b) dezincification as a cause or possible cause of Omega non-activation in testing or in a fire;

c) stop leak or other leak prevention substance as a cause or possible cause of Omega non-activation in testing or in a fire;

d) "o" ring swelling as a cause or possible cause of Omega non-activation in testing or in a fire;

e) "o" ring adhesion as a cause or possible cause of Omega non-activation in testing or in a fire;

f) excessive hydrocarbons as a cause or possible cause of Omega non-activation in testing or in a fire;

g) improper system design as a cause or possible cause of Omega non-activation in testing or in a fire;

h) UL listing or certification of any Omega sprinkler or sprinkler assistive device such as the "helper spring;"

i) FM listing or certification of any Omega sprinkler or sprinkler assistive device such as the "helper spring;"

j) NFPA 13 requirements or applicability with respect to fire sprinklers or sprinkler systems;

k) NFPA 25 requirements or applicability with respect to fire sprinklers or sprinkler systems;

l) UL 199 requirements or applicability with respect to fire sprinklers or sprinkler systems;

m) UL 1626 requirements or applicability with respect to fire sprinklers or sprinkler systems.

REQUEST NO. 96

Provide all records relating in any way to any problem, potential problem, complaint or concern (including any reports of nonactivation or possibility of nonactivation) or which you have been notified, regarding or in any way relating to an Omega sprinkler.

REQUEST NO. 97

Provide all records relating in any way to your notification (or notification on your behalf) of any person and/or entity of any and all problems, potential problems, complaints or concerns (including any reports of nonactivation or possibility of nonactivation) regarding or in any way related to any Omega sprinkler.

REQUEST NO. 98

Provide all records relating in any way to any and all requests for information by you (or on your behalf) to any sprinkler contractor or sprinkler owner regarding any Omega sprinkler, including the sprinkler contractor or owner's response.

REQUEST NO. 99

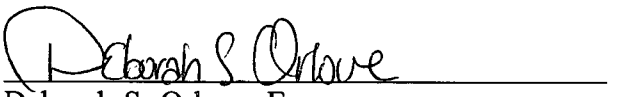
Provide all records relating in any way to your (or anyone on your behalf's) provision (either by sale or without charge) of sprinklers to anyone to replace some or all of the Omegas installed in a particular location.

REQUEST NO. 100

Provide all records relating in any way to the cost of replacement of any and all Omega sprinklers.

REQUEST NO. 101

Provide all records relating in any way to your testing (or testing on your behalf) of any Omega sprinklers from any building or structure in which Omega sprinklers are/were installed.



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Office of Compliance
4330 East West Highway
Bethesda, Maryland 20814
301-504-0626

DATED: April 20, 1998

central\requests.dso

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, Complaint Counsel's **First Set of Interrogatories to Respondents Central Sprinkler Corp. and Central Sprinkler Co.** and **First Requests for Production of Documents and Things to Respondents Central Sprinkler Corp. and Central Sprinkler Co.** were deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

J. Gordon Cooney, Jr.
Thomas P. Hogan, Jr.
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Attorneys for Central Sprinkler Corporation and Central Sprinkler Company

Dated: 4/20/98

central.cer

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION
1998 APR 20 P 5:09

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents	)	

FIRST SET OF INTERROGATORIES TO RESPONDENTS
CENTRAL SPRINKLER CORP. AND CENTRAL SPRINKLER CO.

Complaint Counsel hereby propounds its First Set of Interrogatories upon Respondents Central Sprinkler Corp. and Central Sprinkler Co.

PLEASE TAKE NOTICE that pursuant to 16 C.F.R. § 1025.32, Respondents must respond to these Interrogatories within 30 days after service of same.

PLEASE TAKE FURTHER NOTICE that pursuant to 16 C.F.R. § 1025.31, Respondents are under a continuing duty to supplement their responses to the staff's discovery requests to include information later obtained, regardless of whether the response to the discovery request was complete when made.

DEFINITIONS

Throughout the following Interrogatories and Definitions, unless the context otherwise requires, the singular includes the plural, the masculine includes the feminine, and neuter, or vice versa.

As used herein, the terms below are defined as follows:

"Activate" in the context of Omega sprinklers means full opening (as opposed to partial opening) of the sprinkler -- i.e., full release of the plunger housing -- upon exposure to the Omega's triggering temperature.

"Adhesion" and "Adhered," in the context of a sprinkler "o" ring, refers to adhesion or adhered to the plunger housing and/or main housing of the sprinkler.

"Cause" means to bring about, effect, make happen, contribute to, induce, produce, and/or compel.

"Claim" refers to all lawsuits, governmental actions or orders, disputes, demands for payment, indemnification or reimbursement, complaints, and/or potential lawsuits that contain allegations against you and/or your agents and/or employees.

"Communication" means any transfer of information, ideas, opinions or thought by any means at any time or place under any circumstances, including any transfer of data from one location to another by electrical, electronic or similar means.

"Distribute" means to deliver, sell, give, allot, or otherwise provide, and includes the giving away of free samples and promotional items.

"Document" or "Record" shall have the broadest meanings permissible, and shall include the original and any non-identical copy of any written, graphic, photographic, audio,

electronic or visual material, however produced or reproduced, of any kind or description, whether sent or received or neither, including, but not limited to: papers, books, letters, facsimiles, photographs, motion pictures, video tapes, audio recordings, correspondence, drawings, sketches, schematics, manuals, blueprints, work papers, intra- and interoffice communications, memoranda, notes, transcripts, minutes, reports, recordings of telephone or other conversations, or of interviews, conferences, or meetings, affidavits, statements, summaries, opinions, court pleadings, reports, indices, studies, analyses, evaluations, contracts, licenses, agreements, questionnaires, answers to questionnaires, statistical records, desk calendars, appointment books, diaries, telephone logs, lists, tabulations, charts, graphs, data sheets, computer tapes, disks, printouts or programs, microfilms, all other records kept by electronic, photographic, or mechanical means, and things similar to any of the foregoing, regardless of their author or origin, however denominated, no matter how produced or maintained, regardless of whether in your actual or constructive possession, custody or control, and regardless of whether or not communicated to any person other than the maker. A draft is a separate document or record within the meaning of this term.

If you claim that any document or record is privileged, specify the privilege claimed and the factual basis you contend supports the assertion of the privilege. If any document or record was, but is no longer, in your possession, custody, or control, provide the following information:

a) state the disposition of the document or record;

b) state the date such disposition was made;

c) identify the present custodian of the document or record and state his or her

address or, if the document or record no longer exists, so state;

d) identify the person who made the decision regarding the disposition of the document or record; and

e) state the reason for the disposition and describe the document or record and the contents of the document or record, including the title, the author, the position or title of the author, addressee, the position or title of the addressee, whether indicated or blind copies were made, date, subject matter, number of pages, attachments or appendices, and all persons to whom the document was distributed, shown or explained.

"Field test," for purposes of these Interrogatories, shall mean any test performed on a sprinkler while it is installed in a sprinkler system.

"Identify" or "identity" shall mean, when referring to an individual person, the person's full name, present or last known employer, present or last known address, occupation, business position, and telephone number, and the relationship or association, if any, to a Respondent in this action.

When referring to an entity, the terms "identify" or "identity" shall mean its present and any former name(s), the business address of its principal place of business, its state of incorporation, registration, or organization, the identity and address of its registered agent in each state where it is present and doing business or has a place of business, its present officers, directors, and shareholders, and its relationship, if any, to a Respondent in this action. Once a person or entity has been identified in accordance with this paragraph, only the name of that person or entity need be listed in response to subsequent discovery

requesting the identification of that person or entity.

When referring to a document or record, the terms "identify" or "identity" shall mean a description of the document or record including its date of preparation and transmission, the author, sender and recipient, the custodian of the record, and a summary of the subject matter.

When referring to an Omega or other brand sprinkler, "identify" or "identity means to provide the following information:

a) the sprinkler manufacturer

b) model name and number;

c) manufacture date;

d) activation temperature;

e) "o" ring type (if applicable)

f) all dates of UL listing;

g) the UL standards for safety under which the sprinkler is/was listed;

h) the type of piping in which the sprinkler is or was installed (if applicable);

i) the name, address and telephone number of the building in which the sprinkler was installed (if applicable); and the name, address and telephone number of the owner of that building;

"Manufacture" means to make, produce, assemble, fabricate, or work into usable form.

"Omega" means any and all models and makes (variations within a model) of Omega series or brand automatic fire sprinklers.

"Relating to" shall mean consisting of, referring to, describing, discussing, constituting, evidencing, containing, mentioning, concerning, pertaining to, citing, summarizing, analyzing,

or bearing any logical or factual connection with the matter discussed.

"UL" or "Underwriters Laboratories, Inc." means Underwriters Laboratories, Inc., 333 Pfingsten Road, Northbrook, IL 60062 and any subsidiaries, divisions, or agents of Underwriters Laboratories, Inc.

"You," "your," "yourself" means the Respondent to whom this discovery is directed, including any officer, director, representative, insurer, agent or employee thereof, and also includes any agent, person or entity acting on your behalf.

INSTRUCTIONS

1. Each Interrogatory shall be answered completely, separately, and fully.

2. The following Interrogatories are to be regarded as continuing. You are required to supplement or modify any response as additional or different information becomes known to you.

3. Each person consulted in answering any Interrogatory shall be identified in the body of the response to the particular Interrogatory.

4. If you cannot answer any Interrogatory in full after exercising due diligence, so state and answer or produce to the extent possible, specifying your inability to answer or produce the remainder, stating whatever information or knowledge you have concerning the unanswered portion or unproduced documents, and describing your efforts to secure the unknown information or unproduced documents.

5. If you assert any privilege in responding to any Interrogatory, state the type of privilege asserted and the basis for its assertion. In addition, briefly identify the document or record with respect to which the privilege is asserted. For any document or record with

respect to which a privilege is asserted, state:

a) The type of document or record (e.g., letter, memorandum, contract, etc.), the date of the document, and the subject matter of the document or record;

b) The name, address and position of the author of the document or record and of any person who assisted in its preparation;

c) The name, address and position of each addressee or recipient of the document or record, or any copies of it; and

d) The present location of the document or record and the name, address and position of the person having custody of it.

For any communication with respect to which a privilege is asserted, identify the persons or entities among whom the communication took place, the date of the communication, and the subject.

INTERROGATORIES

INTERROGATORY NO. 1

Identify the person(s) answering these Interrogatories.

INTERROGATORY NO. 2

Identify yourself.

INTERROGATORY NO. 3

Identify all officers, directors and/or shareholders of your company since its formation. For each such person, specify all positions they have held, and the dates they held each position.

INTERROGATORY NO. 4

Provide the date on which the first "Omega" sprinkler was sold or given away as a free sample or promotional item. Identify the fist "Omega" sprinkler sold or given away as a free sample.

INTERROGATORY NO. 5

Identify all makes and/or models of "Omega" sprinklers you have ever designed, manufactured, and/or distributed. For each model, indicate the date(s) it was designed, manufactured and distributed.

INTERROGATORY NO. 6

Provide the total number of Omega sprinklers that:

a) have been sold;

b) have been given away as free samples or promotional items;

c) are installed

in the United States and its territories. Of these, how many contain:

i) EPDM "o" rings;

ii) silicone "o" rings;

iii) neither EPDM or silicone "o" rings (specify whether the model has an "o" ring, and if so, the composition of the "o" ring).

INTERROGATORY NO. 7

How many Omega sprinklers:

a) have been sold;

b) have been given away as free samples or promotional items;

c) are installed

in each state and territory of the United States.

INTERROGATORY NO. 8

Provide the sales price for each Omega sold by you (or anyone on your behalf) in the United States and/or its territories.

INTERROGATORY NO. 9

For each year in which you manufactured and/or distributed Omega sprinklers, provide:

a) your gross income;

b) your net income;

c) the amount in revenues generated from product sales;

d) the amount in revenues generated from sales of Omega sprinklers.

INTERROGATORY NO. 10

How many total Omega sprinklers are installed in the United States and/or its territories in:

a) steel piping systems;

b) copper piping systems;

c) plastic piping systems;

d) polybutylene piping systems;

e) other piping systems not listed above (specify the type of piping system)?

INTERROGATORY NO. 11

How many Omega sprinklers are installed in each state and territory of the United

States in:

a) steel piping systems;

b) copper piping systems;

c) plastic piping systems;

d) polybutylene piping systems;

e) other piping systems not listed above (specify the type of piping system)?

INTERROGATORY NO. 12

How many Omega sprinklers are installed in the United States and/or its territories in:

a) private homes

b) apartment buildings

c) schools (including universities and colleges, public or private)

d) nursing homes

e) hospitals

f) detention facilities (including jails, juvenile detention facilities, etc.)

g) homeless shelters

h) facilities used for recreation (e.g., health clubs, gymnasiums, sports arenas, public pools, country clubs, etc.)

i) hotels

j) museums

k) offices (including office buildings)

l) warehouses with no public access areas

m) industrial facilities with no public access areas

INTERROGATORY NO. 13

Identify which Omega makes and/or models you are currently manufacturing and/or selling.

INTERROGATORY NO. 14

What is the current sales price for each Omega make and/or model listed in your response to Interrogatory No. 13?

INTERROGATORY NO. 15

Identify all of your employees, agents, representatives or consultants who have held a supervisory, managerial, or executive position or role in the following areas of your company at any time:

1) sales;

2) marketing;

3) product design and/or development;

4) engineering and/or technical services;

5) customer service/customer relations;

6) public and/or governmental relations;

7) product manufacturing and/or production;

8) product sales, marketing and/or distribution;

9) corporate mergers and/or acquisitions;

10) quality assurance/control;

11) any divisions, subdivisions or areas that deal or dealt with Omega automatic fire sprinklers and/or any component parts of Omega automatic fire

sprinklers.

For each employee, agent, representative or consultant, please state the position(s) and title(s) of those position(s), term(s) of employment, and salary. If the person is no longer in your employ, please indicate their reason for leaving and, if known, provide their current address and telephone number.

INTERROGATORY NO. 16

Identify all persons and/or entities who were in any way involved in:

a) design and/or development;

b) testing

c) the UL listing process and/or submission of Omega sprinkler samples and/or prototypes for same;

d) marketing;

e) sale; or

f) manufacturing of any makes and/or models

of each make and/or model Omega sprinkler.

For each such person and entity, indicate:

i) whether the person or entity is currently employed by your company;

ii) their position in your company (or, if not in your company, elsewhere) at the time of their involvement;

iii) which makes and/or models the involvement related to; and

iii) describe in detail the nature of their involvement.

INTERROGATORY NO. 17

For each make and/or model of Omega sprinkler, identify and describe (including specifications for) each component part and each chemical (including lubricants), tool and/or substance used in the Omega manufacturing process.

INTERROGATORY NO. 18

Identify the manufacturer of each component part, chemical (including lubricants, etc.), tool and/or substance identified in your response to Interrogatory No. 17.

INTERROGATORY NO. 19

Identify the person and/or entity who supplied to you each component part, chemical (including lubricants, etc.), tool and/or substance identified in your response to Interrogatory No. 17.

INTERROGATORY NO. 20

Identify all persons and/or entities who were involved in any way in the design, specifications, and/or development of each component part, chemical (including lubricants, etc.), tool and/or substance identified in your response to Interrogatory No. 17.

INTERROGATORY NO. 21

Describe in detail the procedures and specifications for the manufacture of each different make and/or model Omega sprinkler, including any changes in such procedures and/or specifications over time. Specify and describe all tools, chemicals and substances used, including when, how and in what amount they are used.

INTERROGATORY NO. 22

For each change in procedure or specification identified in your response to

Interrogatory No. 21:

a) explain the differences between the procedure or specification and its predecessor(s);

b) explain the reasons for the change;

c) identify all persons and/or entities involved in bringing about the change, and explain their role in same;

d) identify all persons and/or entities who implemented the change;

e) indicate whether any tests were done on the models before or after the change occurred. If so:

i) describe the tests and provide a detailed protocol;

ii) identify the persons and entities involved in setting up and/or conducting the tests;

iii) describe and explain the results of the tests, including all observations and conclusions;

iv) identify the persons and entities involved in evaluating the test results.

INTERROGATORY NO. 23

Have you (or anyone on your behalf) ever utilized any chemical or substance in the manufacture of Omega sprinkler(s) to prevent leaking of those sprinklers when they are later installed into a sprinkler system? If so, identify, for each such chemical or substance:

a) its name (and brand name, if applicable);

b) its chemical composition;

c) its manufacturer; and

d) the person and/or entity from whom you purchased and/or received the chemical or substance;

e) identify and describe any tests performed by you or anyone else to assess whether and/or how the substance affects the operation of Omega sprinkler(s) or any Omega component part, providing the following information:

i) describe the tests and provide a detailed protocol;

ii) identify the persons and entities involved in setting up and/or conducting the tests;

iii) describe and explain the results of the tests, including all observations and conclusions;

iv) identify the persons and entities involved in evaluating the test results.

f) indicate whether you have communicated with any persons and/or entities (including your employees, agents, and consultants) regarding any such chemical or substance. If so, provide the following information:

i) identify all such persons and/or entities;

ii) state the date of the communication;

iii) describe the content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 24

Were/are there any prototypes or precursors of any of the Omega sprinklers listed in your response to Interrogatory No. 6? If so:

a) identify and describe each prototypes or precursor, including any modifications

in composition or design;

b) indicate the date on which it was designed and/or developed;

c) identify all persons and entities who were in any way involved in designing, developing and/or reviewing the prototype or precursor;

d) identify the Omega model to which the prototype or precursor corresponds;

e) describe all tests and evaluations performed on the prototype or precursor, providing the following information:

   i) the date on which the test or evaluation was conducted;

   ii) the protocol for the test or evaluation;

   iii) identify all persons and entities who conducted, attended, reviewed, and/or supervised the test or evaluation;

f) indicate whether the prototype or precursor was ever submitted to a testing laboratory for review, certification or listing. If so, fully describe the circumstances and outcome of the submission and testing, and identify the laboratory;

g) indicate whether you have communicated with any persons and/or entities (including your employees, agents, and consultants) regarding any such prototype or precursor. If so, provide the following information:

   i) identify all such persons and/or entities;

   ii) state the date of the communication;

   iii) describe the content of the communication;

   iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 25

Identify and describe all measures and/or procedures taken by you or anyone on your behalf at any time before, during, and/or after each Omega sprinkler is manufactured, to ensure that each Omega sprinkler will fully and properly activate when exposed to its activation (triggering) temperature.

INTERROGATORY NO. 26

Have you ever known or been advised of any problems with, imperfections or flaws in, defects or deficiencies in or associated with any component part(s) of any Omega sprinkler, or any chemical, tool or substance used in manufacturing Omegas, including whether any component part has been or alleged to have been out of tolerance? If so, for each such problem, flaw, defect and deficiency:

a) describe in full detail the problem, imperfection, flaw, defect, deficiency or extent to which the part was out of tolerance;

b) indicate the date on which you were notified or learned of the problem, flaw, defect or deficiency;

c) indicate how you became aware or were notified of the problem, flaw, defect or deficiency;

d) describe all actions, if any, you took as a result, indicating when those actions were taken; and

e) state whether the affected component part was ever delisted, recalled, discontinued. taken off the market, or requested to be returned to the manufacturer, supplier, distributor, etc. and, if so, explain the circumstances of

same.

INTERROGATORY NO. 27

Explain in full detail the mechanism of proper operation of each different make and model of Omega sprinkler, once exposed to its activation (triggering) temperature.

INTERROGATORY NO. 28

Once the activation (triggering) temperature has been reached, indicate whether water pressure or any other source of pressure (not internal to or part of the Omega itself) is a prerequisite to or requirement for activation of any make and/or model of Omega sprinkler(s). If so:

a) identify the Omega

b) indicate, for each make and/or model of Omega, what the necessary pressure is (in psig);

c) indicate the expected or required source of that pressure;

d) explain how the pressure activates or assists the Omega's activation;

e) explain why the sprinkler will not activate without that pressure.

INTERROGATORY NO. 29

Are you aware of any non-Omega sprinklers that contain an "o" ring? If so:

a) identify the sprinkler make and/or model;

b) identify the manufacturer of the sprinkler;

c) indicate where in the sprinkler the "o" ring is located;

d) explain the mechanism of proper operation/activation of the sprinkler, including how the "o" ring is used; and

e) identify all persons and entities involved in any way in the design of each such sprinkler make and/or model;

f) indicate whether you are aware or have been notified of any instances in which a non-Omega sprinkler containing an "o" ring did not or allegedly did not activate, either in testing or in a fire, when exposed to its activation (triggering) temperature. If so, indicate when, how, and from whom you received such notification;

g) identify all tests of which you are aware that were conducted on the sprinkler to determine whether or not it operates properly, providing the following information:

i) identify the sprinkler;

i) describe the tests and provide a detailed protocol;

ii) identify the persons and entities involved in setting up and/or conducting the tests;

iii) describe and explain the results of the tests, including all observations and conclusions;

iv) identify the persons and entities involved in evaluating the test results;

h) indicate whether you have communicated with any persons and/or entities (including your employees, agents, and consultants) regarding the operation of any non-Omega sprinklers containing an "o" ring. If so, provide the following information:

i) identify all such persons and/or entities;

ii) state the date of the communication;

iii) describe the content of the communication;

iv) identify all persons and/or entities present during the communication;

INTERROGATORY NO. 30

Indicate which Omega makes and/or models, and which, if any, adaptations or devices to be used with any Omega make and/or model (such as the "helper spring"), have been tested or submitted for approval, listing and/or certification by a certifying laboratory or institution such as UL or FM? For each such Omega, for each testing and/or submission, and for each certifying laboratory or institution:

a) describe all efforts involved and steps taken in an effort to obtain approval, listing and/or certification;

b) indicate the date on which each such effort or step took place;

c) indicate the project number, if any, that each such effort or step related to or was part of;

d) identify all persons and/or entities involved in each effort or step;

e) with respect to any testing and/or examinations:

i) describe the tests and/or examinations, and provide a detailed protocol;

ii) identify the persons and entities involved in setting up and/or conducting the tests;

iii) describe and explain the results of the tests, including all observations and conclusions;

iv) identify the persons and entities involved in evaluating the test results;

f) describe all communications regarding or relating in any way to the listing and/or certification, including the following information:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication;

g) indicate whether and when listing and/or certification was granted, refused, or postponed by the certifying laboratory or institution.

INTERROGATORY NO. 31

Indicate whether approval, listing or certification was ever refused, withdrawn, discontinued or cancelled for any Omega sprinkler, sprinkler component part or allegedly assistive operating device (such as the helper spring), and/or whether any certifying laboratory or institution has ever objected to your sale and/or distribution of any Omega sprinkler. If so:

a) identify the Omega and/or Omega component part or allegedly assistive operating device;

b) explain the circumstances and date;

c) identify all persons and/or entities involved;

d) identify and describe all communications regarding or relating in any way to the refusal, withdrawal, discontinuation, cancellation, or objected to sale and/or distribution, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 32

Have you ever advertised, represented, indicated or suggested in any marketing material that Omega sprinklers that are not listed or certified by FM are listed or certified by FM? If so:

a) identify the advertisement or marketing material;

b) indicate whether and when you were notified of the false advertisement, representation, indication or suggestion. If so, indicate:

i) how and from whom you received the notification;

ii) when you received the notification;

iii) describe the contents of the notification;

iv) describe your response to the notification.

INTERROGATORY NO. 33

Have you ever advertised, indicated or suggested in any marketing material that Omega sprinklers that are not listed or certified by UL are listed or certified by UL? If so:

a) identify the advertisement or marketing material;

b) indicate whether and when you were notified of the false advertisement, representation, indication or suggestion. If so, indicate:

i) how and from whom you received the notification;

ii) when you received the notification;

iii) describe the contents of the notification;

iv) describe your response to the notification.

INTERROGATORY NO. 34

Indicate whether you are aware or have ever been notified of an Omega that did not or allegedly did not activate in a fire? If so:

a) identify the Omega;

b) indicate when, where and how the fire occurred;

c) what was the system pressure was (in psig) at the time of the fire and/or nonactivation;

d) indicate whether anyone sustained or allegedly sustained bodily injury as a result of or in association with the fire (including injuries sustained or allegedly sustained in attempting to escape the fire). If so:

i) identify the injured person;

ii) indicate how the injury was or was alleged to have been sustained;

iii) indicate whether a suit, claim, or demand was ever made against you or in which you were implicated relating to the incident or injury; provide details of same;

e) indicate whether anyone died or allegedly died as a result of or in association with the fire (including death incurred or allegedly incurred in attempting to escape the fire). If so:

i) identify the decedent;

ii) indicate how and where the death occurred;

iii) indicate whether a suit, claim, or demand was ever made against you or in which you were implicated relating to the incident or death; provide details of same;

f) indicate whether any property was or allegedly was damaged, lost or destroyed as a result of or in association with the fire (including damage sustained or allegedly sustained in attempting to remove the property from the fire, or in attempting to put out the fire). If so:

i) identify the owner of the property;

ii) indicate how the property was or allegedly was damaged;

iii) indicate the value or alleged value of the property;

iv) indicate whether a suit, claim, or demand was ever made against you or in which you were implicated relating to the incident or damage; provide details of same;

g) indicate whether the Omega was fitted with a "helper spring;"

h) indicate when and how you became aware of the fire and/or the nonactivation, including from whom you received the notification;

i) identify and describe all communications regarding or relating in any way to the fire and/or nonactivation, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

j) indicate whether you or anyone else tested and/or examined any Omega that failed to activate or allegedly failed to activate in a fire, the sprinkler system in which the Omega was installed, and/or any other sprinkler from the same site? If so:

i) identify the sprinkler;

ii) describe the tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;

iv) describe and explain the results of the tests and/or examinations, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test and/or examination results;

k) indicate whether the Omega "o" ring was examined for swelling and/or adhesion. If so:

i) indicate whether swelling and/or adhesion was present;

ii) indicate on what basis and by what criteria it was determined whether the "o" ring was swollen and/or adhered;

iii) identify all persons and/or entities involved in determining whether the "o" ring was swollen and/or adhered;

l) indicate whether the Omega and/or the system from which it came was tested

and/or examined for "stop leak" or any other leakage prevention substance. If so:

i) indicate whether "stop leak" or any other such substance was present;

ii) indicate on what basis and by what criteria it was determined whether "stop leak" or any other such substance was present;

iii) identify all persons and/or entities involved in determining whether "stop leak" or any other such substance was present;

m) indicate whether the Omega was examined for dezincification. If so:

i) indicate whether dezincification had occurred;

ii) indicate on what basis and by what criteria it was determined whether dezincification had occurred;

iii) identify all persons and/or entities involved in determining whether dezincification had occurred;

n) explain why the Omega failed to activate in the fire.

INTERROGATORY NO. 35

Indicate whether you are aware or have ever been notified of an Omega sprinkler that, when tested, did not activate or allegedly did not activate at 7 psig or below when exposed to its activation/triggering temperature? If so:

a) identify the Omega;

b) indicate when, how, and from whom you received such notification;

c) describe and explain the circumstances of the nonactivation at 7 psig, including

i) when and where the testing and nonactivation at or below 7 psig took

place;

ii) describe the tests and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting the tests;

iv) describe and explain the results of the tests, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test results.

d) indicate at what pressure, if any, the Omega activated (or if it failed to activate altogether, indicate the highest pressure to which the sprinkler was subjected);

e) describe and explain your response to the notification;

f) did you or anyone else of whom you are aware examine and/or test the Omega that failed to activate (after it failed to activate), the system in which it was installed, and/or any other sprinkler from the same site? If so:

i) identify the sprinkler;

ii) describe the tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;

iv) describe and explain the results of the tests and/or examinations, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test and/or examination results;

g) identify and describe all communications regarding or relating in any way to

the notification, the sprinkler, the testing and/or examination, and/or the nonactivation at 7 psig or below, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

h) indicate whether the Omega was equipped or fitted with a "helper spring;"

i) indicate whether the Omega "o" ring was examined for swelling and/or adhesion. If so:

i) indicate whether swelling and/or adhesion was present;

ii) indicate on what basis and by what criteria it was determined whether the "o" ring was swollen and/or adhered;

iii) identify all persons and/or entities involved in determining whether the "o" ring was swollen and/or adhered;

j) indicate whether the Omega and/or the system from which it came was tested and/or examined for "stop leak" or any other leakage prevention substance. If so:

i) indicate whether "stop leak" or any other such substance was present;

ii) indicate on what basis and by what criteria it was determined whether "stop leak" or any other such substance was present;

iii) identify all persons and/or entities involved in determining whether

"stop leak" or any other such substance was present;

k) indicate whether the Omega was examined for dezincification. If so:

i) indicate whether dezincification had occurred;

ii) indicate on what basis and by what criteria it was determined whether dezincification had occurred;

iii) identify all persons and/or entities involved in determining whether dezincification had occurred;

l) explain why each such Omega did not activate at or below 7 psig.

INTERROGATORY NO. 36

Indicate whether you are aware or have ever been notified of an Omega sprinkler that, when tested in the field, did not activate or allegedly did not activate when exposed to its activation/triggering temperature? If so:

a) identify the Omega;

b) indicate when, how, and from whom you received such notification;

c) describe and explain the circumstances of the nonactivation, including:

i) when and where the testing and nonactivation took place;

ii) describe the tests and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting the tests;

iv) describe and explain the results of the tests, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test results.

d) indicate what the pressure of the system (in which the Omega was installed) was at the time of the field test;

e) describe and explain your response to the notification;

f) did you or anyone else of whom you are aware examine and/or test the Omega that failed to activate (after it failed to activate), the system in which it was installed, and/or any other sprinkler from the same site? If so:

   i) identify the sprinkler;

   ii) describe the tests and/or examinations, and provide a detailed protocol;

   iii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;

   iv) describe and explain the results of the tests and/or examinations, including all observations and conclusions;

   v) identify the persons and entities involved in evaluating the test and/or examination results;

g) identify and describe all communications regarding or relating in any way to the notification, the sprinkler, the testing and/or examination, and/or the nonactivation, including:

   i) the date on which the communication took place;

   ii) the persons and/or entities to and from whom the communication was directed;

   iii) the nature and content of the communication;

   iv) identify all persons and/or entities present during the communication.

h) indicate whether the Omega was equipped or fitted with a "helper spring;"

i) indicate whether the Omega "o" ring was examined for swelling and/or adhesion. If so:

  i) indicate whether swelling and/or adhesion was present;

  ii) indicate on what basis and by what criteria it was determined whether the "o" ring was swollen and/or adhered;

  iii) identify all persons and/or entities involved in determining whether the "o" ring was swollen and/or adhered;

j) indicate whether the Omega and/or the system from which it came was tested and/or examined for "stop leak" or any other leakage prevention substance. If so:

  i) indicate whether "stop leak" or any other such substance was present;

  ii) indicate on what basis and by what criteria it was determined whether "stop leak" or any other such substance was present;

  iii) identify all persons and/or entities involved in determining whether "stop leak" or any other such substance was present;

k) indicate whether the Omega was examined for dezincification. If so:

  i) indicate whether dezincification had occurred;

  ii) indicate on what basis and by what criteria it was determined whether dezincification had occurred;

  iii) identify all persons and/or entities involved in determining whether dezincification had occurred;

l) explain why each such Omega did not activate when field tested.

INTERROGATORY NO. 37

Do you contend that an Omega that is installed into a sprinkler system containing water at a pressure of at least 7 psig, that does not activate upon being exposed to its activation (triggering) temperature for long enough for its fusible like to melt, will activate if fitted with the "helper spring" (that Central has proposed for use with the Omega)? If so:

a) explain the basis for your contention;

b) describe in detail the method of operation of the "helper spring;"

c) describe in detail the specifications for the "helper spring;"

d) identify the manufacturer of the "helper spring;"

e) identify all persons and/or entities involved in the design and/or development of the "helper spring."

f) describe and any tests performed by you or anyone else to assess whether and/or how the "helper spring" affects the operation of an Omega sprinkler or any Omega component part, providing the following information:

i) describe the tests and provide a detailed protocol;

ii) identify the persons and entities involved in setting up and/or conducting the tests;

iii) describe and explain the results of the tests, including all observations and conclusions;

iv) identify the persons and entities involved in evaluating the test results.

g) indicate whether you have communicated with any persons and/or entities

(including your employees, agents, and consultants) regarding the operation and/or efficacy of the helper spring. If so, provide the following information:

i) identify all such persons and/or entities;

ii) state the date of the communication;

iii) describe the content of the communication;

iv) identify all persons and/or entities present during the communication;

h) if you allege that an Omega sprinkler fitted with a helper spring will activate at a lower system pressure than an Omega without a helper spring, please indicate:

i) how much lower the pressure required to activate the helper-spring fitted Omega is than the pressure required to activate an Omega not fitted with the helper spring; and

ii) explain the basis for your allegation;

iii) indicate what evidence supports your allegation.

INTERROGATORY NO. 38

Have you ever been aware or been notified of an Omega sprinkler or component that has cracked or broken? If so:

a) identify the Omega and, if applicable, its component part;

b) describe the circumstances of the cracking and/or breakage, including the date on which it occurred;

c) identify the person and/or entity (including your employees and/or consultants) who notified you of the cracking and/or breakage;

d) detail when and how you became aware or received notification of the cracking and/or breakage;

e) describe and explain your response to the notification;

f) indicate whether you or anyone of whom you are aware examined and/or tested the affected sprinkler, its component part (if applicable), and/or other sprinklers from that site. If so:

i) describe all such tests and/or examinations, and provide a detailed protocol;

ii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;

iii) describe and explain the results of each test and/or examination, including all observations and conclusions;

iv) identify the persons and entities involved in evaluating the test and/or examination results;

g) identify and describe all communications regarding or relating in any way to the affected sprinkler, the cracking and/or breakage, and/or tests and/or examinations relating thereto, indicating:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication;

h) explain in full detail why the cracking and/or breakage occurred.

INTERROGATORY NO. 39

Have you ever been aware or been notified of an Omega sprinkler or any sprinkler component that has exhibited corrosion? If so:

a) identify the Omega and, if applicable, its component part;

b) describe the circumstances of the corrosion, including the date on which it occurred;

c) identify the person and/or entity (including your employees and/or consultants) who notified you of the corrosion;

d) detail when and how you became aware or received notification of the corrosion;

e) describe and explain your response to the notification;

f) indicate whether you or anyone of whom you are aware examined and/or tested the affected sprinkler, its component part (if applicable), and/or other sprinklers from that site. If so:

i) describe all such tests and/or examinations, and provide a detailed protocol;

ii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;

iii) describe and explain the results of each test and/or examination, including all observations and conclusions;

iv) identify the persons and entities involved in evaluating the test or

examination results;

g) identify and describe all communications regarding or relating in any way to the affected sprinkler, the corrosion, and/or tests and/or examinations relating thereto, indicating:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication;

h) explain in full detail how and why the corrosion occurred.

INTERROGATORY NO. 40

Indicate whether you are aware or have ever been notified of an Omega sprinkler that leaked and/or weeped when tested or in a fire? If so:

a) identify the Omega;

b) indicate when, how, and from whom you received notification or became aware of the leakage and/or weeping;

c) describe and explain the circumstances of the leaking and/or weeping, including when and where the leakage and/or weeping took place. If the leakage and/or weeping took place in testing:

i) describe the tests and provide a detailed protocol;

ii) identify the persons and entities involved in setting up and/or conducting the tests;

iii) describe and explain the results of the tests, including all observations and conclusions (and including at what pressure the sprinkler leaked and/or wept);

iv) identify the persons and entities involved in evaluating the test and/or examination results.

d) indicate whether you or anyone else of whom you are aware tested and/or examined the Omega (after it leaked and/or wept), and/or any other sprinkler from the same site. If so:

i) identify the sprinkler;

ii) describe the tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;

iv) describe and explain the results of the tests and/or examinations, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test and/or examination results.

e) describe and explain your response to the notification;

f) identify and describe all communications regarding or relating in any way to the notification, the sprinkler, the testing, and/or the leakage and/or weeping, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was

directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

g) indicate whether the Omega that leaked or wept was equipped or fitted with a "helper spring;"

h) indicate whether the "o" ring of the Omega that leaked or wept was examined for swelling and/or adhesion. If so:

i) indicate whether swelling and/or adhesion was present;

ii) indicate on what basis and by what criteria it was determined whether the "o" ring was swollen and/or adhered;

iii) identify all persons and/or entities involved in determining whether the "o" ring was swollen and/or adhered;

i) explain why the Omega leaked and/or wept.

INTERROGATORY NO. 41

Indicate whether you are aware or have ever been notified of an Omega sprinkler that activated unnecessarily or prematurely (either without or before being exposed to its activation/triggering temperature) when tested or in a fire? If so:

a) identify the Omega;

b) indicate when, how, and from whom you received notification or became aware of the unnecessary or premature activation;

c) describe and explain the circumstances of the unnecessary and/or premature activation; including when and where the activation took place. If during

testing:

i) describe the tests and provide a detailed protocol;

ii) identify the persons and entities involved in setting up and/or conducting the tests;

iii) describe and explain the results of the tests, including all observations and conclusions (and including at what temperature and pressure the sprinkler activated);

iv) identify the persons and entities involved in evaluating the test results.

d) indicate whether you or anyone else of which you are aware tested and/or examined the Omega (after it activated prematurely and/or unnecessarily), and/or any other sprinkler from the same site. If so:

i) identify the sprinkler;

ii) describe the tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;

iv) describe and explain the results of the tests and/or examinations, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test and/or examination results.

e) describe and explain your response to the notification;

f) identify and describe all communications regarding or relating in any way to the notification, the sprinkler, the testing, and/or the premature and/or

unnecessary activation, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

g) indicate whether the Omega that activated prematurely and/or unnecessarily was equipped or fitted with a "helper spring;"

h) indicate whether the "o" ring of the Omega that activated prematurely and/or unnecessarily was examined for swelling and/or adhesion. If so:

i) indicate whether swelling and/or adhesion was or was not present;

ii) indicate on what basis and by what criteria it was determined whether the "o" ring was swollen and/or adhered;

ii) identify all persons and/or entities involved in determining whether the "o" ring was swollen and/or adhered;

i) explain why the Omega activated prematurely and/or unnecessarily.

INTERROGATORY NO. 42

Do you contend that dezincification may cause an Omega to:

a) leak and/or weep;

b) activate prematurely and/or unnecessarily;

c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or

d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or

e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature). If so:

i) explain the basis for your contention;

ii) identify the Omegas in which dezincification causes or may cause (a), (b), (c), and/or (d), above;

iii) identify the systems in which dezincification causes or may cause (a), (b), (c) and/or (d), above;

iv) describe the circumstances under which dezincification causes or may cause (a), (b), (c) and/or (d), above.

INTERROGATORY NO. 43

Have you or anyone of whom you are aware ever determined or alleged that an Omega with a plunger housing made of an alloy other than CDA 35330, from a plastic or copper piping system, exhibits dezincification? If so:

a) identify the Omega;

b) identify the person and/or entity that made the determination or allegation;

c) indicate the date on which the determination or allegation was made;

d) describe the methods and criteria used to determine and confirm the existence of dezincification;

e) identify the person and/or entity (including your employees or consultants) who notified you of the alleged dezincification;

f) indicate how and when you were notified of the alleged dezincification;

g) detail your response to the notification or awareness;

h) did you or anyone else of whom you are aware test and/or examine the Omega, the system in which it was installed and/or any other sprinkler from the same site? If so:

   i) identify the Omega;

   ii) describe all such tests and/or examinations, and provide a detailed protocol;

   iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;

   iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

   v) identify the persons and entities involved in evaluating the test and/or examination results;

i) identify and describe all communications regarding or relating in any way to the Omega, the alleged dezincification, the examination and/or conclusion, and any tests and/or examinations relating thereto, indicating:

   i) the date on which the communication took place;

   ii) the persons and/or entities to and from whom the communication was directed;

   iii) the nature and content of the communication;

   iv) identify all persons and/or entities present during the communication.

j) With respect to each such Omega, indicate whether you contend that the dezincification caused the Omega to:

i) leak and/or weep;

ii) prematurely and/or unnecessarily activate;

iii) fail to activate at 7 psig or below in testing (when exposed to its activation/triggering temperature;

iv) fail to activate in field testing (when exposed to its activation/triggering temperature);

v) fail to activate in a fire (when exposed to its activation/triggering temperature).

If so, explain fully the basis for your contention.

INTERROGATORY NO. 44

Have you or anyone of whom you are aware ever determined or alleged that an Omega with a plunger housing made of CDA 35330 alloy, from a plastic or copper piping system, exhibits dezincification? If so:

a) identify the Omega;

b) identify the person and/or entity that made the determination or allegation;

c) indicate the date on which the determination or allegation was made;

d) describe the methods and criteria used to determine and confirm the existence of dezincification;

e) identify the person and/or entity (including your employees or consultants) who notified you of the alleged dezincification;

f) indicate how and when you were notified of the alleged dezincification;

g) detail your response to the notification or awareness;

h) did you or anyone else of whom you are aware test and/or examine the Omega and/or any other sprinkler from the same site? If so:

  i) identify the Omega;

  ii) describe all such tests and/or examinations, and provide a detailed protocol;

  iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;

  iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

  v) identify the persons and entities involved in evaluating the test and/or examination results;

i) identify and describe all communications regarding or relating in any way to the Omega, the alleged dezincification, the examination and/or conclusion, and any tests and/or examinations relating thereto, indicating:

  i) the date on which the communication took place;

  ii) the persons and/or entities to and from whom the communication was directed;

  iii) the nature and content of the communication;

  iv) identify all persons and/or entities present during the communication.

j) With respect to each such Omega, indicate whether you or anyone else of

whom you are aware contend that the dezincification caused the Omega to:

i) leak and/or weep;

ii) prematurely and/or unnecessarily activate;

iii) fail to activate at 7 psig or below in testing (when exposed to its activation/triggering temperature;

iv) fail to activate in field testing (when exposed to its activation/triggering temperature);

v) fail to activate in a fire (when exposed to its activation/triggering temperature).

If so, explain fully the basis for your contention or, if not your contention, identify the person and/or entity who so contended, and explain your understanding of the basis for their contention.

INTERROGATORY NO. 45

Have you or anyone of whom you are aware ever determined or alleged that an Omega from a piping system that is neither copper or plastic exhibits dezincification? If so:

a) identify the Omega;

b) identify the person and/or entity that made the determination or allegation;

c) indicate the date on which the determination or allegation was made;

d) describe the methods and criteria used to determine and confirm the existence of dezincification;

e) identify the person and/or entity (including your employees or consultants) who notified you of the alleged dezincification;

f) indicate how and when you were notified of the alleged dezincification;

g) detail your response to the notification or awareness;

h) did you or anyone else of whom you are aware test and/or examine the Omega and/or any other sprinkler from the same site? If so:

  i) identify the Omega;

  ii) describe all such tests and/or examinations, and provide a detailed protocol;

  iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;

  iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

  v) identify the persons and entities involved in evaluating the test and/or examination results;

i) identify and describe all communications regarding or relating in any way to the Omega, the alleged dezincification, the examination and/or conclusion, and any tests and/or examinations relating thereto, indicating:

  i) the date on which the communication took place;

  ii) the persons and/or entities to and from whom the communication was directed;

  iii) the nature and content of the communication;

  iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 46

Are you aware or have you ever been notified of an Omega sprinkler from a copper or plastic piping system that did not exhibit dezincification, and that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire? If so:

a) identify the Omega;

b) describe the circumstances under which the Omega did not activate;

c) indicate at what pressure, if any, the Omega activated (or if it failed to activate altogether, indicate the highest pressure to which the Omega was subjected);

d) identify the person and/or entity (including your employees and/or consultants) who notified you of the Omega and/or its nonactivation under the circumstances above;

e) indicate how and when you became aware or received notification of the nonactivation under the circumstances described above;

f) indicate on what basis and by what criteria it was determined whether dezincification was present;

g) detail your response to the notification or awareness;

h) indicate whether you or anyone else of whom you are aware examined and/or tested the affected sprinkler and/or other sprinklers from that site. If so:

   i) identify the Omega;

   ii) describe all such tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;

iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test results;

i) identify and describe all communications regarding or relating in any way to the Omega and/or its nonactivation, and/or tests and/or examinations relating thereto, indicating:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

j) explain in full detail why the Omega did not activate.

INTERROGATORY NO. 47

Do you allege that any change in the manufacturing process and/or component parts, including any tools, substances or chemicals used in the manufacturing process, renders the Omegas manufactured after a certain date unsusceptible to dezincification? If so:

a) describe the alleged change, and indicate which Omega makes and models were changed;

b) indicate the date on which the change was effected;

c) identify all persons and/or entities involved in effecting the change, describing

each such person's role in effecting the change;

d) indicate whether you or anyone else of whom you are aware has tested and/or examined an Omega manufactured after the change to determine whether it exhibits dezincification? If so:

i) identify the Omega;

ii) describe all such tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting each test or examination;

iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test and/or examination results;

e) identify and describe all communications regarding or relating in any way to the change and/or tests and/or examinations relating thereto, indicating:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 48

Do you contend that the use of stop leak or other sealant, leakage prevention substance

or pipe cement by sprinkler installers/contractors, plumbers and/or others directly involved in installation and/or maintenance of sprinkler systems may cause an Omega to:

a) leak and/or weep;

b) activate prematurely and/or unnecessarily;

c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or

d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or

e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature). If so:

i) explain the basis for your contention;

ii) identify the Omegas in which the use of stop leak or other sealant, leakage prevention substance or pipe cement causes or may cause (a), (b), (c), and/or (d), above;

iii) identify the systems in which the use of stop leak or other sealant, leakage prevention substance or pipe cement causes or may cause (a), (b), (c) and/or (d), above;

iv) identify the substances you contend are used;

v) describe the circumstances under which the use of stop leak or other sealant, leakage prevention substance or pipe cement causes or may cause (a), (b), (c) and/or (d), above.

INTERROGATORY NO. 49

Have you or anyone of whom you are aware ever determined or alleged that an Omega sprinkler was exposed to stop leak or any other sealant, leakage prevention substance or pipe cement? If so:

a) identify the Omega;

b) identify the substance to which the Omega was allegedly exposed, including the manufacturer, chemical name, brand name, and chemical composition;

c) identify the person and/or entity that made the determination or allegation;

d) indicate the date on which the determination or allegation was made;

e) describe the methods and criteria used to determine and confirm the existence of the stop leak or the other sealant, leak prevention substance or pipe cement;

f) identify the person and/or entity (including your employees or consultants) who notified you of the alleged exposure to stop leak or any other sealant, leakage prevention substance or pipe cement;

g) indicate how and when you were notified of the alleged exposure to stop leak or any other sealant, leakage prevention substance or pipe cement;

h) detail your response to the notification or awareness;

i) did you or anyone else of whom you are aware test and/or examine the Omega and/or any other sprinkler from the same site? If so:

   i) identify the Omega;

   ii) describe all such tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;

iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test and/or examination results;

j) identify and describe all communications regarding or relating in any way to the Omega, the alleged exposure to stop leak or any other sealant, leakage prevention substance or pipe cement, the examination and/or conclusion, and any tests and/or examinations relating thereto, indicating:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

k) With respect to each such Omega, indicate whether you contend that the exposure to stop leak or any other sealant, leakage prevention substance or pipe cement caused the Omega to:

i) leak and/or weep;

ii) prematurely and/or unnecessarily activate;

iii) fail to activate at 7 psig or below in testing (when exposed to its activation/triggering temperature;

iv) fail to activate in field testing (when exposed to its activation/triggering temperature);

v) fail to activate in a fire (when exposed to its activation/triggering temperature);

If so, explain fully the basis for your contention.

INTERROGATORY NO. 50

Are you aware or have you ever been notified of an Omega sprinkler that was not exposed to stop leak or any other sealant, leakage prevention substance or pipe cement, and that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire? If so:

a) identify the Omega;

b) describe the circumstances under which the Omega did not activate;

c) indicate at what pressure, if any, the Omega activated (or if it failed to activate altogether, indicate the highest pressure to which the Omega was subjected);

d) identify the person and/or entity (including your employees and/or consultants) who notified you of the Omega and/or its nonactivation under the circumstances above;

e) indicate how and when you became aware or received notification of the nonactivation under the circumstances described above;

f) indicate on what basis and by what criteria it was determined whether stop leak or any other sealant, leakage prevention substance or pipe cement was present;

g) detail your response to the notification or awareness;

h) indicate whether you or anyone else of whom you are aware examined and/or tested the affected sprinkler and/or other sprinklers from that site. If so:

i) identify the Omega;

ii) describe all such tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;

iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test results;

i) identify and describe all communications regarding or relating in any way to the Omega and/or its nonactivation, and/or tests and/or examinations relating thereto, indicating:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication;

j) explain in full detail why the Omega did not activate.

INTERROGATORY NO. 51

Do you allege that any change in the manufacturing process and/or component parts,

including any tools, substances or chemicals used in the manufacturing process, renders the Omegas manufactured after a certain date unsusceptible to the effects that you allege in your response to Interrogatory No. 48 are caused or may be caused by the use of stop leak or any other sealant, leakage prevention substance or pipe cement? If so, for each such substance (stop leak or any other sealant, leakage prevention substance or pipe cement):

a) identify the substance;

b) describe the alleged change, and identify the Omega makes and models to which the change applies;

c) indicate the date on which the change was effected;

d) identify all persons and/or entities involved in effecting the change, describing each such person's role in effecting the change;

e) indicate whether you or anyone else of whom you are aware has tested and/or examined an Omega manufactured after the change to determine whether it exhibits the effects that you allege in your response to Interrogatory No. 48 are caused or may be caused by the use of stop leak or any other sealant, leakage prevention substance or pipe cement? If so:

i) identify the Omega;

ii) describe all such tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting each test or examination;

iv) describe and explain the results of each test and/or examination,

including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test and/or examination results;

e) identify and describe all communications regarding or relating in any way to the change and/or tests and/or examinations relating thereto, indicating:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 52

Do you contend that the use of cutting oil or other substances used by sprinkler installers/contractors, plumbers and/or others directly involved in installation and/or maintenance of sprinkler systems to cut pipe may cause an Omega to:

a) leak and/or weep;

b) activate prematurely and/or unnecessarily;

c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or

d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or

e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature). If so:

i) explain the basis for your contention;

ii) identify the Omegas in which the use of cutting oils or other substances used to cut pipe causes or may cause (a), (b), (c), and/or (d), above;

iii) identify the systems in which the use of cutting oils or other substances used to cut pipe causes or may cause (a), (b), (c) and/or (d), above;

iv) identify the substances you contend are used;

v) describe the circumstances under which the use of cutting oils or other substances used to cut pipe causes or may cause (a), (b), (c) and/or (d), above.

INTERROGATORY NO. 53

Have you or anyone of whom you are aware ever determined or alleged that an Omega sprinkler was exposed to cutting oils or other substances used to cut pipe? If so:

a) identify the Omega;

b) identify the substance to which the Omega was allegedly exposed, including the manufacturer, chemical name, brand name, and chemical composition;

c) identify the person and/or entity that made the determination or allegation;

d) indicate the date on which the determination or allegation was made;

e) describe the methods and criteria used to determine and confirm the existence of the cutting oil or other substance used to cut pipe;

f) identify the person and/or entity (including your employees or consultants) who notified you of the alleged exposure to cutting oil or other substance to cut pipe;

g) indicate how and when you were notified of the alleged exposure to cutting oil or other substance to cut pipe;

h) detail your response to the notification or awareness;

i) did you or anyone else of whom you are aware test and/or examine the Omega and/or any other sprinkler from the same site? If so:

  i) identify the Omega;

  ii) describe all such tests and/or examinations, and provide a detailed protocol;

  iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;

  iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

  v) identify the persons and entities involved in evaluating the test and/or examination results;

j) identify and describe all communications regarding or relating in any way to the Omega, the alleged exposure to cutting oil or other substance to cut pipe, the examination and/or conclusion, and any tests and/or examinations relating thereto, indicating:

  i) the date on which the communication took place;

  ii) the persons and/or entities to and from whom the communication was directed;

  iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication;

k) With respect to each such Omega, indicate whether you contend that the exposure to cutting oil or other substance to cut pipe caused the Omega to:

i) leak and/or weep;

ii) prematurely and/or unnecessarily activate;

iii) fail to activate at 7 psig or below in testing (when exposed to its activation/triggering temperature;

iv) fail to activate in field testing (when exposed to its activation/triggering temperature);

v) fail to activate in a fire (when exposed to its activation/triggering temperature).

If so, explain fully the basis for your contention.

INTERROGATORY NO. 54

Are you aware or have you ever been notified of an Omega sprinkler that was not exposed to cutting oil or other substance used to cut pipe, and that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire? If so:

a) identify the Omega;

b) describe the circumstances under which the Omega did not activate;

c) indicate at what pressure, if any, the Omega activated (or if it failed to activate altogether, indicate the highest pressure to which the Omega was subjected);

d) identify the person and/or entity (including your employees and/or consultants)

who notified you of the Omega and/or its nonactivation under the circumstances above;

e) indicate how and when you became aware or received notification of the nonactivation under the circumstances described above;

f) indicate on what basis and by what criteria it was determined whether cutting oil or other substance to cut pipe was present;

g) detail your response to the notification or awareness;

h) indicate whether you or anyone else of whom you are aware examined and/or tested the affected sprinkler and/or other sprinklers from that site. If so:

   i) identify the Omega;

   ii) describe all such tests and/or examinations, and provide a detailed protocol;

   iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;

   iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

   v) identify the persons and entities involved in evaluating the test results;

i) identify and describe all communications regarding or relating in any way to the Omega and/or its nonactivation, and/or tests and/or examinations relating thereto, indicating:

   i) the date on which the communication took place;

   ii) the persons and/or entities to and from whom the communication was

directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication;

j) explain in full detail why the Omega did not activate.

INTERROGATORY NO. 55

Do you allege that any change in the manufacturing process and/or component parts, including any tools, substances or chemicals used in the manufacturing process, renders the Omegas manufactured after a certain date unsusceptible to the effects that you allege in your response to Interrogatory No. 52 are caused or may be caused by the use of cutting oil or other substance used to cut pipe? If so, for each such substance (cutting oil or other substance used to cut pipe):

a) identify the substance;

b) describe the alleged change, and identify the Omega makes and models to which the change applies;

c) indicate the date on which the change was effected;

d) identify all persons and/or entities involved in effecting the change, describing each such person's role in effecting the change;

e) indicate whether you or anyone else of whom you are aware has tested and/or examined an Omega manufactured after the change to determine whether it exhibits the effects that you allege in your response to Interrogatory No. 52 are caused or may be caused by the use of cutting oil or other substance used to cut pipe? If so:

i) identify the Omega;

ii) describe all such tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting each test or examination;

iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test and/or examination results;

f) identify and describe all communications regarding or relating in any way to the change and/or tests and/or examinations relating thereto, indicating:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 56

Do you contend that swelling of the "o" ring in an Omega sprinkler may cause the Omega to:

a) leak and/or weep;

b) activate prematurely and/or unnecessarily;

c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its

activation/triggering temperature); and/or

d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or

e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature). If so:

i) explain the basis for your contention;

ii) identify the Omegas in which "o" ring swelling causes or may cause (a), (b), (c), and/or (d), above, indicating what type of "o" ring (EPDM, silicone, or other) is used in that Omega;

iii) identify the systems in which "o" ring swelling causes or may cause (a), (b), (c) and/or (d), above;

iv) describe the circumstances under which "o" ring swelling causes or may cause (a), (b), (c) and/or (d), above.

INTERROGATORY NO. 57

Have you or anyone of whom you are aware ever determined or alleged that an Omega containing an EPDM "o" ring, from a steel piping system, exhibits "o" ring swelling? If so:

a) identify the Omega;

b) identify the person and/or entity that made the determination or allegation;

c) indicate the date on which the determination or allegation was made;

d) describe the methods and criteria used to determine and confirm the existence of "o" ring swelling;

e) identify the person and/or entity (including your employees or consultants) who notified you of the alleged "o" ring swelling;

f) indicate how and when you were notified of the alleged "o" ring swelling;

g) detail your response to the notification or awareness;

h) did you or anyone else of whom you are aware test and/or examine the Omega and/or any other sprinkler from the same site? If so:

  i) identify the Omega;

  ii) describe all such tests and/or examinations, and provide a detailed protocol;

  iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;

  iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

  v) identify the persons and entities involved in evaluating the test and/or examination results;

i) identify and describe all communications regarding or relating in any way to the Omega, the alleged "o" ring swelling, the examination and/or conclusion, and any tests and/or examinations relating thereto, indicating:

  i) the date on which the communication took place;

  ii) the persons and/or entities to and from whom the communication was directed;

  iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication;

j) With respect to each such Omega, indicate whether you contend that the "o" ring swelling caused the Omega to:

i) leak and/or weep;

ii) prematurely and/or unnecessarily activate;

iii) fail to activate at 7 psig or below in testing (when exposed to its activation/triggering temperature;

iv) fail to activate in field testing (when exposed to its activation/triggering temperature);

v) fail to activate in a fire (when exposed to its activation/triggering temperature).

If so, explain fully the basis for your contention.

INTERROGATORY NO. 58

Have you or anyone of whom you are aware ever determined or alleged that an Omega containing a silicone "o" ring, from a steel piping system, exhibits "o" ring swelling? If so:

a) identify the Omega;

b) identify the person and/or entity that made the determination or allegation;

c) indicate the date on which the determination or allegation was made;

d) describe the methods and criteria used to determine and confirm the existence of "o" ring swelling;

e) identify the person and/or entity (including your employees or consultants) who

notified you of the alleged "o" ring swelling;

f) indicate how and when you were notified of the alleged "o" ring swelling;

g) detail your response to the notification or awareness;

h) did you or anyone else of whom you are aware test and/or examine the Omega and/or any other sprinkler from the same site? If so:

  i) identify the Omega;

  ii) describe all such tests and/or examinations, and provide a detailed protocol;

  iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;

  iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

  v) identify the persons and entities involved in evaluating the test and/or examination results;

i) identify and describe all communications regarding or relating in any way to the Omega, the alleged "o" ring swelling, the examination and/or conclusion, and any tests and/or examinations relating thereto, indicating:

  i) the date on which the communication took place;

  ii) the persons and/or entities to and from whom the communication was directed;

  iii) the nature and content of the communication;

  iv) identify all persons and/or entities present during the communication;

j) With respect to each such Omega, indicate whether you or anyone else of whom you are aware contend that the "o" ring swelling caused the Omega to:

i) leak and/or weep;

ii) prematurely and/or unnecessarily activate;

iii) fail to activate at 7 psig or below in testing (when exposed to its activation/triggering temperature;

iv) fail to activate in field testing (when exposed to its activation/triggering temperature);

v) fail to activate in a fire (when exposed to its activation/triggering temperature).

If so, explain fully the basis for your contention or, if not your contention, identify the person and/or entity who so contends, and explain your understanding of their basis for that contention.

INTERROGATORY NO. 59

Have you or anyone of whom you are aware ever determined or alleged that an Omega from a piping system that is not steel exhibits "o" ring swelling? If so:

a) identify the Omega;

b) indicate what type of "o" ring the Omega contained (EPDM, silicone, or other type of "o" ring);

c) identify the person and/or entity that made the determination or allegation;

d) indicate the date on which the determination or allegation was made;

e) describe the methods and criteria used to determine and confirm the existence

of "o" ring swelling;

f) identify the person and/or entity (including your employees or consultants) who notified you of the alleged "o" ring swelling;

g) indicate how and when you were notified of the alleged "o" ring swelling;

h) detail your response to the notification or awareness;

i) did you or anyone else of whom you are aware test and/or examine the Omega and/or any other sprinkler from the same site? If so:

  i) identify the Omega;

  ii) describe all such tests and/or examinations, and provide a detailed protocol;

  iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;

  iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

  v) identify the persons and entities involved in evaluating the test and/or examination results;

j) identify and describe all communications regarding or relating in any way to the Omega, the alleged "o" ring swelling, the examination and/or conclusion, and any tests and/or examinations relating thereto, indicating:

  i) the date on which the communication took place;

  ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 60

Are you aware or have you ever been notified of an Omega sprinkler from a steel piping system that did not exhibit "o" ring swelling, and that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire? If so:

a) identify the Omega and indicate what type of "o" ring it contained;

b) describe the circumstances under which the Omega did not activate;

c) indicate at what pressure, if any, the Omega activated (or if it failed to activate altogether, indicate the highest pressure to which the Omega was subjected);

d) identify the person and/or entity (including your employees and/or consultants) who notified you of the Omega and/or its nonactivation under the circumstances above;

e) indicate how and when you became aware or received notification of the nonactivation under the circumstances described above;

f) indicate on what basis and by what criteria it was determined whether "o" ring swelling was present;

g) detail your response to the notification or awareness;

h) indicate whether you or anyone else of whom you are aware examined and/or tested the affected sprinkler and/or other sprinklers from that site. If so:

i) identify the Omega;

ii) describe all such tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;

iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test results;

i) identify and describe all communications regarding or relating in any way to the Omega and/or its nonactivation, and/or tests and/or examinations relating thereto, indicating:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication;

j) explain in full detail why the Omega did not activate.

INTERROGATORY NO. 61

Do you allege that any change in the manufacturing process and/or component parts, including any tools, substances or chemicals used in the manufacturing process, renders the Omegas manufactured after a certain date unsusceptible to "o" ring swelling? If so:

a) describe the alleged change, and identify the Omega makes and models to which the change applies;

b) indicate the date on which the change was effected;

c) identify all persons and/or entities involved in effecting the change, describing each such person's role in effecting the change;

d) indicate whether you or anyone else of whom you are aware has tested and/or examined an Omega manufactured after the change to determine whether it exhibits "o" ring swelling; If so:

   i) identify the Omega;

   ii) describe all such tests and/or examinations, and provide a detailed protocol;

   iii) identify the persons and entities involved in setting up and/or conducting each test or examination;

   iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

   v) identify the persons and entities involved in evaluating the test and/or examination results;

e) identify and describe all communications regarding or relating in any way to the change and/or tests and/or examinations relating thereto, indicating:

   i) the date on which the communication took place;

   ii) the persons and/or entities to and from whom the communication was directed;

   iii) the nature and content of the communication;

   iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 62

Do you contend that adhesion of an Omega sprinkler's "o" ring to the plunger housing or main housing of the Omega may cause the Omega to:

a) leak and/or weep;

b) activate prematurely and/or unnecessarily;

c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or

d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or

e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature). If so:

i) explain the basis for your contention;

ii) identify the Omegas in which "o" ring adhesion causes or may cause (a), (b), (c), and/or (d), above;

iii) identify the systems in which "o" ring adhesion causes or may cause (a), (b), (c) and/or (d), above;

iv) identify the Omegas in which "o" ring adhesion causes or may cause (a), (b), (c) and/or (d), above;

v) describe the circumstances under which "o" ring adhesion causes or may cause (a), b), (c) and/or (d), above.

INTERROGATORY NO. 63

Have you or anyone of whom you are aware ever determined or alleged that an

Omega exhibits "o" ring adhesion? If so:

a) identify the Omega, and indicate what type of "o" ring it contained (EPDM, silicone, or other);

b) identify the person and/or entity that made the determination or allegation;

c) indicate the date on which the determination or allegation was made;

d) describe the methods and criteria used to determine and confirm the existence of "o" ring adhesion;

e) identify the person and/or entity (including your employees or consultants) who notified you of the alleged "o" ring adhesion;

f) indicate how and when you were notified of the alleged "o" ring adhesion;

g) detail your response to the notification or awareness;

h) did you or anyone else of whom you are aware test and/or examine the Omega and/or any other sprinkler from the same site? If so:

i) identify the Omega;

ii) describe all such tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;

iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test and/or examination results;

i) identify and describe all communications regarding or relating in any way to the Omega, the alleged "o" ring adhesion, the examination and/or conclusion, and any tests and/or examinations relating thereto, indicating:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication;

j) With respect to each such Omega, indicate whether you or anyone of whom you are aware contend that the "o" ring adhesion caused the Omega to:

i) leak and/or weep;

ii) prematurely and/or unnecessarily activate;

iii) fail to activate at 7 psig or below in testing (when exposed to its activation/triggering temperature;

iv) fail to activate in field testing (when exposed to its activation/triggering temperature);

v) fail to activate in a fire (when exposed to its activation/triggering temperature).

If so, explain fully the basis for your contention or, if not your contention, identify the person and/or entity who so contended, and explain your understanding of the basis for that contention.

INTERROGATORY NO. 64

Do you allege that any change in the manufacturing process and/or component parts, including any tools, substances or chemicals used in the manufacturing process, renders the Omegas manufactured after a certain date unsusceptible to "o" ring adhesion? If so:

a) describe the alleged change, and identify the Omega makes and models to which the change applies;

b) indicate the date on which the change was effected;

c) identify all persons and/or entities involved in effecting the change, describing each such person's role in effecting the change;

d) indicate whether you or anyone else of whom you are aware has tested and/or examined an Omega manufactured after the change to determine whether it exhibits "o" ring adhesion; If so:

   i) identify the Omega;

   ii) describe all such tests and/or examinations, and provide a detailed protocol;

   iii) identify the persons and entities involved in setting up and/or conducting each test or examination;

   iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

   v) identify the persons and entities involved in evaluating the test and/or examination results;

e) identify and describe all communications regarding or relating in any way to

the change and/or tests and/or examinations relating thereto, indicating:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 65

Do you contend or are you aware of any fires in which all Omegas exposed to temperatures at or in excess of their activation/triggering temperature activated? If so:

a) identify each Omega;

b) indicate when, where and how the fire occurred;

c) what was the system pressure was (in psig) at the time of the fire and/or activation;

d) indicate how long after the Omega was first exposed to its activation/triggering temperature it activated;

e) indicate whether anyone sustained or allegedly sustained bodily injury as a result of or in association with the fire (including injuries sustained or allegedly sustained in attempting to escape the fire). If so:

i) identify the injured person;

ii) indicate how the injury was or was alleged to have been sustained;

iii) indicate whether a suit, claim, or demand was ever made against you or in which you were implicated relating to the incident or injury; provide

details of same;

f) indicate whether anyone died or allegedly died as a result of or in association with the fire (including death incurred or allegedly incurred in attempting to escape the fire). If so:

i) identify the decedent;

ii) indicate how and where the death occurred;

iii) indicate whether a suit, claim, or demand was ever made against you or in which you were implicated relating to the incident or death; provide details of same;

g) indicate whether any property was or allegedly was damaged, lost or destroyed as a result of or in association with the fire (including damage sustained or allegedly sustained in attempting to remove the property from the fire, or in attempting to put out the fire). If so:

i) identify the owner of the property;

ii) indicate how the property was or allegedly was damaged;

iii) indicate the value or alleged value of the property;

iv) indicate whether a suit, claim, or demand was ever made against you or in which you were implicated relating to the incident or damage; provide details of same;

h) indicate whether the Omega was fitted with a "helper spring;"

i) indicate when and how you became aware of the fire and/or the activation, including from whom you received the notification;

j) identify and describe all communications regarding or relating in any way to the fire and/or activation, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication;

k) indicate whether you or anyone else tested and/or examined any Omega that allegedly activated in a fire, or any other sprinkler from the same site? If so:

i) identify the sprinkler;

ii) describe the tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;

iv) describe and explain the results of the tests and/or examinations, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test and/or examination results;

l) indicate whether the Omega "o" ring was examined for swelling and/or adhesion. If so:

i) indicate whether swelling and/or adhesion was present;

ii) indicate on what basis and by what criteria it was determined whether the "o" ring was swollen or adhered;

iii) identify all persons and/or entities involved in determining whether the "o" ring was swollen or adhered;

m) indicate whether the Omega and/or the system from which it came was tested and/or examined for "stop leak" or any other leakage prevention substance. If so:

i) indicate whether "stop leak" or any other such substance was present;

ii) indicate on what basis and by what criteria it was determined whether "stop leak" or any other such substance was present;

iii) identify all persons and/or entities involved in determining whether "stop leak" or any other such substance was present;

n) indicate whether the Omega was examined for dezincification. If so:

i) indicate whether dezincification had occurred;

ii) indicate on what basis and by what criteria it was determined whether dezincification had occurred;

iii) identify all persons and/or entities involved in determining whether dezincification had occurred;

INTERROGATORY NO. 66

Identify and describe all tests and/or examinations conducted by you or anyone on your behalf on Omega sprinklers. For each test:

a) identify the sprinklers tested;

b) describe the tests and provide a detailed protocol and the date on which each test was conducted;

c) identify the persons and entities involved in:

i) drafting and/or conceiving the protocol;

ii) setting up and/or conducting the tests;

d) describe and explain the results of the tests, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test results;

f) identify and describe all communications relating in any way to any such tests and/or test results, indicating:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 67

Have you or anyone of whom you are aware ever performed the "load on heat responsive element test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 68

Have you or anyone of whom you are aware ever performed the "strength of heat responsive element test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 69

Have you or anyone of whom you are aware ever performed the "leakage test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was

directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 70

Have you or anyone of whom you are aware ever performed the "hydrostatic strength test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 71

Have you or anyone of whom you are aware ever performed the "30-day leakage test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 72

Have you or anyone of whom you are aware ever performed the "water hammer test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 73

Have you or anyone of whom you are aware ever performed the "operating temperature (bath) test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the

test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 74

Have you or anyone of whom you are aware ever performed the "sensitivity tests" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 75

Have you or anyone of whom you are aware ever performed the "operation - lodgement test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was

directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 76

Have you or anyone of whom you are aware ever performed the "flow endurance test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 77

Have you or anyone of whom you are aware ever performed the "operation - cold soldering test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 78

Have you or anyone of whom you are aware ever performed the "high temperature - test for uncoated sprinklers" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 79

Have you or anyone of whom you are aware ever performed the "high temperature - test for coated sprinklers" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 80

Have you or anyone of whom you are aware ever performed the "strength of frame test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 81

Have you or anyone of whom you are aware ever performed the "impact resistance test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 82

Have you or anyone of whom you are aware ever performed the "rough usage test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 83

Have you or anyone of whom you are aware ever performed the "vibration test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place:

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 84

Have you or anyone of whom you are aware ever performed the "calibration test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 85

Have you or anyone of whom you are aware ever performed the "10 pan distribution test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 86

Have you or anyone of whom you are aware ever performed the "16 pan distribution test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to

the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 87

Have you or anyone of whom you are aware ever performed the "water distribution test - conventional (old style) sprinklers" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was

directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 88

Have you or anyone of whom you are aware ever performed the "100 pan distribution test - sidewall sprinklers" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 89

Have you or anyone of whom you are aware ever performed the "350 pound wood crib fire test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 90

Have you or anyone of whom you are aware ever performed the "10-day corrosion test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 91

Have you or anyone of whom you are aware ever performed the "30-day corrosion test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 92

Have you or anyone of whom you are aware ever performed the "90-day moist air test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to

the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 93

Have you or anyone of whom you are aware ever performed the "stress-corrosion cracking of brass sprinkler parts test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was

directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 94

Have you or anyone of whom you are aware ever performed the "stress-corrosion cracking of stainless sprinkler parts test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 95

Have you or anyone of whom you are aware ever performed the "operational tests on sprinklers incorporating gaskets or "o" ring seals" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 96

Have you or anyone of whom you are aware ever performed the "vacuum test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 97

Have you or anyone of whom you are aware ever performed the "elastomeric parts test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the

test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 98

Have you or anyone of whom you are aware ever performed the "freezing test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 99

Have you or anyone of whom you are aware ever performed the "fire test for extended coverage sprinklers intended for light hazard occupancies" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 100

Have you or anyone of whom you are aware ever performed the "wall wetting test for extended coverage sprinklers intended for light hazard occupancies" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 101

Have you or anyone of whom you are aware ever performed the "evaporation test for sprinkler coatings" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 102

Have you or anyone of whom you are aware ever performed the "cycling tests for flow control (FC) sprinklers" according to the testing protocol in UL 199 on an Omega

sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 103

Have you or anyone of whom you are aware ever performed the "piled stock fire test for flow control (FC) sprinklers" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and

the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 104

Have you or anyone of whom you are aware ever performed the "piled stock fire test for extended coverage sprinklers intended for ordinary hazard occupancies" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 105

Have you or anyone of whom you are aware ever performed the "distribution tests for extended coverage sprinklers intended for ordinary hazard occupancies" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 106

Have you or anyone of whom you are aware ever performed the "high temperature exposure test for flow control (FC) sprinklers" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 107

Have you or anyone of whom you are aware ever performed the "production leakage test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 108

Have you ever tested an Omega that, upon being exposed to its activation/triggering temperature, did not activate within 5 seconds at a pressure at or below 7 psig pressure?

If so:

a) identify the Omega;

b) explain why it failed to activate;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 109

Indicate whether you have attended or been present at any meetings or discussions, or issued or received any communications, in which the following were discussed:

a) failure of Omega sprinklers to activate in testing or in a fire;

b) dezincification as a cause or possible cause of Omega non-activation in testing or in a fire;

c) stop leak or other leak prevention substance as a cause or possible cause of Omega non-activation in testing or in a fire;

d) "o" ring swelling as a cause or possible cause of Omega non-activation in testing or in a fire;

e) "o" ring adhesion as a cause or possible cause of Omega non-activation in testing or in a fire;

f) excessive hydrocarbons as a cause or possible cause of Omega non-activation in testing or in a fire;

g) improper system design as a cause or possible cause of Omega non-activation in testing or in a fire;

h) UL listing or certification of any Omega sprinkler or sprinkler assistive device such as the "helper spring;"

i) FM listing or certification of any Omega sprinkler or sprinkler assistive device such as the "helper spring;"

j) NFPA 13 requirements or applicability with respect to fire sprinklers or sprinkler systems;

k) NFPA 25 requirements or applicability with respect to fire sprinklers or sprinkler systems;

l) UL 199 requirements or applicability with respect to fire sprinklers or sprinkler systems;

m) UL 1626 requirements or applicability with respect to fire sprinklers or sprinkler systems. If so, for each such meeting, discussion, and communication, provide:

i) the date on which the meeting, discussion or communication took place;

ii) the persons and/or entities to and from whom the communication was directed or, if a meeting or discussion, identify all persons who were present and/or participated;

iii) the nature and content of the communication;

INTERROGATORY NO. 110

Have you ever been notified of any problem, potential problem, complaint or concern (including any reports of nonactivation or possibility of nonactivation) regarding or in any way relating to an Omega sprinkler? If so:

a) identify who notified you;

b) indicate how and when you were notified;

c) describe and explain the contents of the notification;

d) identify all persons who have knowledge of the notification and/or the problem, potential problem, complaint or concern;

e) describe and explain your response to the notification;

f) did you or anyone else of whom you are aware examine and/or test the Omega about which you were notified of any problem, potential problem, complaint or concern, the system in which it was installed, and/or any other sprinkler from the same site? If so:

i) identify the sprinkler;

ii) describe the tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;

iv) describe and explain the results of the tests and/or examinations, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test and/or examination results;

g) identify and describe all communications regarding or relating in any way to the notification, the sprinkler, and/or any the testing and/or examination in part f), including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 111

Have you notified any person and/or entity of any problem, potential problem, complaint or concern (including any reports of nonactivation or possibility of nonactivation) regarding or in any way relating to an Omega sprinkler? If so:

a) identify who you notified, and all persons and/or entities who received the notification or copies thereof;

b) indicate how and when you notified the persons and/or entities identified in your response to part (a) above;

c) describe and explain the contents of the notification;

d) identify all persons who have knowledge of the notification and/or the problem, potential problem, complaint or concern, including who drafted, reviewed and/or approved the notification;

e) did you receive any response to the notification? If so:

i) identify the person and/or entity from whom you received a response;

ii) indicate how and when you received the response;

iii) describe and explain the contents of the response;

f) identify and describe all communications regarding or relating in any way to the notification and/or response, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 112

Indicate whether you ever requested any information from any sprinkler contractor or sprinkler owner regarding any Omega sprinkler. If so:

a) identify the persons and/or entities from whom you requested information;

b) indicate how and when you requested the information;

c) describe and explain what information you requested;

d) identify all persons who have knowledge of the request for information, including those who drafted, reviewed and/or approved the request for information;

e) did you receive any response to the request for information? If so:

i) identify the person and/or entity from whom you received a response;

ii) indicate how and when you received the response;

iii) describe and explain the contents of the response;

f) identify and describe all communications regarding or relating in any way to the request for information and/or the response to that request, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 113

Have you or anyone on your behalf provided (either by sale or without charge) sprinklers to anyone to replace some or all of the Omegas installed in a particular location? If so, indicate the total number of Omegas replaced, and the total value of the replacement (labor plus cost of sprinklers, and any other associated expenses).

INTERROGATORY NO. 114

With respect to each location in which you provided (either by sale or without charge)

sprinklers to anyone to replace some or all of the Omegas that were installed there:

a) identify the location;

b) indicate what make and/or model Omegas were replaced, and the quantity of each replaced;

c) indicate what make and/or model sprinkler were provided as a replacement, and the quantity of each provided;

d) identify the person and/or entity to whom you provided the replacements;

e) describe and explain the circumstances under which you provided the replacements;

f) identify the person and/or entity who paid the cost of the replacement;

g) indicate the cost of the replacement;

h) describe and explain what the replacement involved;

i) did you or anyone else of whom you are aware examine and/or test the Omega that was replaced, the system in which it was installed, and/or any other sprinkler from the same site? If so:

   i) identify the sprinkler;

   ii) describe the tests and/or examinations, and provide a detailed protocol;

   iii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;

   iv) describe and explain the results of the tests and/or examinations, including all observations and conclusions;

   v) identify the persons and entities involved in evaluating the test and/or

examination results;

j) identify and describe all communications regarding or relating in any way to the replacement of the sprinklers, the sprinkler that was replaced, the replacement sprinkler, and/or any the testing and/or examination the replaced sprinkler, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 115

Have you ever tested Omega sprinklers from a building or structure and indicated to the building owner/operator or anyone else that all Omegas activated properly? If so:

a) identify each Omega you tested;

b) identify the location in which the Omega had been installed;

c) for each location, indicate how many Omegas were installed there prior to testing, and how many were tested;

d) describe the tests and/or examinations, and provide a detailed protocol;

e) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;

f) describe and explain the results of the tests and/or examinations, including all observations and conclusions;

g) identify the persons and entities involved in evaluating the test and/or examination results;

h) did you or anyone else of whom you are aware examine and/or test the system in which it was installed? If so:

i) describe the tests and/or examinations, and provide a detailed protocol;

ii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;

iii) describe and explain the results of the tests and/or examinations, including all observations and conclusions;

iv) identify the persons and entities involved in evaluating the test and/or examination results;

i) did any person or entity other than you examine and/or test sprinklers from the same site? If so:

i) identify the sprinkler;

ii) describe the tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;

iv) describe and explain the results of the tests and/or examinations, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test and/or examination results;

j) identify and describe all communications regarding or relating in any way to

the sprinklers, the testing and/or the results, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 116

Identify each person whom you expect to call as an expert witness at trial or hearing in this matter, and provide the following information:

a) the subject matter on which the expert is expected to testify;

b) the substance of the facts and opinions to which the expert is expected to testify;

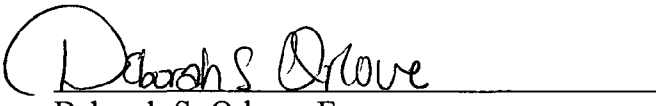
c) provide a summary of the grounds for each opinion to which the expert is expected to testify.

INTERROGATORY NO. 117

Identify each person whom you expect to call as a fact witness at trial or hearing in this matter, and provide the following information:

a) the subject matter on which the witness is expected to testify;

b) the substance of the facts to which the witness is expected to testify.



Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.

Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, Maryland 20814
301-504-0626

DATED: April 20, 1998

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, Complaint Counsel's **First Set of Interrogatories to Respondents Central Sprinkler Corp. and Central Sprinkler Co.** and **First Requests for Production of Documents and Things to Respondents Central Sprinkler Corp. and Central Sprinkler Co.** were deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

J. Gordon Cooney, Jr.
Thomas P. Hogan, Jr.
Emily J. Lawrence
MORGAN, LEWIS & BOCKIUS LLP
2000 One Logan Square
Philadelphia, PA 19103
(215) 963-5000

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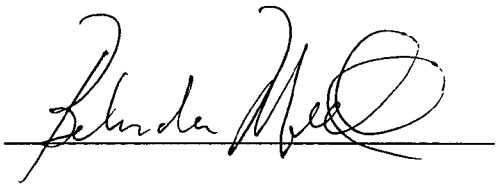
Trevose, PA 19053
(215) 639-4070

Attorneys for Central Sprinkler Corporation and Central Sprinkler Company



Dated: 4/20/98

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15.

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

OFFICE OF THE SECRETARY
1998 APR 27 P 5:07

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents	)	

COMPLAINT COUNSEL'S INDEX OF RESPONSIVE DOCUMENTS TO RESPONDENTS' FIRST INTERROGATORIES AND FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS

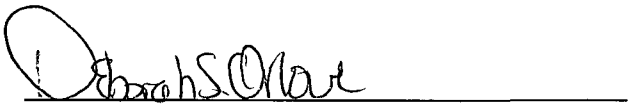
Complaint Counsel provides this list of documents produced in response to Respondents' first set of discovery requests, indicating the Requests and Interrogatories to which the documents correspond. Documents listed as responsive to particular Interrogatories and/or Requests may be responsive to other Requests and Interrogatories as well.

Request for Production	Bates Nos.
1	0001-1025; 1082-1458
	1459-1519
4	2037 - 2134
9	0001-1025; 1082-1458
15	1459-1519
16	1459-1519
17	2022-2035

22	2016
30	1991 - 1998
38	2138 - 2140
40	2135 - 2137
42	2000 - 2001
	and Video News Release (video)
43	2000 - 2015
	and Video News Release (video)

Interrogatory	Bates Nos.
51	0001-1025; 1082-1458
	1459-1519
52	0001-1025; 1082-1458
53	0001-1025; 1082-1458
	1459-1519
82	1459-1519
106	2016
131	0001-1025; 1082-1458
	1459-1519
136	1026 - 1080
143	press release

DATED: April 27, 1998



Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.

Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, Maryland 20814
301-504-0626

index.doc

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, Complaint Counsel's **INDEX OF RESPONSIVE DOCUMENTS TO RESPONDENTS' FIRST INTERROGATORIES AND FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS** was deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

J. Gordon Cooney, Jr., Esq.
Thomas P. Hogan, Jr., Esq.
Emily J. Lawrence, Esq.
MORGAN, LEWIS & BOCKIUS LLP
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Five Neshaminy Interplex, Suite 315
Trevose, PA 19053
(215) 639-4070

Attorneys for Central Sprinkler Corporation and Central Sprinkler Company

Responsive documents were copied by Complaint Counsel and provided to J. Gordon Cooney at the above address.

A copy was also served on the Presiding Officer pursuant to 16 C.F.R. § 1025.31(h) at:

The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
1099 14th St., NW, Suite 350
Washington, DC 20005

Dated: 4/27/98

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

OFFICE OF THE SECRETARY
FREEDOM OF INFORMATION
1998 APR 27 P 5:07

In the Matter of	
CENTRAL SPRINKLER CORP.,	
and	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	
Respondents	

COMPLAINT COUNSEL'S RESPONSES TO RESPONDENTS' FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS

Complaint Counsel hereby responds to Respondents' First Request for Production of Documents and Things.

1. All documents identified in the "List and Summary of Documentary Evidence" attached to the Complaint.

Response: Complaint Counsel objects to this Request to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery pursuant to the work product privilege. The data compilation of failures was prepared by or for Complaint Counsel in anticipation of litigation. Without waiving its objection, Complaint Counsel will produce the data on which the compilation is based, and the information about the fires, to the extent that the information was not provided to Complaint Counsel by a third party on a confidential basis. Without waiving its objection, to the extent that the data or information was provided on a confidential basis, Complaint

Counsel will produce the data upon the execution of an appropriate confidentiality stipulation by Respondents, and the issuance of an appropriate protective order by the Presiding Officer.

2. All documents identified in the CPSC's responses to Respondents' First Set of Interrogatories.

Response: Complaint Counsel objects to this Request on the grounds that it is overbroad and unduly burdensome. However, without waiving its objection, Complaint Counsel will produce non-privileged and non-confidential documents referenced in its responses to Respondents' Interrogatories.

3. All documents that constitute the entirety of the CPSC administrative file regarding the Omegas.

Response: Complaint Counsel objects to this Request on the ground that the term "administrative file" is undefined, unclear, vague and ambiguous. Complaint Counsel further objects to this Request on the ground that it is overbroad and unduly burdensome. To the extent that "administrative file" encompasses documents prepared by or for Complaint Counsel in anticipation of litigation, Complaint Counsel objects to this Request on the ground that it seeks documents protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel will produce all non-confidential and non-privileged documents referenced in its responses to Respondents' Interrogatories, and/or requested in these Requests for Production that are not already in Respondents' possession.

4. All documents that constitute subpoenas from the CPSC or other requests for documents to any person, organization, business, or any other entity regarding or related to the Omegas.

Response: Complaint Counsel objects to this Request to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel will produce subpoenas it served in this matter upon UL, FM and others.

5. All documents provided to the CPSC in response to subpoenas from the CPSC or other requests for documents to any person, organization, business, or any other entity regarding or related to the Omegas.

Response: Complaint Counsel objects to this Request to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel also objects to this Interrogatory to the extent that it seeks documents prohibited from disclosure pursuant to 15 U.S.C. § 2055. Without waiving its objections, Complaint Counsel will produce all non-confidential documents provided to Complaint Counsel by third parties in response to subpoenas issued by CPSC in this matter upon the receipt of permission from the third parties, and upon execution of an appropriate confidentiality stipulation by Respondents, and the issuance of any necessary protective orders by the Presiding Officer.

6. All documents provided to the CPSC by Respondents regarding the Omegas.

Response: Complaint Counsel objects to this Request on the grounds that it is overbroad and unduly burdensome, and on the ground that the information is already within the possession of Respondents (who continue to be represented by the same counsel who provided the information in the first place).

7. All documents provided to the CPSC by any person, organization, business, or any other entity regarding or related to the Omegas and/or Respondents.

Response: Complaint Counsel objects to this Request on the grounds that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel would be pleased to produce specific documents, or specific categories of documents, that Respondents seek to discover, upon rephrasal of this Request.

8. All documents that constitute, provide evidence of, refer, or relate to any testing of the Omegas conducted by or on behalf of the CPSC.

Response: Complaint Counsel objects to this Request on the grounds that it seeks documents prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel responds that it will share with Respondents the results of any testing it intends to introduce into evidence at the hearing in this matter, once those determinations have been made.

9. All documents that constitute, provide evidence of, refer, or relate to any testing of the Omegas conducted by on or behalf of any other person, organization, business, or other entity.

Response: Complaint Counsel objects to this Request on the grounds that the terms "other person, organization, business or other entity" are unclear, undefined, vague and ambiguous. Assuming that the terms "other person, organization, business or other entity" refer to

persons, organizations, businesses or entities other than CPSC and its staff, Complaint Counsel objects to this Request on the grounds that it is overbroad and unduly burdensome, and includes information not within the knowledge or control of Complaint Counsel. Complaint Counsel further objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel also objects to this Interrogatory to the extent that it seeks documents prohibited from disclosure pursuant to 15 U.S.C. § 2055. Without waiving its objections, Complaint Counsel will produce responsive documents provided to Complaint Counsel by third parties regarding testing of Omega sprinklers upon the receipt of permission from the third parties, and upon execution of an appropriate confidentiality stipulation by Respondents, and the issuance of any necessary protective orders by the Presiding Officer.

10. All documents that constitute, provide evidence of, refer, or relate to any testing of non-Omega sprinkler heads conducted by on or behalf of the CPSC.

Response: Complaint Counsel objects to this Request to the extent that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel further objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request on the ground that to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint counsel further objects to Respondents' Request on the ground that the terms "provide evidence of" call for a legal conclusion. Without waiving its objections, Complaint Counsel

responds that it currently has no documents regarding testing of non-Omega sprinklers.

11. All documents that constitute, provide evidence of, refer, or relate to testing of non-Omega sprinkler heads conducted by on or behalf of any other person, organization, business, or other entity.

Response: Complaint Counsel objects to this Request on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel further objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request on the ground that to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint counsel further objects to Respondents' Request on the ground that the terms "provide evidence of" call for a legal conclusion. Without waiving its objections, Complaint Counsel responds that it currently has no documents regarding testing of non-Omega sprinklers.

12. All documents that constitute, provide evidence of, refer, or relate to the alleged jurisdiction of the CPSC over the Omegas.

Response: Complaint Counsel objects to this Request on the grounds that it is unclear, vague and ambiguous. Complaint Counsel further objects to this Request on the ground that it seeks documents prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Request on the ground that it calls for a legal conclusion. Without waiving its objections, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss, the case law and statutes cited therein, and the affidavit and exhibit submitted

therewith.

13. All documents that constitute, provide evidence of, refer, or relate to the jurisdiction of the CPSC over any product, including without limitation any memoranda or other internal correspondence that addresses the extent of or any limitations on the jurisdiction of the CPSC.

Response: Complaint Counsel objects to this Request on the grounds that it is unclear, vague and ambiguous. Complaint Counsel further objects to this Request on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence herein. Complaint Counsel further objects to this Request on the ground that it is overbroad and unduly burdensome, as CPSC exercises jurisdiction over tens of thousands of products, and every document in every CPSC file is arguably responsive to this Request. Complaint Counsel further objects to this Request on the ground that it seeks documents prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Request on the ground that it calls for a legal conclusion. Without waiving its objections, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this case, the case law and statutes cited therein, and the affidavit and exhibit submitted therewith, as well as the records of sprinkler testing provided in response to Request #1.

14. All documents that constitute, provide evidence of, refer, or relate to CSC manufacturing, selling, or marketing Omegas.

Response: Complaint Counsel objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request on the ground

that all documents that "constitute, provide evidence of, refer, or relate to CSC manufacturing, selling, or marketing Omegas" are within CSC's possession, and have themselves been Requested by Complaint Counsel in discovery in this case. Without waiving its objections, Complaint Counsel refers Respondents to the documents provided in response to Request No. 1.

15. All documents that constitute, provide evidence of, refer, or relate to any fires where Omegas allegedly failed to activate properly.

Response: Complaint Counsel objects to this Request on the grounds that the terms "failed to activate properly" are undefined, unclear, vague and ambiguous. Complaint Counsel further objects to this Request to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel refers Respondents to the documents provided in response to Respondents' Request No. 1. .

16. All documents that constitute, provide evidence of, refer, or relate to any fires where Omegas allegedly activated properly.

Response: Complaint Counsel objects to this Request on the grounds that the terms "allegedly activated properly" are undefined, unclear, vague and ambiguous, and on the ground that the question as a whole is unclear, vague and ambiguous, as it does not indicate whether Respondents seek documents regarding only fires in which all Omegas "activated properly," or in which some Omegas "activated properly," though others did not. Complaint Counsel further objects to this Request to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by

the work product privilege. Without waiving its objections, Complaint Counsel refers Respondents to its response to Respondents' Request No. 1.

17. All documents that constitute, provide evidence of, refer, or relate to any fires where non-Omega sprinkler heads allegedly failed to activate properly.

Response: Complaint Counsel objects to this Request on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel also objects to this Request on the grounds that the terms "failed to activate properly" are undefined, unclear, vague and ambiguous. Complaint Counsel further objects to this Request on the ground that it is overbroad and unduly burdensome. Without waiving its objections, Complaint Counsel will provide documents relating to reports of fires in which sprinklers that are or possibly are non-Omegas failed to activate. CPSC is investigating whether these fires involved non-Omegas.

18. All documents that constitute, provide evidence of, refer, or relate to any fires where non-Omega sprinkler heads allegedly activated properly.

Response: Complaint Counsel objects to this Request on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel also objects to this Request on the grounds that the terms "allegedly activated properly" are undefined, unclear, vague and ambiguous, and on the ground that the question as a whole is unclear, vague and ambiguous, as it does not indicate whether Respondents seek documents regarding only fires in which all non-Omegas "activated properly," or in which some non-Omegas "activated properly," though others did not. Complaint Counsel further objects to this Request on the ground that it is overbroad and

unduly burdensome.

19. All documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and former employees of Respondents, including but not limited to interview notes, questions asked, answers received, documents exchanged or revealed by or between either party, and any audiotape or videotape of such communications.

Complaint Counsel objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege.

20. All documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and current employees of Respondents, including but not limited to interview notes, questions asked, answers received, documents exchanged or revealed by or between either party, and any audiotape or videotape of such communications.

Response: Complaint Counsel objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel intends to submit certain information to the Presiding Officer for in camera review and determination of whether to provide the material to Respondents, and under what conditions.

21. All documents that constitute, provide evidence of, refer, or relate to "[the] multiple random inquiries of sprinkler contractors across the nation," as referenced in a

November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo.

Response: Complaint Counsel objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Request on the ground that it is overbroad and unduly burdensome. Without waiving its objection, Complaint Counsel refers Respondents to its Response to Respondents' Interrogatory No. 106.

22. **All documents that constitute, provide evidence of, refer, or relate to "what has been, and remains, customarily required to remove and install sprinklers," as referenced in a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo.**

Response: Complaint Counsel objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Request on the ground that it is overbroad and unduly burdensome. Without waiving its objection, Complaint Counsel refers Respondents to its Response to Respondents' Interrogatory No. 106.

23. **All documents that constitute, provide evidence of, refer, or relate to "the evidence we have gathered does not support the view [that] dezincification alone is the cause of the above-required operating pressures in Omegas from plastic pipes," as referenced in a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo.**

Response: Complaint Counsel objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Request on the ground that it is overbroad and unduly burdensome. Without waiving its objection, Complaint Counsel refers Respondents to its Response to Respondents' Interrogatory No. 107.

24. All documents that constitute, provide evidence of, refer, or relate to "the evidence we have gathered does not support the view . . . that swollen o-rings due to cutting oil exposure are the exclusive cause of non-activation in Omegas manufactured before 1996," as referenced in a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo.

Response: Complaint Counsel objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Request on the ground that it is overbroad and unduly burdensome. Without waiving its objection, Complaint Counsel refers Respondents to its Response to Respondents' Interrogatory No. 108.

25. All documents that constitute, provide evidence of, refer, or relate to "the data [which] point to multiple failure modes rooted in the design and construction of these sprinklers," as referenced in a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo.

Response: Complaint Counsel objects to this Request on the ground that it seeks

information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Request on the ground that it is overbroad and unduly burdensome. Without waiving its objection, Complaint Counsel refers Respondents to its Response to Respondents' Interrogatory No. 109.

26. All documents that constitute, provide evidence of, refer, or relate to any testing, evaluation, consideration, or analyses done by or on behalf of the CPSC regarding the "testing based corrective action," as referenced in a February 19, 1998 letter from Eric Stone of the CPSC to Kathleen Sanzo.

Response: Complaint Counsel objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Request on the ground that it is overbroad and unduly burdensome. Without waiving its objection, Complaint Counsel refers Respondents to its Response to Respondents' Interrogatory No. 110.

27. All documents that constitute, provide evidence of, refer, or relate to any testing, evaluations, or analyses done by or on behalf of the CPSC which reflects the "serious concerns" of the CPSC regarding whether "Omega sprinklers with silicone o-rings will function in the long term," as referenced in a February 19,1998 letter from Eric Stone of the CPSC to Kathleen Sanzo.

Response: Complaint Counsel objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore

protected from discovery by the work product privilege. Complaint Counsel further objects to this Request on the ground that it is overbroad and unduly burdensome. Without waiving its objection, Complaint Counsel refers Respondents to its Response to Respondents' Interrogatory No. 111.

28. All documents that constitute, provide evidence of, refer, or relate to any testing, evaluations, consideration, or analyses done by or on behalf of the CPSC which addressed Omegas where "the internal shaft was cocked or tipped slightly and jammed in that position," as referenced in a February 24, 1998 letter from Eric Stone of the CPSC to Kathleen Sanzo.

Response: Complaint Counsel objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Request on the ground that it is overbroad and unduly burdensome. Without waiving its objection, Complaint Counsel refers Respondents to its Response to Respondents' Interrogatory No. 112. Complaint Counsel invites Respondents to inspect the x-ray it has of the sprinkler referred to in the February 24, 1998 letter.

29. All documents that constitute, provide evidence of, refer, or relate to "automatic fire sprinklers' historical rate of proving 99.5 percent effective," as referenced in a January 6, 1998 letter from Eric Singer of the CPSC to state attorneys general.

Response: Complaint Counsel objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore

protected from discovery by the work product privilege. Complaint Counsel further objects to this Request on the ground that it is overbroad and unduly burdensome. Without waiving its objection, Complaint Counsel refers Respondents to its Response to Respondents' Interrogatory No. 113.

30. All documents that constitute, provide evidence of, refer, or relate to the CPSC Recall Handbook.

Response: Complaint Counsel objects to this Request on the grounds that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request on the grounds that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel further objects to this Request to the extent that it seeks confidential and/or trade secret information pertaining to other companies investigated by CPSC. Without waiving its objections, Complaint Counsel will produce the CPSC Recall Handbook.

31. All documents received by the CPSC from Respondents or any agent, employee, or representative of Respondents.

Response: Complaint Counsel objects to this Request on the grounds that it is overbroad and unduly burdensome, and on the ground that the information is already within the possession of Respondents. Without waiving its objections, Complaint Counsel intends to submit certain information to the Presiding Officer for in camera review and determination of whether to provide the material to Respondents, and under what conditions.

32. All Omegas in possession of the CPSC.

Response: Complaint Counsel objects to this Request on the grounds that it is overbroad

and unduly burdensome. Complaint Counsel further objects to this Request on the ground that it seeks things provided to or currently being tested by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel responds that it has offered, and still intends, to preserve the Omega sprinkler heads it currently possesses from the Fort Wayne and Kent Manor Inn fire sites for testing in conjunction with Respondents. Complaint Counsel suggests that the parties to this action discuss a procedure for examination of each other's sprinkler samples.

33. All non-Omega sprinkler heads in the possession of the CPSC.

Response: Complaint Counsel objects to this Request on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence.

34. All audio and/or video tapes regarding or relating to any testing of Omegas.

Response: Complaint Counsel objects to this Request on the ground that it seeks things prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel responds that it will share with Respondents the results and videotapes of any testing it intends to introduce into evidence at the hearing in this matter, once those determinations have been made.

35. All audio and/or video tape regarding or relating to any testing of non-Omega sprinkler heads.

Response: Complaint Counsel objects to this Request to the extent that it seeks irrelevant

information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel further objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel also objects to this Request on the ground that it seeks things prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel responds that it currently has no audio and/or video tapes regarding or relating to any testing of non-Omega sprinkler heads.

36. All documents that constitute, provide evidence of, refer, or relate to any personal journals, diaries, or correspondence maintained by the CPSC Staff regarding the Omegas and/or Respondents.

Response: Complaint Counsel objects to this Request on the grounds that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request on the ground that it seeks documents prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege.

37. All documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and any dealers, retailers, contractors, or any distributors regarding or related to the Omegas and/or Respondents.

Response: Complaint Counsel objects to this Request on the grounds that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request on the ground that it seeks documents prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel will produce all non-privileged and non-confidential documents

referenced in response to Respondents' Interrogatory No. 106.

38. All documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and any Authorities Having Jurisdiction regarding or related to the Omegas and/or Respondents.

Response: Complaint Counsel objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request on the ground that it seeks documents prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel will produce all correspondence to Fire Marshals that are in the public domain.

39. All documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and any consumers regarding or related to the Omegas and/or Respondents.

Response: Complaint Counsel objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request on the ground that it seeks documents prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel objects to this Interrogatory on the ground that it requests information pertaining to the identity of consumers in prohibition of 15 U.S.C. § 2074(c).

40. All documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and any state law enforcement authorities regarding or related to the Omegas and/or Respondents.

Response: Complaint Counsel objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request on the ground that it seeks documents prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory to the extent that it seeks information provided to CPSC by third parties who claim confidentiality or trade secret. Without waiving its objections, Complaint Counsel will produce all correspondence to State Attorney Generals that are in the public domain.

41. All documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and any federal law enforcement authorities regarding or related to the Omegas and/or Respondents.

Response: Complaint Counsel objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request on the ground that it seeks documents prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory to the extent that it seeks information provided to CPSC by third parties who claim confidentiality or trade secret.

42. All documents that constitute, provide evidence of, refer, or relate to scripts, talking points, outlines, or any other material prepared by, for, or on behalf of the CPSC for any press conferences or news releases regarding the Omegas and/or Respondents.

Response: Complaint Counsel objects to this Request on the ground that it seeks irrelevant

information not likely to lead to the discovery of admissible evidence. Complaint Counsel further objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel also objects to this Request on the ground that it seeks documents prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Request on the ground that it seeks documents protected from discovery by the attorney-client privilege. Without waiving its objections, Complaint Counsel will produce the press release and VNR that were prepared in this matter, and released to the public.

43. All documents that constitute, provide evidence of, refer, or relate to any material regarding the Omegas and/or Respondents created by or on behalf of the CPSC public relations department, media department, or any other CPSC internal department charged with communicating with or providing information to the public media.

Response: Complaint Counsel objects to this Request on the ground that it seeks irrelevant information not likely to lead to the discovery of admissible evidence. Complaint Counsel further objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel also objects to this Request on the ground that it seeks documents prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Request on the ground that it seeks documents protected from discovery by the attorney-client privilege. Without waiving its objections, Complaint Counsel will produce the press release and VNR that were prepared in this matter, and released to the public, as well as the Omega Sprinkler Questionnaire on CPSC's web site, and the Omega Sprinkler Questionnaire

available through CPSC's fax-on-demand service.

44. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 5 of the Complaint that CSC is a "manufacturer" of consumer products.

Response: See Response to Interrogatory Nos. 1 and 4.

45. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 6 of the Complaint that the Omegas are "consumer products."

Response: See Response to Interrogatory Nos. 5 through 25.

46. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 8 of the Complaint that the Omegas are "designed to perform in accordance with" UL Standard 199 and NFPA Standard 13.

Response: See Response to Interrogatory Nos. 38, 39 and 40.

47. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 8 of the Complaint that the Omegas are designed to perform in accordance with certain standards "when exposed to certain temperatures."

Response: See Response to Interrogatory No. 41.

48. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 10 of the Complaint that the Omegas "do not and/or will not function in a significant percentage of instances."

Response: See Response to Interrogatory No. 52.

49. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 10 of the Complaint that the "Omegas are defective pursuant to

15 U.S.C. § 2064(a)(2) and 16 C.F.R. § 1115.4."

Response: See Response to Interrogatory Nos. 53 through 73.

50. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 13 of the Complaint that "failure of the Omegas to function exposes the public to bodily injury and/or death."

Response: See Response to Interrogatory No. 76.

51. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 15 of the Complaint that the "defect or defects in the Omegas create a substantial risk of injury to the public within the meaning of § 1 5(a)(2) of the CPSA, 15 U.S.C. § 2064(a)(2)."

Response: See Response to Interrogatory No. 77.

52. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 16 of the Complaint that "Omegas present a substantial product hazard as described in Sections 15(a)(2), (c) and (d) of the CPSA, 15 U.S.C. §§ 2064(a)(2), (c) and (d)."

Response: See Response to Interrogatory No. 88.

53. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 16 of the Complaint that "action under these provisions is in the public interest."

Response: See Response to Interrogatory No. 89.

54. A current curriculum vitae or resume for each and every expert witness whom the CPSC expects to testify on its behalf at the hearing in this matter.

Response: Complaint Counsel has not yet determined who will testify as an expert witness on its behalf in this matter. Complaint Counsel further points out that any expert witness that it will call will testify on behalf of Complaint Counsel and the staff, and not on behalf of the Commission.

55. All publications of any nature authored by any expert witness whom the CPSC expects to testify on its behalf at the hearing in this matter.

Response: Complaint Counsel has not yet determined who will testify as an expert witness on its behalf in this matter. Complaint Counsel further points out that any expert witness that it will call will testify on behalf of Complaint Counsel and the staff, and not on behalf of the Commission.

56. Any and all written statements made by Respondents that the CPSC contends constitute an admission with reference to any of the issues raised in the Complaint.

Response: Complaint Counsel objects to this Request on the ground that it is overbroad and unduly burdensome, and requests information already in Respondents' possession. Complaint Counsel further objects to this Request to the extent that it may seek information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Request on the ground that it calls for a legal conclusion. Without waiving its objections, Complaint Counsel responds that any and all written statements made by Respondents may constitute an admission by Respondents in this matter.

57. All documents that constitute, provide evidence of, refer, or relate to the

use of silicone o-rings in sprinkler heads.

Response: Complaint Counsel objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request to the extent that it seeks irrelevant information not likely to lead to the discovery of admissible evidence. Complaint Counsel further objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege.

58. All documents that constitute, provide evidence of, refer, or relate to the use of EPDM o-rings in sprinkler heads.

Response: Complaint Counsel objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request to the extent that it seeks irrelevant information not likely to lead to the discovery of admissible evidence. Complaint Counsel further objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege.

59. All documents that constitute, provide evidence of, refer, or relate to the use in sprinkler heads of o-rings comprised of any other material or compound.

Response: Complaint Counsel objects to this Request on the ground that the terms "any other material or compound" are undefined, unclear, vague and ambiguous. Complaint Counsel also objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request to the extent that it seeks irrelevant information not likely to lead to the discovery of admissible evidence. Complaint

Counsel further objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege.

60. All documents that constitute, provide evidence of, refer, or relate to the reasons giving rise to the CPSC's decision to investigate alleged risks associated with the Omegas.

Response: Complaint Counsel objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request to the extent that it seeks irrelevant information not likely to lead to the discovery of admissible evidence, as the Agency's decision to investigate the risks associated with Omega sprinklers, and the bases therefore, are not at issue herein. Complaint Counsel further objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel refers Respondents to its response to Respondents' Request No. 1.

61. All documents that constitute, provide evidence of, refer, or relate to any and all incidents known to the CPSC in which a consumer or other person has reported any form of property damage in connection with the Omegas.

Response: Complaint Counsel objects to this Request on the ground that the term "consumer complaints" is undefined, unclear, vague and ambiguous. Complaint Counsel objects to this Request on the ground that it requests information pertaining to the identity of

consumers in prohibition of 15 U.S.C. § 2074(c). Complaint Counsel further objects to this Request on the ground that it requests information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel responds that it is currently investigating whether reports that it has received regarding sprinklers are "in connection with the Omegas," and whether they report property damage and/or personal injury in connection therewith. Complaint Counsel will produce all non-privileged and non-confidential reports of fires in which Omegas have reportedly failed to activate. Complaint Counsel will supplement its response to this Request as additional information becomes available.

62. All documents that constitute, provide evidence of, refer, or relate to any and all incidents known to the CPSC in which a consumer or other person has reported any form of personal injury in connection with the Omegas.

Response: Complaint Counsel objects to this Request on the ground that the term "consumer complaints" is undefined, unclear, vague and ambiguous. Complaint Counsel objects to this Request on the ground that it requests information pertaining to the identity of consumers in prohibition of 15 U.S.C. § 2074(c). Complaint Counsel further objects to this Request on the ground that it requests information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel responds that it is currently investigating whether reports that it has received regarding sprinklers are "in connection with the Omegas," and whether they report property damage and/or personal injury in connection therewith. Complaint Counsel will produce all non-privileged and non-confidential reports of

fires in which Omegas have reportedly failed to activate. Complaint Counsel will supplement its response to this Request as additional information becomes available.

63. Any and all testing protocols used by the CPSC or by any expert or other person on behalf of the CPSC in testing the Omegas.

Response: Complaint Counsel objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel refers Respondents to its Response to Respondents' Request Nos. 8, 9, 32 and 34.

64. All documents that constitute, provide evidence of, refer, or relate to any alternative design features for the Omegas.

Response: Complaint Counsel objects to this Request on the ground that the terms "any alternative design features for the Omegas" are undefined, unclear, vague and ambiguous, and that the question as a whole is unintelligible, and thus precludes Complaint Counsel from formulating a response without clarification of its meaning.

65. All documents that constitute, provide evidence of, refer, or relate to the feasibility and/or propriety of any alternative design features for the Omegas.

Response: Complaint Counsel objects to this Request on the ground that the terms "any alternative design features for the Omegas" are undefined, unclear, vague and ambiguous, as are the terms "feasibility and/or propriety" of same. Complaint Counsel objects to this Request on the ground that the question as a whole is unintelligible, and thus precludes

Complaint Counsel from formulating a response without clarification of its meaning.

66. All documents that constitute, provide evidence of, refer, or relate to the CPSC's preliminary determination of the alleged risks associated with the Omegas.

Response: Complaint Counsel objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request to the extent that it seeks irrelevant information not likely to lead to the discovery of admissible evidence, as the Agency's preliminary determination of the risks associated with Omega sprinklers, and the bases therefore, are not at issue herein. Complaint Counsel further objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel refers Respondents to its responses to Respondents' Requests Nos. 1 and 60.

67. All documents that constitute, provide evidence of, refer, or relate to any changes in the CPSC's preliminary determination and/or initial assignment of the level of hazard allegedly presented by the Omegas.

Response: Complaint Counsel objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request to the extent that it seeks irrelevant information not likely to lead to the discovery of admissible evidence, as the Agency's preliminary determination of the risks associated with Omega sprinklers, any changes thereto, and/or to the initial assignment of the level of hazard presented by Omegas, and the bases therefore, are not at issue herein. Complaint Counsel further objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in

anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel refers Respondents to its responses to Respondents' Requests Nos. 1 and 60.

68. All documents that constitute, provide evidence of, refer, or relate to any corrective action proposal for the Omegas.

Response: Complaint Counsel objects to this request on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Request on the ground that any such proposal was proposed by Respondents themselves, and therefore the documents that constitute or provide evidence of any such corrective action proposal by Respondents are within Respondents' own possession.

69. All documents that constitute, provide evidence of, refer, or relate to the requested recall of the Omegas.

Response: Complaint Counsel objects to this Request on the ground that it is overbroad and unduly burdensome, as all documents related to this case relate to the requested recall of the Omegas. Complaint Counsel further objects to this Request to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege.

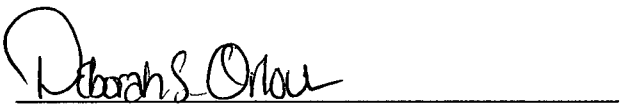
70. All documents that constitute, provide evidence of, refer, or relate to the corrective action proposal presented by Respondents regarding the Omegas.

Response: Complaint Counsel objects to this Request on the ground that it does not specify to which proposal of Respondents it refers. Complaint Counsel objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Request on the ground that any such proposal was proposed by Respondents themselves, and therefore the documents that constitute or provide evidence of any such corrective action proposal by Respondents are within Respondents' own possession. Without waiving its objections, Complaint Counsel refers Respondents to its responses to Interrogatory Nos. 114 and 139.

71. All documents that constitute, provide evidence of, refer, or relate to the CPSC's decision to initiate the instant adjudicative proceeding against the Respondents.

Response: Complaint Counsel objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request to the extent that it seeks irrelevant information not likely to lead to the discovery of admissible evidence, as the Agency's decision to initiate this adjudicative proceeding against Central, and the bases therefore, are not at issue herein. Complaint Counsel further objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel refers Respondents to its responses to Respondents' Requests Nos. 1 and 60.

DATED: April 27, 1998



Deborah S. Orlove, Esq.
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Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, Maryland 20814
301-504-0626

g:\dso\central\1doc.req

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, Complaint Counsel's **Responses to Respondents' First Request for Production of Documents** were deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

J. Gordon Cooney, Jr., Esq.
Thomas P. Hogan, Jr., Esq.
Emily J. Lawrence, Esq.
MORGAN, LEWIS & BOCKIUS LLP
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MORGAN, LEWIS & BOCKIUS LLP
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Five Neshaminy Interplex, Suite 315
Trevose, PA 19053
(215) 639-4070

Attorneys for Central Sprinkler Corporation and Central Sprinkler Company

Responsive documents were copied by Complaint Counsel and provided to J. Gordon Cooney at the above address.

A copy was also served on the Presiding Officer pursuant to 16 C.F.R. § 1025.31(h) at:

The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
1099 14th St., NW, Suite 350
Washington, DC 20005

Deborah S. O'Neal

Dated: April 27, 1998

central.cer

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of CENTRAL SPRINKLER CORP., and CENTRAL SPRINKLER CO., Respondents	CPSC DOCKET NO. 98-2

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION
1998 APR 27 P 5:15

COMPLAINT COUNSEL'S RESPONSES TO
RESPONDENTS' FIRST SET OF INTERROGATORIES

Complaint Counsel hereby responds to Respondents' First Set of Interrogatories.

A. **Allegations of the Complaint**

1. (a) State whether CSC manufactures Omegas.

If so:

(b) identify and describe any such manufacturing;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such manufacturing;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such manufacturing; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) Based on, among other things, representations made by Central's

Carmine Schiavone and George Meyer, and Central Sprinkler Corporation in its "Company Information" section on its web site (in which CSC describes itself as "a leading manufacturer or automatic fire sprinkler heads"), and based on statements made by Central's Counsel (as late as an April 7, 1998 letter from Kathleen Sanzo to Eric Stone, Director of Administrative Litigation, in which Ms. Sanzo states that "Central has reviewed its manufacturing records . . ."), Complaint Counsel responds that CSC manufactures Omegas.

(b) Complaint Counsel is in the process of requesting from Respondents a description of such manufacturing. This information is within Respondents' possession.

(c) Complaint Counsel is in the process of requesting from Respondents the identification of all documents describing, evidencing and referring to Respondents' manufacture of Omega sprinklers. This information is within Respondents' possession.

(d) Complaint Counsel is in the process of requesting from Respondents the identify of every person known or believed to have knowledge of the manufacture of Omega sprinklers. This information is within Respondents' possession.

(e) See response to (d), above.

2. (a) State whether CSC sells Omegas.

If so:

(b) identify and describe any such sales;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such sales;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such sales; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) Based on, among other things, representations made by Central's Carmine Schiavone and George Meyer, and Central Sprinkler Corporation in its "Company Information" section on its web site (in which CSC states that "approximately 56% of the Company's (defined as Central Sprinkler Corporation at the outset of the section) annual sales are derived from the manufacture and sale of fire sprinkler heads and valves . . . ," Complaint Counsel responds that CSC sells Omegas.

(b) Complaint Counsel is in the process of requesting from Respondents a description of such sales. This information is within Respondents' possession.

(c) Complaint Counsel is in the process of requesting from Respondents the identification of all documents describing, evidencing and referring to Respondents' sales of Omega sprinklers. This information is within Respondents' possession.

(d) Complaint Counsel is in the process of requesting from Respondents the

identify of every person known or believed to have knowledge of the sale of Omega sprinklers. This information is within Respondents' possession.

(e) See response to (d), above.

3. (a) **State whether CSC markets Omegas.**

If so:

(b) identify and describe any such marketing;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such marketing;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such marketing; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) Based on, among other things, representations made by Central Sprinkler Corporation in its "Company Information" section on its web site (in which CSC states that "approximately 56% of the Company's (defined as Central Sprinkler Corporation at the outset of the section), based on brochures depicting the Omega line of sprinklers, and based on statements of Central's counsel and corporate officers in submissions and meetings with CPSC staff, Complaint Counsel responds that CSC markets Omegas.

(b) Complaint Counsel is in the process of requesting from Respondents a

description of such marketing. This information is within Respondents' possession.

(c) Complaint Counsel is in the process of requesting from Respondents the identification of all documents describing, evidencing and referring to Respondents' marketing of Omega sprinklers. This information is within Respondents' possession.

(d) Complaint Counsel is in the process of requesting from Respondents the identify of every person known or believed to have knowledge of the marketing of Omega sprinklers. This information is within Respondents' possession.

(e) See response to (d), above.

4. With respect to the allegation of Paragraph 5 of the Complaint that CSC is a "manufacturer" of consumer products:

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: See Complaint Counsel's Response to Interrogatory No. 1, and Complaint Counsel's Opposition to Respondents' Motion to Dismiss.

5. (a) **State whether the C-1 model of the Omegas constitutes a "consumer product" pursuant to 15 U S.C. § 2052(a)(1).**

If so:

(b) **set forth the factual basis for this assertion;**

(c) **identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;**

(d) **identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;**

(e) **describe in detail the substance of each such person's knowledge and/or information.**

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

6. (a) **State whether the C-1 A model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).**

If so:

(b) **set forth the factual basis for this assertion;**

(c) **identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;**

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

7. (a) State whether the C-1A PRO model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

8. (a) State whether the C-lA PRO ID model of the Omegas constitutes a "consumer product" pursuant to I5 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the

exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

9. (a) State whether the EC-20 model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

10. (a) **State whether the EC-20A model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).**

If so:

(b) **set forth the factual basis for this assertion;**

(c) **identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;**

(d) **identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;**

(e) **describe in detail the substance of each such person's knowledge and/or information.**

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

11. (a) **State whether the EC-20 AID model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).**

If so:

(b) **set forth the factual basis for this assertion;**

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

12. (a) State whether the HEC- 12 model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

13. (a) State whether the HEC-12 ID model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the

exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

14. (a) State whether the HEC-12 PRO model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

15. (a) State whether the HEC-12A PRO model of the Omegas

constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

16. (a) State whether the HEC-12 RES model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

17. (a) State whether the HEC-20 model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or

believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

18. (a) State whether the HEC-20 ID model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for

a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

19. (a) State whether the R-1 model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine

Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

20. (a) State whether the R-1A model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

21. (a) State whether the R-1 M model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C.§ 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion,

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

22. (a) State whether the AC model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

23. (a) State whether the M model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

24. **(a) State whether the Flow Control model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).**

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided

in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

25. With respect to the allegation of Paragraph 6 of the Complaint that the Omegas are "consumer products":

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

26. (a) Separately for each model of the Omegas listed in the Complaint, state whether such model is sold by Respondents directly to consumers. If so:

(b) identify all documents which describe, evidence, refer, or relate

to any such sales;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such sales; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, the exhibits in support thereof, and the applicable statutes and case law cited therein, which indicate that sale of an article directly to consumers is not necessary for CPSC jurisdiction.

27. (a) Separately for each model of the Omegas listed in the Complaint, state whether Respondents market such a model to consumers. If so:

(b) identify all documents which describe, evidence, refer, or relate to any such marketing;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such marketing; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, the exhibits in support thereof, and the applicable statutes and case law cited therein, which indicate that marketing of an article directly to consumers is not necessary for CPSC jurisdiction.

28. (a) Separately for each model of the Omegas listed in the Complaint, state whether such a model is installed by consumers themselves (as opposed to professional contractors).

If so:

(b) identify all documents which describe, evidence, refer, or relate to any such installation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such installation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, the exhibits in support thereof, and the applicable statutes and case law cited therein, which indicate that installation of an article

(and other "direct interaction or manipulation" of a product) directly by consumers is not necessary for CPSC jurisdiction.

29. (a) Separately for each model of the Omegas listed in the Complaint, state whether such a model is serviced by consumers themselves (as opposed to professional contractors).

If so:

(b) identify all documents which describe, evidence, refer, or relate to any such servicing;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such servicing; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, the exhibits in support thereof, and the applicable statutes and case law cited therein, which indicate that servicing of an article (and other forms of "direct interaction" or "active manipulation of a product) directly by consumers is not necessary for CPSC jurisdiction.

30. (a) Separately for each model of the Omegas listed in the

Complaint, state whether such a model is repaired by consumers themselves (as opposed to professional contractors).

If so:

(b) identify all documents which describe, evidence, refer, or relate to any such repairs;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such repairs; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, the exhibits in support thereof, and the applicable statutes and case law cited therein, which indicate that repair of an article (and other forms of "direct interaction" or "active manipulation of a product) directly by consumers is not necessary for CPSC jurisdiction.

31. State whether Omegas installed in buildings used only as storage facilities constitute "consumer products" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it calls for a legal conclusion. Complaint Counsel further objects to this Interrogatory on the ground that it requests irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel also objects to this Interrogatory on the ground that the term "storage facility" is undefined, unclear, vague and ambiguous. If by "storage facility," Respondents intend to refer to industrial facilities, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, the exhibits in support thereof, and the applicable statutes and case law cited therein, which indicate that the CPSC has jurisdiction even over "products which are primarily or exclusively sold to industrial or institutional buyers so long as they were produced or distributed **for use of consumers**." As stated in Complaint Counsel's Opposition, Omega sprinklers are produced and distributed for use of and enjoyment by consumers, and therefore are consumer products subject to CPSC's jurisdiction.

32. State whether Omegas installed in warehouses constitute "consumer products" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it calls for a legal conclusion. Complaint Counsel further objects to this Interrogatory on the ground that it requests irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel also objects to this Interrogatory on the ground that the term "warehouses" is undefined, unclear, vague and ambiguous. If by "warehouses," Respondents intend to refer to industrial facilities, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, the exhibits in support thereof, and the applicable statutes and case law cited therein, which indicate that the CPSC has jurisdiction even over "products which are primarily or exclusively sold to industrial or institutional buyers so long as they were produced or distributed **for use of consumers.**" As stated in Complaint Counsel's Opposition, Omega sprinklers are produced and distributed for use of and enjoyment by consumers, and therefore are consumer products subject to CPSC's jurisdiction.

33. State whether Omegas installed in factories constitute "consumer products" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it calls for a legal conclusion. Complaint Counsel further objects to this Interrogatory on the ground that it requests irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel also objects to this Interrogatory on the ground that the term "factories" is undefined, unclear, vague and ambiguous. If by "factories," Respondents intend to refer to industrial facilities, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, the exhibits in support thereof, and the applicable statutes and case law cited therein, which indicate that the CPSC has jurisdiction even over "products which are primarily or exclusively sold to industrial or institutional buyers so long as they were produced or distributed **for use of consumers**." As stated in Complaint Counsel's Opposition, Omega

sprinklers are produced and distributed for use of and enjoyment by consumers, and therefore are consumer products subject to CPSC's jurisdiction.

33. State whether Omegas installed in computer facilities constitute "consumer products" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it calls for a legal conclusion. Complaint Counsel further objects to this Interrogatory on the ground that it requests irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel also objects to this Interrogatory on the ground that the term "computer facilities" is undefined, unclear, vague and ambiguous. If by "computer facilities," Respondents intend to refer to industrial facilities, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, the exhibits in support thereof, and the applicable statutes and case law cited therein, which indicate that the CPSC has jurisdiction even over

"products which are primarily or exclusively sold to industrial or institutional buyers so long as they were produced or distributed **for use of consumers.**" As stated in Complaint Counsel's Opposition, Omega sprinklers are produced and distributed for use of and enjoyment by consumers, and therefore are consumer products subject to CPSC's jurisdiction.

35. State whether there are any factual circumstances under which any Omegas would not constitute a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) identify and describe any such circumstances;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such circumstances;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such circumstances; and

(e) describe in detail the substance of each such person's knowledge and/or information

Response: Complaint Counsel objects to this Interrogatory on the ground that it calls for speculation. Complaint Counsel further objects to this Interrogatory requests irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel further objects to this Interrogatory on the ground that it calls for a legal conclusion. Complaint Counsel points Respondents to its Opposition to

Respondents' Motion to Dismiss this action, and the exhibits in support thereof, which demonstrate that Omegas are consumer products with CPSC's jurisdiction.

36. (a) State whether there are any factual circumstances under which any non- Omega sprinkler heads would not constitute a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) identify and describe any such circumstances;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such circumstances;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such circumstances; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. The jurisdictional question that Respondents have raised in this litigation is whether Omega sprinklers are consumer products. Complaint Counsel further objects to this Interrogatory on the ground that it calls for a legal conclusion. Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof, which demonstrate that Omegas are consumer products with CPSC's jurisdiction.

37. (a) Separately for each model of the Omegas listed in the Complaint, describe any and all ways in which consumers use, consume, and/or enjoy such a model.

(b) identify all documents which describe, evidence, refer, or relate to any such use, consumption, or enjoyment;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such use, consumption, or enjoyment; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof.

38. With respect to the allegation of Paragraph 8 of the Complaint that the Omegas are "designed to perform in accordance with" NFPA Standard 13:

(a) identify which specific sub-sections of NFPA Standard 13, if any, address the operating water pressure at which previously installed sprinkler heads should activate when such heads are removed and tested;

(b) identify which specific sub-sections of NFPA Standard 13, if any, address the operating water pressure at which installed sprinkler heads should activate when such heads are still incorporated into the sprinkler system;

(c) identify which specific sub-sections of NFPA Standard 13, if any, address the required residual water pressure at the most remote sprinkler head in a system after the other sprinkler heads are open and flowing;

(d) identify which specific sub-sections of NFPA Standard 13, if any, are applicable to the allegations of the Complaint; and

(e) describe in terms of psi (pounds per square inch) the testing standard that Complainant contends is created by NFPA Standard 13 that applies to the Omegas.

Response: Complaint Counsel objects to this Interrogatory on the ground that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel responds that the Standard speaks for itself.

39. With respect to the allegation of Paragraph 8 of the Complaint that the Omegas are "designed to perform in accordance with" UL Standard 199:

(a) identify which specific sub-sections of UL Standard 199, if any, address the operating water pressure at which previously installed sprinkler heads should activate when such heads are removed and tested;

(b) identify which specific sub-sections of UL Standard 199, if any, address the operating water pressure at which installed sprinkler heads should activate when such heads are still incorporated into the sprinkler system;

(c) identify which specific sub-sections of UL Standard 199, if any, address the required residual water pressure at the most remote sprinkler head in a

system after the other sprinkler heads are open and flowing;

(d) identify which specific sub-sections of UL Standard 199, if any, are applicable to the allegations of the Complaint; and

(e) describe in terms of psi the testing standard that Complainant contends is created by UL Standard 199 that applies to the Omegas.

Response: Complaint Counsel objects to this Interrogatory on the ground that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel responds that the Standard speaks for itself.

40. With respect to the allegation of Paragraph 8 of the Complaint that the Omegas are "designed to perform in accordance with" UL Standard 199 and NFPA Standard 13:

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel responds that the Standard speaks for itself.

41. With respect to the allegation of Paragraph 8 of the Complaint that the Omegas are designed to perform in accordance with certain standards "when exposed to certain temperatures":

(a) describe in terms of both degrees Fahrenheit and Celsius what temperatures are meant by the phrase "certain temperatures";

(b) set forth the factual basis for this allegation,

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) The temperatures referred to are the activation/triggering temperatures of the Omega sprinklers.

(b) See (a), above. UL 199, and UL correspondence and listing files for Omega sprinklers, which were received by Complaint Counsel in confidence by a third party, and will be produced to Respondents upon receipt of permission from the third party for disclosure to Respondents.

(c) See response to (b), above. Complaint Counsel has requested this information from Respondents in discovery, but expects that various

Central and UL employees will be included.

(d) Complaint Counsel has requested this information from Respondents in discovery.

(e) See (d), above.

42. (a) State whether Complainant contends that there is a single standard of water pressure (in psi) at which previously installed sprinkler heads must activate when tested to be deemed by the Complainant as not presenting any substantial risk of injury to the public and/or substantial product hazard;

If so:

(b) identify and describe any such standard;

(c) identify all documents which describe, evidence, refer, support, or relate to any such a standard;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such standard; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the grounds that it is vague, ambiguous and confusing. Complaint Counsel further objects to this Interrogatory on the ground that it is overbroad, and seeks irrelevant information pertaining to sprinklers other than Omegas. Without waiving its objections, Complaint Counsel responds that once an Omega is removed from service, it will not create the substantial risk of injury to the public of which Complainant complains. Omega sprinklers fail to activate as designed

and, in many cases, will not activate at pressures that far exceed the water pressure that may be available in the system at the time of a fire.

43. (a) State whether Complainant contends that there is a single standard of temperature at which previously installed sprinkler heads must activate when tested to be deemed by the Complainant as not presenting any substantial risk of injury to the public and/or substantial product hazard;

If so:

(b) identify and describe any such standard;

(c) identify all documents which describe, evidence, refer, support, or relate to any such standard;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such standard; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: See Response to previous Interrogatory. According to Respondents, Omega sprinklers are designed to activate at particularly defined activation/triggering temperatures, based on the temperature at which the fusible link in their heat collector is intended to convert from solid to liquid form.

44. (a) Describe the percentage of previously installed sprinkler heads that must activate at the standards described in Interrogatory Nos. 42-43 when tested in order to be deemed by the Complainant as not presenting any substantial risk of injury to public and/or substantial product hazard;

(b) identify all documents which describe, evidence, refer, support, or relate to such a percentage;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of such a percentage; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: See Response to Interrogatory Nos. 42 and 43.

45. (a) State whether Complainant contends that there is a standard of "failure" that will accurately predict whether a particular Omega will fail to activate in a fire when used in a particular building without regard to the actual hydraulic pressure that exists in the building.

If so:

(b) identify and describe any such standard;

(c) identify all documents which describe, evidence, refer, support, or relate to any such standard

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such standard; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the grounds that it is vague, ambiguous and confusing. Complaint Counsel also objects to this Interrogatory

on the ground that the terms "standard of failure" and "actual hydraulic pressure that exists in the building" are undefined, unclear, vague and ambiguous. The pressure in a building may fluctuate depending on numerous factors. Without clarification of these terms, and additional information as to those factors, Complaint Counsel is unable to respond to this Interrogatory.

46. (a) State whether Complainant contends that if a particular Omega does not activate at a minimum of 7 psi when tested, such an Omega would not activate if a fire occurred in a building where such Omega was installed.

(b) set forth the factual basis for any such contention;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that the term "activate" is undefined, unclear, vague and ambiguous. Without waiving its objection, Complaint Counsel responds that it contends that if a particular Omega does not activate, as that term is defined in Complaint Counsel's discovery requests, upon exposure to its activation/triggering temperature in testing, it would not activate when exposed to that same temperature in a fire that were to occur in a building in which it was installed.

Moreover, to the extent that Omegas have been found to fail at test pressures far in excess of 7 psig, Respondents' Interrogatory is irrelevant.

47. Describe the average static water pressure (in psi) present in the sprinkler systems of most residential buildings.

Response: Complaint Counsel objects to this Interrogatory on the ground that the terms "most residential buildings" and "average static water pressure" are undefined, unclear, vague and ambiguous. Complaint Counsel further objects to this Interrogatory on the ground that it seeks irrelevant information not likely to lead to the discovery of admissible evidence. Complaint Counsel also objects to this Interrogatory on the ground that it is confusing and ambiguous, as it fails to identify the location of the buildings, or define the other factors upon which the water pressure of a building at any given time depends. The water pressure in different areas of the country (and even in different areas of a state) is different, and the water pressure of a single building may fluctuate depending upon various factors. Without additional information as to each of those variants, a response to this question is impossible.

48. Describe the average residual water pressure (in psi) present at the most remote sprinkler head in the sprinkler systems of most residential buildings, after the system has been activated.

Response: Complaint Counsel objects to this Interrogatory on the ground that the terms "average residual water pressure," "most remote sprinkler head in the sprinkler systems," "most residential buildings" and "activated" are undefined, unclear, vague and

ambiguous. Complaint Counsel reiterates its objections and comments in response to Respondents' Interrogatory No. 47.

49. Describe the average static water pressure (in psi) present in the sprinkler systems of most commercial buildings.

Response: Complaint Counsel objects to this Interrogatory on the ground that the terms "most commercial buildings" and "average static water pressure" are undefined, unclear, vague and ambiguous. Complaint Counsel further objects to this Interrogatory on the ground that it seeks irrelevant information not likely to lead to the discovery of admissible evidence. Complaint Counsel also objects to this Interrogatory on the ground that it is confusing and ambiguous, as it fails to identify the location of the buildings, or define the other factors upon which the water pressure of a building at any given time depends. The water pressure in different areas of the country (and even in different areas of a state) is different, and the water pressure of a single building may fluctuate depending upon various factors. Without additional information as to each of those variants, a response to this question is impossible.

50. Describe the average residual water pressure (in psi) present at the most remote sprinkler head in the sprinkler systems of most commercial buildings, after the system has been activated.

Response: Complaint Counsel objects to this Interrogatory on the ground that the terms "average residual water pressure," "most remote sprinkler head in the sprinkler systems," "most commercial buildings" and "activated" are undefined, unclear, vague and

ambiguous. Complaint Counsel reiterates its objections and comments in response to Respondents' Interrogatory No. 49.

51. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas "do not and/or will not function":

(a) separately for each Omega model listed in the Complaint, describe in detail all of the causes and/or reasons that the Omegas "do not and/or will not function";

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) Complaint Counsel objects to this Interrogatory on the ground that it seeks irrelevant information not likely to lead to the discovery of admissible evidence. It is not relevant why Omegas do not and will not function -- it is relevant that they do not and will not function. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a definitive response to this Interrogatory at this time. Available information suggests that the Omega sprinkler design is inadequate for its

intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(b) The Complaint refers, relates to, and provides evidence of this allegation. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC are the basis for this allegation, as is the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test results and fire data to Respondents.

(c) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's allegation. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, and any sprinkler contractors and/or AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about the basis for this allegation. Complaint Counsel is in the process of investigating the identities of all such

persons, and has requested same from Respondents in discovery.

(d) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Complaint Counsel has insufficient information upon which to formulate a response to this Interrogatory.

52. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas do not and/or will not function in a "significant percentage" of instances:

(a) expressed in terms of a specific percentage, describe what constitutes "a significant percentage" regarding this allegation;

(b) set forth the factual basis for this allegation;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) In the current case, CPSC's compilation of test data from various sources, including but not limited to Central, UL and FM, indicates that Omegas have an overall failure rate of approximately 40%.

(b) The factual basis for this allegation is the test data that indicates that

Omegas have an overall failure rate of approximately 40%.

(c) All non-privileged test data that forms the basis of Complaint Counsel's allegation will be produced to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's allegation. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, and any sprinkler contractors and/or AHJs who have dealt with defective Omegas, are all knowledgeable about the basis for this allegation. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Complaint Counsel has insufficient information upon which to formulate a response to this Interrogatory.

53. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the C-l model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which

it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with

Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

54. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the C-l A model of the

Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function

in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce this evidence to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their

properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

55. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the C-1A PRO model of the

Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function

in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their

properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

56. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the C- IA PRO ID model of the

Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has

requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who

have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

57. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the EC-20 model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate

to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s).

Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is

overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

58. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the EC-20A model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate

at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers,

as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

59. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the EC-20 AID model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is

inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals

knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

60. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC-12 model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant

to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of

Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

61. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC-I 2 ID model of the

Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the

failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel

will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

62. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC- 12 PRO model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant

to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires

in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers; which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

63. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC-12A PRO model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it

intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about

Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

64. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC-12 RES model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention.

Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the

knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

65. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC-20 model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would

reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas

that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

66. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC-20 ID model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on

these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is

overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

67. **With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":**

(a) state whether Complainant contends that the R-l model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate

at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers,

as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

68. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

If so:

(a) state whether Complainant contends that the R-1A model of the Omegas is defective;

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is

inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals

knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

69. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the R-IM model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant

to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of

Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

70. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the AC model of the Omegas

is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the

failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel

will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

71. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the M model of the Omegas is defective;

If so:

(b) identify and describe any such defect:

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant

to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will

produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

72. With respect to the allegation of Paragraph 10 of the Complaint that the

Omegas are "defective":

(a) state whether Complainant contends that the Flow Control model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a

significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint

Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

73. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel has already been asked and answered this Interrogatory. See Interrogatory No. 53, and Complaint Counsel's response thereto.

74. State whether the failure of any Omega to function has resulted in any bodily injury or injuries.

Response: Assuming that "failure of any Omega to function" is the failure of an Omega to activate when exposed to its activation/triggering temperature, Complaint Counsel responds that it has information at this time that would indicate that the failure of an Omega to function has resulted in injury or injuries. Complaint Counsel is continuing its investigation of this matter, and has requested this information from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding fires involving Omega sprinklers.

75. State whether the failure of any Omega to function has resulted in any death or deaths.

Response: Assuming that "failure of any Omega to function" is the failure of an Omega to activate when exposed to its activation/triggering temperature, Complaint Counsel responds that it has insufficient information at this time to respond to this Interrogatory. Complaint Counsel is continuing its investigation of this matter, and has requested this information from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding fires involving Omega sprinklers.

76. With respect to the allegation of Paragraph 13 of the Complaint that "failure of the Omegas to function exposes the public to bodily injury and/or death":

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) When an Omega sprinkler does not function in a fire situation, smoke and flames from the fire can cause injury and/or death.

(b) The Complaint refers, relates to, and provides evidence of this allegation. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC are the basis for this allegation, as is the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(c) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's allegation. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, and any sprinkler contractors and/or AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about the basis for this allegation. All persons who have knowledge of fires and/or fire behavior and/or the effects of fire on persons and property exposed to fire, have knowledge of the risk to which the public is exposed in a fire

situation. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(d) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (c) is in part revealed in those documents.

77. With respect to the allegation of Paragraph 15 of the Complaint that the defect or the defects in the Omegas create a "substantial risk of injury to the public":

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) When an Omega sprinkler does not function in a fire situation, smoke and flames from the fire can cause injury and/or death.

(b) The Complaint refers, relates to, and provides evidence of this allegation. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC are the basis for this allegation, as is the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(c) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's allegation. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, and any sprinkler contractors and/or AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about the basis for this allegation. All persons who have knowledge of fires and/or fire behavior and/or the effects of fire on persons and property exposed to fire, have knowledge of the risk to which the public is exposed in a fire situation. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(d) Complaint Counsel objects to this Interrogatory on the ground that it is

overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (c) is in part revealed in those documents.

78. (a) State whether the Complainant contends that any Omegas used with plastic piping systems installed after 1990 have ever failed to activate in a fire.

If so:

(b) identify and describe any such failures;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it is unclear, vague and ambiguous, as it is impossible to ascertain whether the Interrogatory seeks information regarding piping systems installed after 1990, or regarding Omegas installed after 1990 (regardless of when the system was installed). Complaint Counsel further objects to this Interrogatory to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory on the ground that the term "failed to

activate" is undefined, unclear, vague and ambiguous. Complaint Counsel is unable to formulate a response to this Interrogatory without clarification of how Respondents define a failure to activate. Without waiving its objections, Complaint Counsel will provide all non-privileged information it has with respect to fires that have occurred in which Omegas reportedly did not activate, as that term is defined by Complaint Counsel in its discovery to Respondents.

79. (a) **State whether the Complainant contends that any Omegas used with plastic piping systems installed after 1990 have ever failed to activate under any type of testing.**

If so:

(b) identify and describe any such a contention;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it is unclear, vague and ambiguous, as it is impossible to ascertain whether the Interrogatory seeks information regarding piping systems installed after 1990, or regarding Omegas installed after 1990 (regardless of when the system was installed). Complaint Counsel further objects to this Interrogatory to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege.

Complaint Counsel further objects to this Interrogatory on the ground that the term "failed to activate" is undefined, unclear, vague and ambiguous. Complaint Counsel is unable to formulate a response to this Interrogatory without clarification of how Respondents define a failure to activate. Without waiving its objections, Complaint Counsel will provide all non-privileged information it has with respect to testing of Omega sprinklers.

80. (a) State whether the Complainant contends that any Omegas used with copper piping systems installed after 1990 have ever failed to activate in a fire.

If so:

(b) identify and describe any such failures;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it is unclear, vague and ambiguous, as it is impossible to ascertain whether the Interrogatory seeks information regarding piping systems installed after 1990, or regarding Omegas installed after 1990 (regardless of when the system was installed). Complaint Counsel further objects to this Interrogatory to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory on the ground that the term "failed to

activate" is undefined, unclear, vague and ambiguous. Complaint Counsel is unable to formulate a response to this Interrogatory without clarification of how Respondents define a failure to activate. Without waiving its objections, Complaint Counsel will provide all non-privileged information it has with respect to fires that have occurred in which Omegas reportedly did not activate, as that term is defined by Complaint Counsel in its discovery to Respondents.

81. (a) State whether the Complainant contends that any Omegas used with copper piping systems installed after 1990 have ever failed to activate under any type of testing.

If so:

(b) identify and describe any such testing;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it is unclear, vague and ambiguous, as it is impossible to ascertain whether the Interrogatory seeks information regarding piping systems installed after 1990, or regarding Omegas installed after 1990 (regardless of when the system was installed). Complaint Counsel further objects to this Interrogatory to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege.

Complaint Counsel further objects to this Interrogatory on the ground that the term "failed to activate" is undefined, unclear, vague and ambiguous. Complaint Counsel is unable to formulate a response to this Interrogatory without clarification of how Respondents define a failure to activate. Without waiving its objections, Complaint Counsel will provide all non-privileged information it has with respect to testing of Omega sprinklers.

82. (a) State whether the Complainant contends that any Omegas manufactured from 1996 through the present and using silicone o-rings have ever failed to activate in a fire.

If so:

(b) identify and describe any such failures;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory on the ground that the term "failed to activate" is undefined, unclear, vague and ambiguous. Complaint Counsel is unable to formulate a response to this Interrogatory without clarification of how Respondents define a failure to activate. Without waiving its objections,

Complaint Counsel will provide all non-privileged information it has with respect to fires that have occurred in which Omegas reportedly did not activate, as that term is defined by Complaint Counsel in its discovery to Respondents.

83. (a) State whether the Complainant contends that any Omegas manufactured from 1996 through the present and using silicone o-rings have ever failed to activate in any type of testing.

If so:

(b) identify and describe any such testing;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory on the ground that the term "failed to activate" is undefined, unclear, vague and ambiguous. Complaint Counsel is unable to formulate a response to this Interrogatory without clarification of how Respondents define a failure to activate. Without waiving its objections, Complaint Counsel will provide all non-privileged and non-confidential information it has with respect to testing of Omega sprinklers. Complaint Counsel adds that one of the three Omega

sprinklers it received from Respondents in February, 1998, which had just been manufactured a few weeks earlier and had never yet been installed in a sprinkler system, did not activate (as that term is defined in Complaint Counsel's discovery requests to Respondents) when exposed to its activation/triggering temperature. The sprinkler partially deployed, releasing drips of water only, and then the fusible link cold soldered, preventing activation. Complaint Counsel has shared this knowledge with respondents, and asked for an explanation of what, why and how this occurred.

84. (a) State whether the Complainant contends that any Omegas used with plastic piping systems installed after 1990 constitute a "substantial product hazard" pursuant to 15 U.S.C. § 2064(a).

If so:

(b) identify and describe any such hazards;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) Complaint Counsel objects to this Interrogatory on the ground that it is unclear, vague and ambiguous, as it is impossible to ascertain whether the Interrogatory seeks information regarding piping systems installed after 1990, or regarding Omegas installed after 1990 (regardless of when the system was installed). Without waiving its objection, Complaint Counsel

responds that it contends that all Omega sprinklers are substantial product hazards pursuant to 15 U.S.C. § 2064, regardless of the type of piping in which they may be used.

(b) Omega sprinklers are defective pursuant to 15 U.S.C. § 2064, as they may fail in a fire situation, and thus create a substantial risk of injury to the public.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for, among others, UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged and non-confidential test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas present a substantial product hazard. Complaint Counsel is in the process of investigating the identities

of all such persons, and has requested same from Respondents in discovery.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory.

85. (a) State whether the Complainant contends that any Omegas used with copper piping systems installed after 1990 constitute a "substantial product hazard" pursuant to 15 U.S.C. § 2064(a).

If so:

(b) identify and describe any such hazards;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) Complaint Counsel objects to this Interrogatory on the ground that it is unclear, vague and ambiguous, as it is impossible to ascertain whether the Interrogatory seeks information regarding piping systems installed after 1990, or regarding Omegas installed after 1990 (regardless of when the system was installed). Without waiving its objection, Complaint Counsel responds that it contends that all Omega sprinklers are substantial product

hazards pursuant to 15 U.S.C. § 2064, regardless of the type of piping in which they may be used.

(b) Omega sprinklers are defective pursuant to 15 U.S.C. § 2064, as they may fail in a fire situation, and thus create a substantial risk of injury to the public.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for, among others, UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged and non-confidential test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas present a substantial product hazard. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory.

86. (a) State whether Complainant contends that any Omegas manufactured using silicone o-rings constitute a "substantial product hazard" pursuant to 15 U.S.C. § 2064(a).

If so:

(b) identify and describe any such hazards;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) Complaint Counsel contends that all Omega sprinklers, including those with silicone "o" rings, are substantial product hazards pursuant to 15 U.S.C. § 2064.

(b) Omega sprinklers are defective pursuant to 15 U.S.C. § 2064, as they may fail in a fire situation, and thus create a substantial risk of injury to the public.

(c) The Complaint refers, relates to, and provides evidence of this contention.

Central's test results, and the results of testing of Omegas by or for, among others, UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged and non-confidential test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas present a substantial product hazard. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory.

87. (a) State whether the Complainant contends that the performance of

Omegas declines or deteriorates over time.

If so:

(b) identify and describe any such performance decline or deterioration;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that the phrase "performance of Omegas declines or deteriorates over time" is undefined, unclear, vague and ambiguous and, without clarification of same, it is impossible to formulate a response to this Interrogatory. However. deterioration of o-ring material and corrosion, which available evidence suggest may contribute to failure of Omega sprinklers, may be progressive events.

88. With respect to the allegation of Paragraph 16 of the Complaint that the Omegas present a "substantial product hazard":

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or

information.

Response: (a) Omega sprinklers are defective pursuant to 15 U.S.C. § 2064, as they may fail in a fire situation, and thus create a substantial risk of injury to the public.

(b) The Complaint refers, relates to, and provides evidence of Complaint Counsel's allegation that Omegas present a substantial product hazard. Central's test results, and the results of testing of Omegas by or for, among others, UL, FM and CPSC support and relate to this allegation, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged and non-confidential test and fire data to Respondents.

(c) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas present a substantial product hazard. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery.

(d) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory.

89. With respect to the allegation of Paragraph 16 of the Complaint that "action under these provisions is in the public interest":

(a) identify and describe all of the public interest factors which Complainant believes favor "action under these provisions";

(b) set forth the factual basis for such an allegation;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) Preservation of life, health and public safety, and avoidance of the risk of injury and death created by Omega sprinklers, which may fail in a fire situation.

(b) Taking Omegas out of service will abolish the risk of injury and/or death they pose to the public.

(c) Complaint Counsel objects to this subpart on the ground that it is overbroad and unduly burdensome, as all documents relating to fire behavior and injury

and death caused or potentially caused by fire are responsive. Without waiving its objection, Complaint Counsel responds that the Complaint refers, relates to, and provides evidence of Complaint Counsel's allegation that action under 15 U.S.C. § 2064 is in the public interest. Central's test results, and the results of testing of Omegas by or for, among others, UL, FM and CPSC support and relate to this allegation, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged and non-confidential test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's allegation. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's allegation that action under this section is in the public interest. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection,

Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory.

90. With respect to the allegation of Paragraph B(1) of the Complaint that Respondent give prompt "public notice of the defect in the Omegas," identify and describe the "public notice" that the Complainant seeks to impose.

Response: Complaint Counsel would seek to impose public notice pursuant to 15 U.S.C. § 2064 (c), including the following: public notice of the defect; mailing of notice to each person who is a manufacturer, distributor or retailer of Omega sprinklers; notice to every person to whom Respondents know Omega sprinklers were delivered or sold.

91. With respect to the allegation of Paragraph C(3) of the Complaint regarding repair of all Omegas so they will "perform properly," identify and describe what would constitute "performs properly" for purposes of the Complainant.

Response: Proper performance of an Omega sprinkler is full (rather than partial or no) activation of the sprinkler upon exposure to its activation/triggering temperature, as defined in Complaint Counsel's discovery to Respondents.

92. With respect to the allegation of Paragraph C(3) of the Complaint regarding the replacement of all Omegas "with a like or equivalent product which performs properly":

(a) identify and describe any and all "like or equivalent product which performs properly";

(b) state whether Complainant believes that Omegas with a silicone o-ring

qualify as a "like or equivalent product which performs properly"; and

(c) state whether Complainant believes that Omegas with a spring collar qualify as a "like or equivalent product which performs properly."

Response: (a) "Like or equivalent product which performs properly" is a fire sprinkler that, upon exposure to its activation/triggering temperature, activates fully (rather than partially or not at all).

(b) No. Complaint Counsel believes that Omegas with silicone o rings also do not or will not perform properly.

(c) No. Complaint Counsel believes that Omegas with a spring collar also do not or will not perform properly. Moreover, use of a spring collar with a sprinkler is prohibited in a number of, if not most, jurisdictions.

93. With respect to the allegation of Paragraph C(3) of the Complaint regarding a "refund to consumers [of] the purchase price of the Omegas," identify and describe how Complainant would calculate or determine a "refund to consumers [of] of the purchase price of the Omegas."

Response: Complaint Counsel has insufficient information at this time to determine how a refund of the purchase price of Omegas would be calculated. Complaint Counsel has requested from Respondents in discovery information pertaining to sale and installation prices for Omega sprinklers.

94. (a) If the Commission orders Respondents to repair some or all of the Omegas pursuant to 15 U.S.C. § 2064(d)(1), identify and describe the nature and amount of the "reasonable and foreseeable expenses" under 15 U.S.C. § 2064(e)(1) that Complainant

contends should be reimbursed to persons by Respondents.

(b) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(d) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: Complaint Counsel has insufficient information at this time to identify all reasonable and foreseeable expenses that will be incurred by people in availing themselves of any remedy provided under an order issued under 15 U.S.C. § 2064(d), pursuant to 15 U.S.C. § 2064(e). At minimum, it can be expected that consumers would face costs associated with contacting Respondents, obtaining replacement sprinklers, and installing same. The details of any such effort by Respondents will determine these and other expenses.

95. (a) If the Commission orders Respondents to replace some or all of the Omegas pursuant to 15 U.S.C. § 2064(d)(2), identify and describe the nature and amount of the "reasonable and foreseeable expenses" under 15 U.S.C. § 2064(e)(1) that Complainant contends should be reimbursed to persons by Respondents.

(b) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(d) describe in detail the substance of each such person's knowledge and/or

information about any such contention.

Response: Complaint Counsel has insufficient information at this time to identify all reasonable and foreseeable expenses that will be incurred by people in availing themselves of any remedy provided under an order issued under 15 U.S.C. § 2064(d), pursuant to 15 U.S.C. § 2064(e). At minimum, it can be expected that consumers would face costs associated with contacting Respondents, obtaining replacement sprinklers, and installing same. The details of any such effort by Respondents will determine these and other expenses.

96. (a) **If the Commission orders Respondents to refund some or all of the Omegas pursuant to 15 U.S.C. § 2064(d)(3), identify and describe the nature and amount of the "reasonable and foreseeable expenses" under 15 U.S.C. § 2064(e)(1) that Complainant contends should be reimbursed to persons by Respondents.**

(b) **identify all documents which describe, evidence, refer, support, or relate to any such contention;**

(c) **identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and**

(d) **describe in detail the substance of each such person's knowledge and/or information about any such contention.**

Response: Complaint Counsel has insufficient information at this time to identify all reasonable and foreseeable expenses that will be incurred by people in availing themselves of any remedy provided under an order issued under 15 U.S.C. § 2064(d), pursuant to 15 U.S.C. § 2064(e). See also response to Interrogatory No. 94.

97. (a) **If the Commission orders Respondents to repair some or all of the**

Omegas pursuant to U.S.C. § 2064(d)(1), identify and describe the nature and amount of the reimbursement to "any other person who is a manufacturer, distributor, or retailer of such product for such other person's expenses in connection with carrying out the order" that Complainant contends should be made by Respondents.

(b) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(d) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: Complaint Counsel has insufficient information at this time to identify all expenses in connection with carrying out an order under 15 U.S.C. § 2064(c) or (d), that Respondents would have to reimburse other manufacturers, distributors or retailers of Omega sprinklers. See also response to Interrogatory No. 94.

98. (a) If the Commission orders Respondents to replace some or all of the Omegas pursuant to U.S.C. § 2064(d)(2), identify and describe the nature and amount of the reimbursement to "any other person who is a manufacturer, distributor, or retailer of such product for such other person's expenses in connection with carrying out the order" that Complainant contends should be made by Respondents.

(b) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(c) identify each and every person whom Complainant knows and/or

believes to have knowledge of any such contention; and

(d) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: Complaint Counsel has insufficient information at this time to identify all expenses in connection with carrying out an order under 15 U.S.C. § 2064(c) or (d), that Respondents would have to reimburse other manufacturers, distributors or retailers of Omega sprinklers. See also response to Interrogatory No. 94.

99. (a) If the Commission orders Respondents to refund the purchase price to some or all of the Omegas pursuant to U.S.C. § 2064(d)(3), identify and describe the nature and amount of the reimbursement to "any other person who is a manufacturer, distributor, or retailer of such product for such other person's expenses in connection with carrying out the order" that Complainant contends should be made by Respondents.

(b) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d)[sic] identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e)[sic] describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: Complaint Counsel has insufficient information at this time to identify all expenses in connection with carrying out an order under 15 U.S.C. § 2064(c) or (d), that Respondents would have to reimburse other manufacturers, distributors or retailers of Omega sprinklers. See also response to Interrogatory No. 94.

B. Potential Witnesses

100. Identify all former and/or current employees of Respondents with whom Complainant has had any contact regarding the Omegas. For each such person, identify and describe:

(a) the person's name;

(b) the person's last known home and business address;

(c) the person's last known telephone number;

(d) the person's last known position with Respondents;

(e) the date of any such contacts;

(f) the nature of any such contacts (e.g., letter, telephone conversation, in-person interview);

(f)[sic] a detailed description of the subject matter of such communication; and

(g) the identity of any other persons who were present during such contacts.

Response: Complaint Counsel objects to the phrase "any contact" on the ground that it is vague and ambiguous. Complaint Counsel further objects to this Interrogatory on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel intends to submit certain information to the Presiding Officer for in camera review and determination of whether to provide the material to Respondents, and under what conditions.

101. For each and every contact describe an [sic] response to Interrogatory No. 100,

identify each and every document that describes, evidences, refers, or relates to such contacts, including without limitation any notes of such contacts, documents shown during the course of such contacts, lists of questions or answers given, or any reports of such communications.

Response: Complaint Counsel objects to the phrase "any contact" on the ground that it is vague and ambiguous. Complaint Counsel further objects to this Interrogatory on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege.

102. Identify each and every person whom Complainant knows and/or believes to have knowledge or information concerning or related to the subject matter of the Complaint or other discoverable information. For each such person, describe:

(a) the person's name;

(b) the person's last known home and business address;

(c) the person's last known telephone number;

(d) the corporate or government affiliation of the person;

(e) whether the Complainant has contacted such person; and

(f) the specific subject matter of the person's knowledge.

Response: Complaint Counsel objects to this Interrogatory on the ground that it is overbroad and unduly burdensome -- there are thousands of people and entities who have information concerning or related to Omega sprinklers. Complaint Counsel further objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in

anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel responds that it believes that Respondents and their current and former employees have such knowledge and information.

103. Identify each and every fact witness that Complainant expects to testify on its behalf at the hearing in this matter. For each such fact witness, identify and describe:

(a) the name, title, business address, and home address for each such witness; and

(b) the subject matter about which each witness is expected to testify.

Response: Complaint Counsel has not yet determined which witnesses it will call to testify at the hearing in this matter.

104. Identify each and every expert witness whom the Complainant expects to testify on its behalf at the hearing in this matter. For each such expert, identify and describe:

(a) the expert's name, title, home address, business address, education, employment since graduation from high school, and all publications authored or edited by the expert;

(b) the subject matter on which each expert is expected to testify;

(c) the substance and facts upon which the expert relies in forming his or her opinion;

(d) the opinions to which the expert is expected to testify;

(e) a summary of the grounds for each such opinion;

(f) and a statement and description of all information and documents upon which the expert relies or expects to rely.

Response: Complaint Counsel objects to this Interrogatory to the extent that it exceeds the requirements of 16 C.F.R. § 1026.31 regarding discovery of facts known and opinions held by experts. Without waiving its objection, Complaint Counsel responds that it has not yet determined which witnesses it will call to testify at the hearing in this matter. Complaint Counsel will supplement its response as such decisions are made.

105. Identify and describe any and all oral or written statements made by Respondents that the Complainant contends constitute an admission with reference to any of the issues raised in the Complaint. For each such statement, identify and describe:

(a) the person making the alleged statement;

(b) that person's relationship to Respondents;

(c) the content of the statement;

(d) the date, time, and place of the statement;

(e) the nature of the alleged statement (e.g., written or oral); and

(f) the identity of each person who heard the statement or otherwise has personal knowledge of the statement.

Response: Complaint Counsel objects to this Interrogatory on the ground that it calls for a legal conclusion. Complaint Counsel further objects to this Interrogatory on the ground that it is overbroad and unduly burdensome, and requests information already in Respondents' possession. Complaint Counsel further objects to this Request to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery

by the work product privilege. Complaint Counsel further objects to this Request on the ground that it calls for a legal conclusion. Without waiving its objections, Complaint Counsel responds that any and all statements made by Respondents may constitute an admission by Respondents in this matter.

C. Other Allegations Made By the CPSC

106. In a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo, Singer states, "based on multiple random inquiries of sprinkler contractors across the nation in the recent past, we believe that Central's proposed labor payment falls considerably short of what has been, and remains, customarily required to remove and install sprinklers ...." With respect to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to the "multiple random inquiries of sprinkler contractors";

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such "multiple random inquires of sprinkler contractors";

(e) describe in detail the substance of each such person's knowledge and/or information of such "multiple random inquiries of sprinkler contractors";

(f) identify and describe in terms of a specific monetary amount "what has been, and remains, customarily required to remove and install sprinklers";

(g) identify each and every document that constitutes, evidences, refers, or

relates in any way to "what has been, and remains, customarily required to remove and install sprinklers";

(h) identify each and every person whom Complainant knows and/or believes to have knowledge of "what has been, and remains, customarily required to remove and install sprinklers"; and

(i) describe in detail the substance of each such person's knowledge and/or information of "what has been, and remains, customarily required to remove and install sprinklers."

Response: (a) Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege and . Without waiving its objection, Complaint Counsel responds that a labor payment of $5.00 per sprinkler, as suggested by Central's George Meyer in November, 1997, is inadequate to compensate consumers for the charge of replacing their Omega sprinklers.

(b) Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege, and on the ground that it inquires into confidential settlement discussions. Without waiving its objection, Complaint Counsel responds that Complaint Counsel conducted inquiries of many sprinkler contractors as to the labor expense involved in removing and replacing sprinkler heads. In all

instances, sprinkler contractors indicated that the figure suggested by Central's President was grossly low, and that on average the cost may be three to six times that amount, depending on the facility.

(c) Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel responds that Counsel's written notes of its conversations relate to and evidence its inquiries of sprinkler contractors, as does an invoice from a sprinkler contractor relating to replacement of Omegas, which Complaint Counsel will produce to Respondents.

(d) Eric Singer has knowledge of such inquiries. To a lesser extent, Eric Stone, Catherine Anne Cumberland, Andrew Stadnik, Rohit Khanna, and Nicholas Marchica have knowledge of such inquiries.

(e) See response to (b), above.

(f) See response to (b), above. Please note that this cost does not include the cost for the replacement sprinkler, nor can it account for special reconstruction of the sprinkler system such as recutting the drop.

(g) Other than the letter to which Respondents refer, as well as notes reflecting its inquiries of sprinkler contractors, which are Complaint Counsel's work product, Complaint Counsel possesses one invoice from a sprinkler contractor relating to replacement of Omegas, which it will produce to

Respondents.

(h) Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel identifies the following individuals of whom it is aware:

1) David Dixon, Exec. V.P., David Dixon, 4495 Mendenhall Road South, Memphis, TN 38141

2) Jeffrey Larson, Viking Automatic Sprinkler Company, 3434 First Avenue South, Seattle, Washington 98134-1894

3) Fred Jackson, President, Jackson Fire Protection, 1906 Grace Ave., Ft. Myers, FL 33901

4) William L. Oliver, President, Oliver Sprinkler Co., Inc., 501 Feheley Drive, King of Prussia, PA 19046

5) John C. Livingston, Jr. Chairman and CEO, Livingston Fire Protection, Inc., 5150 Lawrence Place, Hyattsville, MD 20781

6) Peter Miller, Miller Fire Protection, 2750 Marble Ct., Forestville, MD 20747

7) Thomas E. Strange, Vice President of Operations, Worsham Sprinkler Company, 400 East Arrowhead Drive, University Trade Center, Charlotte, North Carolina, 28213

8) James Lewis, American Fire Sprinkler Corp., 210 North 28A

Highway #B, Great Bend, Kansas 67530

Complaint Counsel believes that hundreds of other sprinkler contractors have knowledge of what has been and remains customarily required [in terms of labor costs] to remove and install sprinklers. At present, Complaint Counsel has insufficient information to identify them.

(i) Complaint Counsel objects to this subpart on the ground that it overbroad and unduly burdensome, and requests information pertaining to the knowledge of persons other than the Complainant. Without waiving its objection, Complaint Counsel reiterates its response to subpart (b), and indicates that it otherwise has insufficient information with which to respond to this subpart.

107. In a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo, Singer states, "the evidence we have gathered does not support the view that dezincification alone is the cause of above-required operating pressures in Omegas from plastic pipe ...." With regard to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify and describe all of the "evidence we have gathered";

(d) identify each and every document that constitutes, evidences, refers, or relates in any way to this statement;

(e) identify each and every person whom Complainant knows and/or

believes to have knowledge of this statement; and

(f) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege, and on the ground that it inquires into confidential settlement discussions. Without waiving its objection, Complaint Counsel responds that it contends that dezincification, Respondents' proposed explanation for the high activation pressures required to activate some Omegas that were installed in plastic pipe, cannot be the only explanation.

(b) Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel responds that it has evidence of at least one fire (Kent Manor Inn) in which Omega sprinklers installed in a plastic piping system that contained no copper (which Respondents claim is a prerequisite to dezincification) did not activate, and showed no signs of dezincification upon visual inspection. A number of other Omegas that have required high activation pressures in order to activate in testing have also shown no sign of dezincification, e.g., a 1992 Omega from The Fairways at Piper Glen, N.C. As well, evidence

indicating dezincification in sprinklers that have activated tends to cast doubt on the existence of a causal connection between dezincification and high activation pressures required for, or non-activation of, Omegas. In one such instance (the Madison Park Condominiums), Central itself concluded that all eight Omegas that it tested showed signs "characteristic of dezincification," yet apparently four of eight Omegas that it tested failed to activate, in part, Central claimed, as a result of swollen "o" rings. At least one forensic study of which Complaint Counsel is aware has determined that dezincification is not the cause for failure of Omegas from plastic piping systems.

(c) See response to subpart (b), above.

(d) The letter to Ms. Sanzo constitutes and evidences the statement made therein. The results of tests of Omega sprinklers relate to the contention made therein, as does the evidence of the fire at the Kent Manor Inn, both of which will be produced to Respondents. The scientific study referred to above was supplied to Complaint Counsel under a claim of confidentiality; Complaint Counsel awaits authorization from a third party to release the documents to Respondents and, if necessary, a confidentiality stipulation by Respondents and/or protective order by the Presiding Officer.

(e) The letter to Ms. Sanzo is not a public document; Complaint Counsel, other members of the CPSC staff, and Respondents have knowledge of the statement made in the letter to which Respondents refer.

(f) Complaint Counsel objects to this subpart on the ground that it is overbroad

and unduly burdensome, and requests information pertaining to the knowledge of persons other than the Complainant. Without waiving its objection, Complaint Counsel reiterates its response to subpart (b), and indicates that it otherwise has insufficient information with which to respond to this subpart.

108. In a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo, Singer states, "the evidence we have gathered does not support the view . . . that swollen o-rings due to cutting oil exposure are the exclusive cause of non-activation in Omegas manufactured before 1996." With regard to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify and describe all of the "evidence we have gathered";

(d) identify each and every document that constitutes, evidences, refers, or relates in any way to this statement;

(e) identify each and every person whom Complainant knows and/or believes to have knowledge of this statement; and

(f) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product

privilege, and on the ground that it inquires into confidential settlement discussions. Without waiving its objection, Complaint Counsel responds that it contends that swollen "o" rings due to cutting oil exposure Respondents' proposed explanation for the high activation pressures required to activate some Omegas that were installed in steel pipe) cannot be the only explanation for non-activation of Omegas.

(b) Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel responds that:

1) it had (and still has) received no evidence from Respondents that Omegas were in fact exposed to excessive hydrocarbons, or that hydrocarbons were the source of any "o" ring swelling;

2) there is evidence of Omegas that showed no "o" ring swelling that did not activate when exposed to their activation/triggering temperature in testing;

3) there are at least two studies that have attributed failure of Omegas to causes other than swollen "o" rings;

4) Central's own public statement in May, 1996, that "the presence of high concentrations of hydrocarbons (found in petroleum based cutting fluids), in conjunction with varying degrees of corrosion," (emphasis added), suggests that swelling due to excessive

hydrocarbons is not the only cause of failure in these Omegas;

5) A number of Omegas that have activated properly in testing have exhibited swollen "o" rings.

(c) See response to subpart (b), above.

(d) The letter to Ms. Sanzo constitutes and evidences the statement made therein. The results of tests of Omega sprinklers relate to the contention made therein, and will be produced to Respondents. The scientific studies referred to above were supplied to Complaint Counsel under a claim of confidentiality; Complaint Counsel awaits authorization from a third party to release the documents to Respondents, the execution of an appropriate confidentiality stipulation by Respondents, and/or a protective order from the Presiding Officer.

(e) The letter to Ms. Sanzo is not a public document; Complaint Counsel, other members of the CPSC staff, and Respondents have knowledge of the statement made in the letter to which Respondents refer.

(f) Complaint Counsel objects to this subpart on the ground that it is overbroad and unduly burdensome, and requests information pertaining to the knowledge of persons other than the Complainant. Without waiving its objection, Complaint Counsel reiterates its response to subpart (b), and indicates that it otherwise has insufficient information with which to respond to this subpart.

109. In a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo, Singer states, "rather, primarily, the data points to multiple failure modes rooted in

the design and construction of these sprinklers." With regard to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify and describe the "multiple failure modes rooted in the design and construction of these sprinklers";

(d) identify and describe "the data" referenced in the statement;

(e) identify and describe each and every document that constitutes, evidences, refers, or relates in any way to this statement;

(f) identify each and every person whom Complainant knows and/or believes to have knowledge of this statement; and

(g) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it misquotes the letter from Complaint Counsel to Counsel for Respondents. The letter states that preliminarily the data points to multiple failure modes rooted in the design and construction of these sprinklers. Complaint Counsel further objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege, and on the ground that it inquires into confidential settlement discussions. Complaint Counsel further objects to this Interrogatory on the ground that it seeks irrelevant information not reasonably calculated to lead to

the discovery of admissible evidence. Complaint Counsel's theories on the basis for the activation failure of Omega sprinklers is irrelevant, as it is the fact that the Omegas fail, and not why they fail, that is at issue herein. Without waiving its objection, Complaint Counsel responds that it contends that none of the proposed explanations that Respondents have suggested are, alone, sufficient to explain the activation failures of Omegas. See responses to Interrogatories 107 and 108 for an explanation of Complaint Counsel's position, and the bases therefor.

110. In a February 19, 1998 letter from Eric Stone of the CPSC to Kathleen Sanzo, the CPSC refuses to accept a "testing based corrective action proposal" from Respondents. With regard to this rejection:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for rejecting a "testing based corrective action proposal";

(c) identify and describe any and all reasons that the CPSC believes are correct in rejecting such a proposal;

(d) identify each and every document that constitutes, evidences, refers, or relates in any way to the rejection of this proposal;

(e) identify each and every person whom Complainant knows and/or believes to have knowledge of the rejection of this proposal; and

(f) describe in detail the substance of each such person's knowledge and/or information.

Response: See Response to Interrogatory No. 114, below.

111. In a February 19, 1998 letter from Eric Stone of the CPSC to Kathleen Sanzo, the CPSC states that "Central continues to insist on selling Omega sprinklers with silicone o-rings despite serious concerns about whether they will function in the long term." With regard to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify and describe all "serious concerns" that the CPSC has regarding the functioning of Omega sprinklers with silicone o-rings;

(d) identify each and every document that constitutes, evidences, refers, or relates in any way to such "serious concerns"; and

(e) identify each and every person whom Complainant knows and/or believes to have knowledge of such "serious concerns."

Response: a) Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege, and on the ground that it inquires into confidential settlement discussions. Without waiving its objection, Complaint Counsel responds that it contends that Central continues to insist on selling Omega sprinklers with silicone o-rings, and that Complaint Counsel has serious concerns about whether those sprinklers will function both currently and in the long term.

b) Complaint Counsel has evidence that, and Respondents have admitted that Central is continuing to sell Omegas with silicone o rings. The basis for Complaint Counsel's concerns regarding silicone o ring Omegas is the same as its concern regarding other Omegas -- that they are a substantial product hazard, as they may fail in a fire situation, thus exposing the public to substantial risk of injury and/or death. Complaint Counsel points Respondents to its response to Interrogatory No. 112, below, for an explanation of the problem with a silicone o ring sprinkler manufactured in February, 1998, and tested by CPSC only a few weeks later and found not to activate properly, but instead to 'drip' and cold-solder. Complaint Counsel's concerns with respect to silicone o ring Omegas relate to the design of the sprinkler, Respondents' manufacturing (and quality control) procedures, and to the silicone material itself -- including but not limited to the possibility of adhesion, susceptibility to corrosion, inadequate or improper lubrication, inadequate clearances, and possible malfunctioning parts. Complaint Counsel has requested information from Respondents in discovery regarding each of these (and other) issues.

c) See response to subparts (a) and (b), above.

d) See responses to Interrogatories 86 and 112.

e) Complaint Counsel has insufficient information at this time to provide full identification for each person or organization whom Complaint Counsel knows or believes to know of the serious concerns that Complaint Counsel

has with respect to Omegas utilizing a silicone o-ring. Provisionally, however, in addition to Respondents, it provides the following list:

Underwriters Laboratories
333 Pfingsten Road
Northbrook, IL 60062-2096
847-272-8800

Factory Mutual Research Corporation
1151 Boston-Providence Turnpike
Norwood, MA 02062
781-762-4300

Parco, Inc.
2150 Parco Ave.
Ontario, CA 91761
909-923-0288

Loss Prevention Council
Melrose Avenue
Borehamwood
Hertfordshire WD6 2BJ
United Kingdom
011-44-0181-207-2345

112. In a February 24, 1998 letter from Eric Stone of the CPSC to Kathleen Sanzo, Stone states, "x-ray examination of the unit showed that the internal shaft was cocked or tipped slightly and jammed in that position" and that the CPSC "plans to conduct non-destructive analysis of the unit ...." With regard to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify and describe any evidence that Omegas may be "cocked or tipped slightly and jammed in that position";

(d) identify each and every document that constitutes, evidences, refers, or relates in any way to the statement that Omegas are "cocked or tipped slightly and jammed in that position";

(e) identify each and every person whom Complainant knows and/or believes to have knowledge of any such problems;

(f) describe in detail the substance of each such person's knowledge and/or information; and

(g) describe any "non-destructive analysis of the unit" performed by or on behalf of the CPSC.

Response: (a) Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel responds that although it does not at this time intend to rely on a letter it wrote to Ms. Sanzo, Complaint Counsel may rely on the evidence that the letter to Ms. Sanzo discusses.

(b) The factual basis for the statement is stated in the phrase quoted by Respondents.

(c) The evidence that the Omega referred to in the letter was cocked or tipped is described in the letter -- it is the x-ray of the unit described.

(d) Complaint Counsel objects to this interrogatory on the ground that it misquotes the statement in the letter. The statement refers to a single

Omega, manufactured in February, 1998, and never installed in a sprinkler system, that, when tested by Complainant a few weeks after it was manufactured by Central, failed to activate, as that term is defined in Complaint Counsel's discovery to Respondents, when exposed to its activation/triggering temperature, and instead "leaked" or "wept," dripping water and then cold-soldering. When the sprinkler was x-rayed, it demonstrated what was described in the letter. Complaint Counsel shared this information with Respondents to demonstrate to Respondents that their various theories of what is wrong with Omegas, including the installation-based explanations that point to installer error and/or mishandling of the Omegas, cannot suffice to account for the problem with Omega sprinklers. The sprinkler that exhibited this activation failure had never been installed, nor had it ever been exposed to cutting oils, stop leak, or any other substance, by any sprinkler contractor or installer. Further, Complaint Counsel sought efforts by Respondents to ensure that the sprinklers they are currently manufacturing are safe and will function properly.

(e) Complaint Counsel objects to this subpart on the ground that it requests information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel identifies Complaint Counsel, its staff and consultants, Respondents and Counsel for Underwriters Laboratories.

(f) See (a) through (d), above.

113. In a January 6, 1998 letter from Eric Singer of the CPSC to the state attorneys general, Singer states, "this contrasts with automatic fire sprinklers' historical rate of proving 99.5 percent effective." With regard to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify and describe all evidence that automatic fire sprinklers have an "historical rate of proving 99.5 percent effective";

(d) identify each and every document that constitutes, evidences, refers, or relates in any way to such historical rate of effectiveness;

(e) identify each and every person whom Complainant knows and/or believes to have knowledge of such historical rate of effectiveness; and

(f) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) Complaint Counsel objects to this Interrogatory on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence in this case. The effectiveness of sprinklers other than Omegas is irrelevant herein. Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege.

(b) Complaint Counsel objects to this Interrogatory on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence in this case. Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel responds that statistics on the high reliability of other automatic fire sprinklers is in the public domain, and is available from the National Fire Protection Association and National Fire Sprinkler Association. Complaint Counsel is in the process of gathering evidence on the historical rate of effectiveness of automatic fire sprinklers, but offers the following list:

1) Rural/Metro Fire Department (Scottsdale, Arizona), Automatic Sprinklers: A 10 Year Study (1997);

2) Fire Sprinkler Advisory Board of Southern California, City of Los Angeles Civil Disturbance: Report on the Buildings Protected by Automatic Fire Sprinkler Systems and Their Performance Record (1992);

3) H.W. Marryatt, Fire: Automatic Sprinkler Performance in Australia and New Zealand, 1886-1968 (Melbourne: Australian Fire Protection Association, 1971);

4) "Sprinklers for Your Home," This Old House (magazine) (Jan./Feb.

1998);

5) Walter W. Maybee, "Sprinkler Performance Update: 1952- to 1986," Bulletin of the Society of Fire Protection Engineers (1988).

(c) See response to subpart (b).

(d) See response to subpart (b).

(e) Complaint Counsel objects to this subpart on the ground that it is overbroad and unduly burdensome. Without waiving its objection, Complaint Counsel identifies the following as having information pertaining to the high rate of effectiveness of automatic fire sprinklers:

1) Russell P. Fleming, P.E., Vice President of Engineering, National Fire Sprinkler Association, Inc., Robin Hill Corporate Park, Route 22 - P.O. Box 1000, Patterson, New York 12563;

2) John A. Viniello, President, National Fire Sprinkler Association, Inc., Robin Hill Corporate Park, Route 22- P.O. Box 1000, Paterson, New York 12563.

f) Complaint Counsel objects to this subpart on the ground that it requests information pertaining to entities other than Complainant. Without waiving its objection, Complaint Counsel responds that it has insufficient information at this time to describe in detail the complete substance of each person's knowledge and/or information on the high rate of effectiveness of automatic fire sprinklers.

114. (a) State whether Complainant deems any corrective action proposal to be

acceptable that is based in part on testing of a sample of sprinkler heads from a building and comparing the results of the sample to the hydraulically calculated operating pressure of that building.

If so:

(b) identify and describe such an acceptable corrective action proposal;

If not:

(c) identify and describe all reasons for such unacceptability;

(e)[sic] identify each and every document that constitutes, evidences, refers, or relates in any way to such unacceptability;

(f) identify each and every person whom Complainant knows and/or believes to have knowledge of such unacceptability; and

(g) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) Complaint Counsel objects to this Interrogatory on the ground that the terms "hydraulically calculated operating pressure" are undefined, unclear, vague and ambiguous. Without waiving its objection, and assuming that Respondents ask whether Complainant deems acceptable any corrective action plan that would involve a one-time test of a sample of Omegas from buildings in which Omegas are installed, Complaint Counsel responds that such a corrective action plan is unacceptable to correct the substantial product hazard presented by Omegas.

(b) (inapplicable in light of response to (a); no response necessary pursuant to

instructions)

(c) Complaint Counsel incorporates its response to (a), above. Complaint Counsel further objects to this Interrogatory on the ground that it seeks privileged work product, and legal conclusions. Without waiving its objections, Complaint Counsel responds that it deems such a corrective action plan unacceptable because (1) the overall failure rate of Omegas in testing, based on thousands of samples tested to date, is so high, coupled with the fact that fires have been documented in which Omegas reportedly failed to activate, that removal of Omegas cannot be delayed; (2) testing in light of the high failure rate of Omegas to date would divert resources and time unnecessarily from correcting the hazard presented by Omegas; (3) testing in this manner has been shown to be an unreliable indicator of whether any given Omega (that was not one of the sample tested from a building) will operate when exposed to its activation/triggering temperature; (4) the water pressure in a building is not a constant - it is a variable, based on numerous factors, and therefore there is no "static pressure" that can be used as a standard; and (5) once one or more sprinklers activate in a fire situation, the water pressure "seen" by any other sprinkler will always be less than the building's water pressure prior to the opening of any sprinklers.

(d) (no subpart (d) is included in this Interrogatory)

(e) All results of tests of Omega sprinklers provide evidence of the reasons stated by Complaint Counsel in section (c), above. As well, all reports of

fires in which Omegas allegedly failed to activate support same.

(f) Complaint Counsel and its staff have knowledge of their contention that such proposed corrective action plans are unacceptable. Respondents and their attorneys also have knowledge of Complaint Counsel's position, as that position has been communicated to them.

(g) The substance of the knowledge possessed by Complaint Counsel and its staff, as well as by Respondents, regarding Complaint Counsel's position on the unacceptability of a testing-based corrective action plan is as stated in subpart (c), above.

D. CPSC Investigation

115. Identify all persons employed or otherwise retained by the CPSC who in any way participated in the CPSC's investigation of the Omegas. For each person identified, describe his or her role in the investigation.

Response: Complaint Counsel objects to this Interrogatory on the ground that the term "participated in the CPSC's investigation of the Omegas" is unclear, vague and ambiguous, as the use of the past tense indicates an intent to limit the Interrogatory to some time in the past, and the Interrogatory fails to specify the time period to which it refers. Complaint Counsel further objects to this Interrogatory on the ground that it requests information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel identifies the following staff who have participated in the CPSC's investigation of Omega sprinklers prior to the assignment of Complaint Counsel of record to the case: Catherine Cumberland, Marc

Schoem, Eric Stone, Andrew Stadnik, Rohit Khanna, Nicholas Marchica, Mark Kumagi, James Hoebel. Complaint Counsel objects to this Interrogatory to the extent that it exceeds the requirements of 16 C.F.R. § 1026.31 regarding discovery of facts known and opinions held by experts. Without waiving its objection, Complaint Counsel further responds that it has not yet determined which witnesses it will call to testify at the hearing in this matter. Complaint Counsel will supplement its response as such decisions are made.

116. Describe the circumstances surrounding, and the reasons giving rise to the CPSC's decision to investigate alleged risks associated with the Omegas. Your response should include, without limitation, the following:

(a) the date that the CPSC decided to investigate the Omegas;

(b) the identity of all persons at the CPSC involved in the decision to investigate the Omegas; and

(c) the identity of all information (including, but not limited to, any consumer complaints) available to or otherwise relied upon by the CPSC in deciding to initiate an investigation of the Omegas.

Response: Complaint Counsel objects to this Interrogatory on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Interrogatory on the ground that it requests information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory on the ground that it seek irrelevant information not reasonably calculated to lead to the discovery of admissible evidence, as the CPSC's investigation of Omega

sprinklers, and the propriety thereof and bases therefore, are not at issue in this litigation. Without waiving its objections, Complaint Counsel responds as follows:

(a) CPSC initiated its investigation of Omega sprinklers on or about May, 1996.

(b) Catherine A. Cumberland and Marc J. Schoem, in consultation with Eric L. Stone.

(c) CPSC initiated its investigation after receiving information regarding two fires in which Central Omega sprinklers reportedly failed to operate: one at a VA hospital in New York, and the other at a Marriott Hotel in Michigan.

117. Describe in detail any investigation by the CPSC relating to consumer complaints and/or consumer reports of personal injury, property damage, non-activation, or any other problems allegedly associated with the Omegas. Your response should include, without limitation, the following:

(a) the identity of any and all persons employed or otherwise retained by the CPSC who participated in this aspect of the investigation;

(b) the identity of all consumers with whom the CPSC communicated in connection with this aspect of the investigation;

(c) the identity of all consumers who complained of or reported an incident relating to the Omegas;

(d) the identification of any consumer questionnaires or other surveys used by the CPSC in conducting this aspect of the investigation; and

(e) the identification of any and all data, reports, survey results, or other information revealing the results of this aspect of the investigation.

Response: Complaint Counsel objects to this Interrogatory on the ground that the terms "non-activation" and "consumer complaints" are undefined, unclear, vague and ambiguous. Complaint Counsel objects to this Interrogatory on the ground that it requests information pertaining to the identity of consumers in prohibition of 15 U.S.C. § 2074(c). Complaint Counsel further objects to this Interrogatory on the ground that it requests information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence, as the CPSC's investigation of Omega sprinklers, and the propriety thereof and bases therefore, are not at issue in this litigation. Without waiving its objections, Complaint Counsel responds that it is currently investigating whether reports that it has received regarding sprinklers are "in connection with the Omegas," and whether they report property damage and/or personal injury in connection therewith. Complaint Counsel will supplement its response to this Interrogatory as additional information becomes available.

118. Identify and describe any and all incidents known to the CPSC in which a consumer or other person has reported a fire in connection with use of the Omegas. For each such incident, state the following:

(a) the name and address of the consumer;

(b) the date of the incident involving the fire;

(c) a description of any and all property damage, if any, caused by or associated with the fire; and

(d) a description of any and all personal injuries, if any, sustained as a

result of or associated with the fire.

Response: Complaint Counsel objects to this Interrogatory on the ground that it is vague, ambiguous, and unclear as worded. Complaint Counsel further objects to this Interrogatory on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Interrogatory on the ground that it requests information pertaining to the identity of consumers in prohibition of 15 U.S.C. § 2074(c). Complaint Counsel further objects to this Interrogatory on the ground that it requests information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, and assuming that a fire "in connection with use of the Omegas" means a fire in which one or more Omegas exposed to their activation/triggering temperature may not have activated, as that term is defined in Complaint Counsel's discovery to Respondents, Complaint Counsel identifies the following fires of which it is aware:

1. (a) Location: Marriott International, Inc., 10400 Fernwood Road, Bethesda, MD 20817

   (b) 1/26/95

   (c) damage to room

   (d) employee injured

2. (a) Department of Veteran's Affairs, Veteran's Health Administration, Washington, DC

   (b) 5/16/95

   (c) smoke and water damage

   (d) Complaint Counsel has insufficient information at this time with which to

respond to this subpart.

3. (a) Location: Uptown Manor, 1354 N. Harper, West Hollywood, CA

(b) 1/18/97

(c) damage to property and contents

(d) Complaint Counsel has insufficient information at this time with which to respond to this subpart.

4. (a) Location: Ft. Wayne Children's Home/Crossroads, 2525 Lake Avenue, Ft. Wayne, IN

(b) 4/6/97

(c) damage to bed, bedding, and room

(d) Complaint Counsel has insufficient information at this time with which to respond to this subpart.

5. (a) Location: Mel's Marina, 300 Pensacola Beach Road, Gulf Breeze, FL 32561

(b) 9/28/97

(c) property damage; contents damage; total on the order of $3 million

(d) Complaint Counsel has insufficient information at this time with which to respond to this subpart.

6. (a) Location: Kent Manor Inn, 500 Kent Manor Dr., Stevensville, MD 21666

(b) 10/27/97

(c) approx. $50,000 damage - structural and contents

(d) Complaint Counsel has insufficient information at this time with which to

respond to this subpart.

7. (a) Location: Lorene Lodge, 470 Lorene Dr., SW, Marietta, GA 30060

(b) 2/6/98

(c) damage to room and contents

(d) Complaint Counsel has insufficient information at this time with which to respond to this subpart.

8. (a) Location: Monserrat School of Art, 31 Elliott St., Beverly, MA 01915

(b) 3/1/98

(c) approx. $15,000 damage to contents and structure

(d) Complaint Counsel has insufficient information at this time with which to respond to this subpart.

Complaint Counsel is continuing its investigation into possible fires in which an Omega failed to activate, and will supplement its response to this Interrogatory as additional information becomes available. Further, Complaint Counsel has requested information responsive to this Interrogatory from Respondents in discovery.

119. To the extent not already identified in response to Interrogatory Nos. 117-118, identify and describe any and all incidents known to the CPSC in which a consumer or other person has reported any form of property damage or personal injury in connection with the Omegas. For each such incident, state the following:

(a) the name and address of the consumer;

(b) the date of the incident involving the alleged property damage and/or personal injury;

(c) a description of the type of property damage allegedly sustained; and

(d) a description of any and all personal injury allegedly sustained.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests information pertaining to the identity of consumers in prohibition of 15 U.S.C. § 2074(c). Without waiving its objections, Complaint Counsel responds that it is currently investigating whether reports that it has received regarding sprinklers are "in connection with the Omegas," and whether they report property damage and/or personal injury in connection therewith. Complaint Counsel will supplement its response to this Interrogatory as additional information becomes available.

120. Describe in detail any and all communications between the CPSC and any dealer, retailer, or distributor in connection with the Omegas. Your response should include, without limitation, the following:

(a) the identity of any and all persons employed or otherwise retained by the CPSC who participated in this aspect of the investigation;

(b) the identity of any and all dealers, retailers, or distributors with whom the CPSC communicated in connection with this aspect of the investigation of the Omegas;

(c) a description of the content of the CPSC's communications with each such dealer, retailer, or distributor;

(d) the identification of any questionnaires or other surveys used by the CPSC in communicating with each such dealer, retailer, or distributor; and

(e) the identification of any and all data, reports, surveys results, or other

information revealing the results of this aspect of the investigation.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests information prepared by or for Complaint Counsel in preparation for litigation, and thus protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory to the extent that it seeks information provided to CPSC by third parties who claim confidentiality or trade secret. Without waiving its objection, Complaint Counsel will provide copies of all such communications that are in the public domain.

121. Describe in detail any and all communications between the CPSC and any Authority Having Jurisdiction ("AHJ") in connection with the Omegas. Your response should include, without limitation, the following:

(a) the identity of any and all persons employed or otherwise retained by the CPSC who participated in this aspect of the investigation;

(b) the identity of any and all AHJ's with whom the CPSC communicated in connection with this aspect of the investigation;

(c) a description of the content of the CPSC's communication with each such AHJ;

(d) the identification of any questionnaires or other surveys used by the CPSC in communicating with each such AHJ; and

(e) the identification of any and all data, reports, surveys results, or other information revealing the results of this aspect of the investigation.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests information prepared by or for Complaint Counsel in preparation for litigation, and thus protected

from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory to the extent that it seeks information provided to CPSC by third parties who claim confidentiality or trade secret. Without waiving its objection, Complaint Counsel will provide copies of all such communications that are in the public domain.

122. Describe in detail any and all communications between the CPSC and any state law enforcement authorities in connection with the Omegas. Your response should include, without limitation, the following:

(a) the identity of any and all persons employed or otherwise retained by the CPSC who participated in this aspect of the investigation;

(b) the identity of any and all state law enforcement authorities with whom the CPSC communicated in connection with this aspect of the investigation of the Omegas;

(c) a description of the content of the CPSC's communications with each such state law enforcement authority;

(d) the identification of any questionnaires or other surveys used by the CPSC in communicating with each such state law enforcement authority; and

(e) the identification of any and all data, reports, surveys results, or other information revealing the results of this aspect of the investigation.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests information prepared by or for Complaint Counsel in preparation for litigation, and thus protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory to the extent that it seeks information provided to CPSC by third parties who claim confidentiality or trade secret. Without waiving its objection, Complaint Counsel will provide

copies of all such communications that are in the public domain.

123. Describe in detail any and all communications between the CPSC and any federal law enforcement authorities in connection with the Omegas. Your response should include, without limitation, the following:

(a) the identity of any and all persons employed or otherwise retained by the CPSC who participated in this aspect of the investigation;

(b) the identity of any and all federal law enforcement authorities with whom the CPSC communicated in connection with this aspect of the investigation of the Omegas;

(c) a description of the content of the CPSC's communications with each such federal law enforcement authority;

(d) the identification of any questionnaires or other surveys used by the CPSC in communicating with each such federal law enforcement authority; and

(e) the identification of any and all data, reports, surveys results, or other information revealing the results of this aspect of the investigation.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests information prepared by or for Complaint Counsel in preparation for litigation, and thus protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory to the extent that it seeks information provided to CPSC by third parties who claim confidentiality or trade secret. Without waiving its objection, Complaint Counsel will provide copies of all such communications that are in the public domain.

E. Design and Testing

124. Identify and describe any and all testing of the Omegas conducted by or on behalf of the CPSC. Your response should include, without limitation, the following:

(a) a description of any testing protocols used by the CPSC in testing the Omegas;

(b) the identity of the person(s) who created or established any such testing protocols for the Omegas;

(c) a description of the methodology employed during each and every test of the Omegas;

(d) the date of each and every test of the Omegas;

(e) an identification of the person(s) who conducted, participated in, or were otherwise present during each test of the Omegas;

(f) a description of the results of each and every test of the Omegas; and

(g) the identification of any and all documents (including videotapes and audiotapes) relating to any testing of the Omegas.

Response: Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and thus protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel responds that it is currently in the process of testing Omega sprinklers, and will produce all non-privileged documents relating thereto as soon as they are available.

125. Identify any and all outside consultants, experts, or other persons who assisted, advised, or otherwise communicated with the CPSC with respect to any testing of the Omegas. For each such person, describe his or her role in the testing, and the communications between that person and the CPSC.

Response: Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in preparation for litigation, and therefore protected from discovery pursuant to the work product privilege. Complaint Counsel further objects to this Interrogatory to the extent that it exceeds the requirements of 16 C.F.R. § 1026.31 regarding discovery of facts known and opinions held by experts, and on the ground that it violates 16 C.F.R. 1025.31(c)(4)(ii). Without waiving its objections, Complaint Counsel will produce all non-privileged results of testing of Omega sprinklers, and will identify, in its supplemental response to Interrogatory No. 104, all experts whom it expects to call at trial in this matter, and all information required to be disclosed pursuant to 16 C.F.R. § 1025.31(c)(4), once it is determined who those experts will be.

126. For each test of the Omegas conducted by the CPSC, describe in detail the condition and age of the specific Omegas used in the test. Your response should include, without limitation, the following:

(a) an identification of each specific Omega by model number;

(b) a description of how and when the CPSC obtained each specific Omega used in the testing;

(c) a description of the condition of each specific Omega used in the testing (e.g., new, used, damaged, dented, etc. . .);

(d) a statement of the age of each specific Omega used in the testing;

(e) a statement of whether the CPSC has retained and the current location of each specific Omega used in the testing; and

(f) if the CPSC has since destroyed or discarded any Omegas used in its testing, a statement of the reasons for that action.

Response: See Response to Interrogatory No. 126. Complaint Counsel also objects to this interrogatory on the ground that the terms "condition" and "age" are undefined, unclear, vague and ambiguous.

127. For each test of the Omegas conducted by the CPSC, describe in detail the piping used in the sprinkler system from which the Omegas were removed. Your response should include, without limitation, the following:

(a) the material constituting the piping;

(b) the presence of any treatments or substances applied to the piping;

(c) the contents of any and all materials or substances inside the piping; and

(d) a description of the overall condition of the piping.

Response: See Response to Interrogatories 124, 125 and 126. Complaint Counsel also objects to this Interrogatory on the ground that the terms "materials or substances inside" and

"overall condition" are undefined, unclear, vague and ambiguous.

128. For the time period 1990 through the present, identify and describe any and all testing of any non-Omega sprinkler heads conducted by or on behalf of the CPSC. Your response should include, without limitation, the following:

(a) a description of any testing protocols used by the CPSC in testing the non-Omega sprinkler heads;

(b) the identity of the person(s) who created or established any such testing protocols for the non-Omega sprinkler heads;

(c) a description of the methodology employed during each and every test of the non-Omega sprinkler heads;

(d) the dates of each and every test of the non-Omega sprinkler heads;

(e) an identification of the person(s) who conducted, participated in, or were otherwise present during each test of the non-Omega sprinkler heads;

(f) a description of the results of each and every test of the non-Omega sprinkler heads; and

(g) the identification of any and all documents (including videotapes and audiotapes) relating to any testing of the non-Omega sprinkler heads.

Response: Complaint Counsel objects to this Request to the extent that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel further objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request on the ground that to the

extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel responds that it has not at this time conducted any testing on non-Omega sprinklers.

129. To the extent that you contend, or otherwise intend to present at the hearing in this matter, the feasibility and/or propriety of any alternative design features for the Omegas, identify and describe any such proposed alternative design features. Your response should include, without limitation, a description of all data, testing, reports, or other information supporting this contention.

Response: Complaint Counsel objects to this Request on the ground that the terms "feasibility and/or propriety of" (in the context of "alternative design features for the Omegas"), and "any alternative design features for the Omegas" are undefined, unclear, vague and ambiguous, and that the question as a whole is unintelligible, and thus precludes Complaint Counsel from formulating a response without clarification of its meaning.

F. Risk Assessment

130. Set forth the factual basis of your contention in Paragraph 15 of the Complaint that the Omegas "create a substantial risk of injury to the public within the meaning of Section 15(a)(2) of the CPSA, 15 U.S.C. § 2064(a)(2)." Your response should include, without limitation, the following:

(a) a description of the specific risks of injury that you contend are presented by the Omegas;

(b) a description of the criteria or factors used by the CPSC in determining that each risk allegedly associated with the Omegas constitutes a "substantial risk" within the meaning of 15 U.S.C. § 2064(a)(2); and

(c) an identification of any and all data, survey information, or testing relating to the alleged risks associated with the Omegas.

Response: See Complaint Counsel's Response to Interrogatory No. 77.

131. Describe in detail any and all measures taken by the CPSC to determine the severity of the risk allegedly associated with the Omegas, including, without limitation:

(a) a description of how the CPSC measures the severity of the risk allegedly associated with the Omegas;

(b) a statement of whether the measurement employed by the CPSC incorporates, considers, or is in any way adjusted to reflect the number of products in use and the frequency of use of the Omegas;

(c) a description of all efforts taken by the CPSC to measure the severity of the risk or probability of injury allegedly associated with the Omegas; and

(d) an identification of all data, studies, and reports that quantify or otherwise provide an assessment of the risk or probability of injury allegedly associated with the Omegas.

Response: a) Complaint Counsel objects to this Interrogatory on the ground that the term "measures" is undefined, unclear, vague and ambiguous as used herein. Complaint Counsel also objects to this Interrogatory on the ground that it

calls for a legal conclusion. Without waiving its objection, Complaint Counsel responds that CPSC does not measure severity of the risk created by consumer products as the term "measure" is defined by Webster's Dictionary, to which Respondents point for definition of terms not otherwise defined. Without waiving its objection, Complaint Counsel responds that it determined the severity of the risk posed by Omega sprinklers according to 15 U.S.C. § 2064(a)(2) and 16 C.F.R. § 1115.12. Pursuant to 15 U.S.C. § 2064(a)(2), severity of the risk is one of the factors the staff may consider in determining whether a product defect creates a substantial risk of injury to the public. According to 16 C.F.R. § 1115.12(g)(1)(iii), a risk is severe if the injury which might occur is serious and/or if the injury is likely to occur. When a sprinkler does not activate in a fire, it cannot suppress or contain the fire, thus exposing the public to the risk of injury and/or death that are both serious and likely to occur.

b) Complaint Counsel objects to this Interrogatory on the ground that the term "measurement" is undefined, unclear, vague and ambiguous, as used herein. Without waiving its objection, and by way of clarification, Complaint Counsel responds that CPSC does not engage in a measurement of the severity of the risk created by consumer products as the term "measurement" is defined by Webster's Dictionary, to which Respondents

point for definition of terms not otherwise defined. Moreover, pursuant to 15 U.S.C. § 2064(a)(2), the number of defective products distributed in commerce is one of the factors the staff may consider in determining whether a product defect creates a substantial risk of injury to the public, and that factor is a distinct factor from the severity of the risk, pursuant to 16 C.F.R. § 1115.12(g)(1). By way of further clarification, Complaint Counsel states that one defective product can present a substantial risk of injury to the public, if the injury which might occur is serious and/or if the injury is likely to occur. 16 C.F.R. § 1115.12(g)(1)(ii).

c) Complaint Counsel reiterates its objections and responses to subparts (a) and (b) of this Interrogatory. Complaint Counsel further objects to this Interrogatory on the ground that it requests information prepared by or for Complaint Counsel in anticipation of litigation, and thus protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel responds that it reviewed Central's test results, and the results of testing of and incidents related to Omegas, by or for UL, FM and CPSC, S.E.A., Hughes Associates, BodyCote Taussig, University of Maryland, governmental entities (Office of the Maryland State Fire Marshall; Farifax County Virginia Fire Prevention Division), independent entities (NFPA) and other third parties.

d) See Response to subpart (c), above. Complaint Counsel objects to this

Interrogatory to the extent that it seeks information provided to Complaint Counsel on a confidential basis by third parties. Complaint Counsel will produce all non-privileged and non-confidential documents pertaining to the tests and fires. Complaint Counsel will produce other responsive documents received by third parties subject to a confidentiality claim upon receipt of permission by those parties, execution of an appropriate confidentiality stipulation by Respondents, and/or protective order by the Presiding Officer.

132. Describe the CPSC's preliminary determination of the alleged risks associated with the Omegas. Your response should include, without limitation, the following:

(a) the date the CPSC Staff issued its preliminary determination of the alleged risks associated with the Omegas;

(b) the identity of all persons involved in the Staff's preliminary determination;

(c) the level of hazard assigned to the Omegas in accordance with the applicable provisions of the CPSC Recall Handbook; and

(d) an identification of all data, studies, reports, and/or testing upon which CPSC relied in making its preliminary determination.

Response: Complaint Counsel objects to this Interrogatory on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of

admissible evidence. Without waiving its objection, Complaint Counsel responds as follows:

(a) 1/28/98

(b) Complaint Counsel objects to this subpart on the ground that the term "involved in the preliminary determination" is undefined, unclear, vague and ambiguous. Without waiving its objection, Complaint Counsel responds that Marc J. Schoem, Catherine A. Cumberland, and Eric H. Singer signed off on the preliminary determination. Eric Stone, Rohit Khanna, Nicholas Marchica, and Andrew Stadnik were all present for and/or contributed to the decision.

(c) Complaint Counsel objects to this subpart on the ground that it calls for a legal conclusion. Complaint Counsel further objects to this subpart on the ground that it request irrelevant information not likely to lead to the discovery of admissible evidence. Complaint Counsel further objects to this subpart on the ground that it requests confidential Agency information. The letter category of hazard classification is an internal Agency classification that is not generally publicly disclosed. Without waiving its objections, Complaint Counsel responds that Omegas were classified as a class "a" hazard.

(d) See response to (c), above.

133. Explain the factual basis underlying the level of hazard assigned to the

Omegas in the CPSC Staffs preliminary determination of the alleged risks associated with the Omegas. Your response should include a statement of the specific factors considered, and the data or information relied upon, by the CPSC Staff in determining the level of hazard assigned to the Omegas.

Response: Complaint Counsel objects to this Interrogatory on the ground that the terms "level of hazard assigned" are undefined, unclear, vague and ambiguous. Assuming that Respondents intend to refer to the Agency's internal hazard classification of Omega sprinklers, Complaint Counsel objects to this Interrogatory on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel further objects to this Interrogatory on the ground that it calls for a legal conclusion. Complaint Counsel further objects to this Interrogatory on the ground that it seeks information protected from discovery by the work product and/or attorney client privileges. Complaint Counsel also objects to this Interrogatory on the ground that it requests confidential Agency information. The letter category of hazard classification is an internal Agency classification that is not publicly disclosed. Without waiving its objections, Complaint Counsel responds that the basis for its hazard classification of Omega sprinklers was the results of testing by four organizations of a total of over 4,800 Omega sprinklers from sites around the nation, which yielded an approximately 40% failure rate, coupled with evidence of six fires in which Omegas reportedly failed to activate, and the fact that Omegas are designed to be a life safety device. When they do not function to suppress or contain a fire, the public is exposed to the risk of death or grievous injury.

134. State whether CPSC's preliminary determination and/or initial assignment of the level of hazard allegedly presented by the Omegas has changed over time. If so, describe any such change and the information or testing giving rise to the change.

Response: Complaint Counsel objects to this Interrogatory on the ground that the terms "initial assignment of the level of hazard" are undefined, unclear, vague and ambiguous. Assuming that Respondents intend to refer to the Agency's internal hazard classification of Omega sprinklers, Complaint Counsel objects to this Interrogatory on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel further objects to this Interrogatory on the ground that it calls for a legal conclusion. Complaint Counsel further objects to this Interrogatory on the ground that it seeks information protected from discovery by the work product and/or attorney client privileges. Complaint Counsel also objects to this Interrogatory on the ground that it requests confidential Agency information. The letter category of hazard classification is an internal Agency classification that is not generally publicly disclosed. Without waiving its objections, Complaint Counsel responds that its hazard classification for Omega sprinklers has not changed over time.

135. For the period from 1990 through the present, identify all consumer products classified by the CPSC as presenting a hazard level equal to, or greater than, the hazard level assigned to the Omegas. For example, if the Omegas have been classified as a "Class B" hazard, identify all other consumer products that have been classified as "Class B" hazards and all consumer products identified as "Class A" hazards. For each consumer

product identified in your response, you should provide the following:

(a) the identity of the consumer product by brand name or other description;

(b) the identification of the manufacturer of each such consumer product;

(c) the date of the CPSC's classification of the consumer product as presenting a hazard;

(d) the hazard level assigned each such consumer product;

(e) a description of the hazard presented by each such consumer product;

(f) for each such consumer product, the estimated total number of units manufactured as of the date the CPSC made its determination of the hazard level;

(g) for each such consumer product, the estimated total number of units in the hands of the consumers as of the date the CPSC made its determination of the hazard level;

(h) the number and severity of any and all personal injuries associated with each such consumer product;

(i) the number of deaths associated with each such consumer product; and

(j) the nature and number of property damage reports associated with each such consumer product.

Response: Complaint Counsel objects to this Interrogatory on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence.

Information pertaining to other consumer products classified by the staff as presenting a hazard priority level equal to or greater than the hazard level assigned to the Omegas will not lead to the discovery of admissible evidence regarding the hazard presented by the Omegas. Complaint Counsel further objects to this Interrogatory on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Interrogatory on the ground that it seeks confidential and/or trade secret or other information whose disclosure is prohibited pursuant to 15 U.S.C. § 2074 and/or 15 U.S.C. § 2055. Plaintiffs also object to this question to the extent that it seeks information that is protected by the attorney-client and work product privileges. Without waiving its objections, Complaint Counsel will provide all non-privileged and non-confidential information pertaining to other consumer products classified at a level equal to or greater than the hazard level at which Omega sprinklers are classified.

G. Sufficiency of Corrective Action

136. For each consumer product identified in your response to Interrogatory No. 135, describe any and all corrective action taken with respect to that product. Your response should include, without limitation, the following:

(a) a statement of the CPSC's role in effecting the corrective action;

(b) a statement of whether the corrective action that was taken was completely voluntary on the part of the manufacturer, retailer, or distributor, was the result of a negotiated corrective action plan with the CPSC, or otherwise was compelled by the CPSC through the initiation of an adjudicative proceeding pursuant to 15 U.S.C. § 2064; and

(c) the identification of all documents evidencing the corrective action taken with respect to each such consumer product.

Response: See response to Interrogatory No. 135.

137. For each consumer product identified in your response to Interrogatory No. 135, describe the nature and extent of the public notice provided as part of the corrective action taken. Your response should include, without limitation, the following:

(a) the specific nature of the notice given (e.g., written notice to consumers and retailers, press releases, bill-boards, posters, etc. . .);

(b) a description of the media coverage associated with the corrective action (e.g., newspaper ads and reports, magazine ads and reports, wire services, other print media, television coverage, radio coverage, and/or internet exposure);

(c) a description of the extent of media coverage and exposure of the corrective action (e.g., a list of all newspapers, magazines, wire services, television stations, radio stations, and internet services that provided notice or otherwise covered the corrective action);

(d) a description of the frequency and amount of media coverage associated with the corrective action (e.g., the number of days newspapers carried a written notice, or the number of days the notice appeared on television); and

(e) a description of any and all point of purchase notification to consumers associated with the corrective action (e.g., posters and notices provided to retailers to

display at stores).

Response: See Response to Interrogatory No. 135.

138. For each consumer product identified in your response to Interrogatory No. 135, describe the nature of the recall component, if any, of the corrective action taken. Your response should include, without limitation, the following:

(a) the number of individual units recalled;

(b) the remedy options offered to consumers (e g., replacement, refund, substitute products);

(c) an assessment of consumer participation in the recall (e g, percentage of units in the hands of consumers that were actually received by the recall);

(d) identification of any and all documents revealing the level of consumer participation in the recall; and

(e) a description of any studies conducted by the manufacturer, distributor, or retailer of the consumer product, or by the CPSC, or by both, or by any other person or entity, assessing the effectiveness of the recall program.

Response: See Response to Interrogatory No. 135.

139. Explain the factual basis of your contention, if any, that the corrective action proposal of Respondents in connection with the Omegas is insufficient to protect the public or otherwise fails to provide adequate remedial measures under 15 U.S.C. § 2064.

Response: Complaint Counsel objects to this Interrogatory on the ground that it does not specify to which proposal of Respondents it refers. Without waiving its objection, and assuming

that Respondents refer to their counsel's latest proposal for a testing-based corrective action program, Complaint Counsel reiterates its explanation in Response to Interrogatory No. 114.

140. Describe in detail the public notice, recall, and/or other remedial measures that you contend are necessary with respect to the Omegas to constitute a sufficient remedy and/or corrective action proposal under 15 U.S.C. § 2064.

Response: Complaint Counsel would seek to impose public notice pursuant to 15 U.S.C. § 2064 (c), including the following: public notice of the defect, including paid advertisements, video news releases, and other necessary and/or appropriate methods under the circumstances; mailing of notice to each person who is a manufacturer, distributor or retailer of Omega sprinklers; notice to every person to whom Respondents know Omega sprinklers were delivered or sold.

141. Identify and describe all efforts taken by the CPSC (including, without limitation, consumer surveys, press surveys, and public opinion polls) to evaluate, test, or otherwise determine the sufficiency of the corrective action proposal of Respondents with respect to the Omegas.

Response: Complaint Counsel objects to this Interrogatory on the ground that it does not specify to which proposal of Respondents it refers. Complaint Counsel further objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, and assuming that Respondents refer to their counsel's latest

proposal for a testing-based corrective action program, Complaint Counsel refers Respondents to its Response to Interrogatory No. 114.

142. Identify and describe all criteria and factors considered by the CPSC in measuring the sufficiency of the corrective action proposal of Respondents with respect to the Omegas.

Response: Complaint Counsel objects to this Interrogatory on the ground that it does not specify to which proposal of Respondents it refers. Complaint Counsel further objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel refers Respondents to its Response to Interrogatory No. 114.

143. Identify all public statements, press releases, or other information released to the public by the CPSC that in any way relates to or otherwise refers to the Omegas and/or Respondents.

Response: March 3, 1998 Administrative Complaint; March 4, 1998 press release and press statement; March 4, 1998 video news release relating to Omega sprinklers; Omega Sprinkler Questionnaire on CPSC web site; Omega Sprinkler Questionnaire on CPSC fax-on-demand service.

H. Initiation of Adjudicative Proceedings

144. For the time period beginning January 1, 1982 to the present, identify all

incidents in which the CPSC has filed an administrative complaint pursuant to Section 15 of the Consumer Product Safety Act (CPSA), 15 U.S.C. § 2064. Your response should include, without limitation, the following:

(a) the date the administrative action was filed;

(b) the identity of the manufacturers, distributors, or retailers of the consumer product named as respondents in the administrative action;

(c) the identity of the consumer product at issue;

(d) a description of the alleged "substantial product hazard" at issue in each case; and

(e) a description of the outcome of the administrative action and the nature of the remedy awarded.

Response: Complaint Counsel objects to this Interrogatory on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Any other administrative litigation relating to any product other than the Omega is irrelevant to the instant action.

145. Identify all persons employed or otherwise retained by the CPSC who in any way participated in the CPSC's decision to initiate the instant adjudicative proceeding against the Respondents.

Response: Complaint Counsel objects to this Interrogatory on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence.

The propriety of the Commission's decision to initiate the instant adjudicative proceeding against Respondents is not at issue herein. Complaint Counsel further objects to this Interrogatory on the ground that it is unclear, vague and ambiguous, as it fails to define "participated." Complaint Counsel also objects to this Interrogatory on the ground that it is overbroad and unduly burdensome. Without waiving its objections, Complaint Counsel responds that the Commissioners made the decision of whether to initiate the instant adjudicative proceeding, upon consultation with and advice of their staff and the Office of the General Counsel. Alan Schoem, Eric Singer, Eric Stone, Deborah Orlove and Catherine Cumberland could all be said to have participated in the decision to initiate the adjudicative proceeding.

146. State the date on which the CPSC authorized Complaint Counsel to initiate the instant adjudicative proceeding against the Respondents.

Response: Complaint Counsel objects to this Interrogatory on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. The timing of the Commission's decision to initiate the instant adjudicative proceeding, in relation to the filing of same, is not at issue herein. Without waiving its objections, Complaint Counsel responds that the Commissioners voted on whether to authorize the Complaint by ballot submitted on February 18, 1998, and voted on on February 18, 1998 (Chairman Ann Brown), February 26, 1998 (Commissioner Gall) and March 2, 1998 (Commissioner Moore).

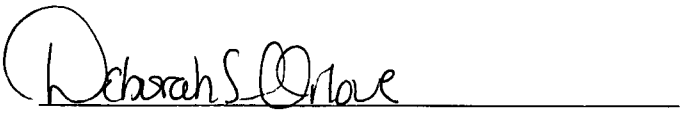
147. Identify all communications and documents (including internal memoranda and correspondence) relating to the CPSC's decision to initiate the instant adjudicative proceeding against the Respondents.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel further objects to disclosure of such information on the ground that it seeks information protected from discovery by the work-product and attorney-client privileges.

148. State the reasons for the CPSC's authorization of, and decision to initiate, the instant adjudicative proceeding against the Respondents.

Response: Complaint Counsel objects to this Interrogatory on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. The reasons for the CPSC's authorization of, and decision to initiate, the instant adjudicative proceeding are irrelevant to this action (though the basis for the staff's recommendation of same have been indicated herein). Complaint Counsel further objects to this Interrogatory on the ground that it calls for speculation on the part of Complaint Counsel as to the thoughts of the Commissioners. Complaint Counsel is unable to speak to the reasons for the individual Commissioner's authorizations of, and decisions to initiate, the instant adjudicative proceeding and, pursuant to proper agency procedure, is prohibited from making inquiry into such matters, other than to state that the Commission authorizes the issuance of administrative complaints upon information and belief that a product or products present a substantial product hazard. Complaint Counsel further responds that the Complaint speaks for itself.

DATED: April 27, 1998



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CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, Complaint Counsel's **Responses to Respondents' First Set of Interrogatories** were deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

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A copy was also served on the Presiding Officer pursuant to 16 C.F.R. § 1025.31(h) at:

The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
1099 14th St., NW, Suite 350
Washington, DC 20005

Deborah S. Love

Dated: April 27, 1998

certif.ser

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

OFC OF THE SECRETARY
FREEDOM OF INFORMATION

1998 MAY -4 P 4:15

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents	)	

COMPLAINT COUNSEL'S SURREPLY IN OPPOSITION TO RESPONDENTS' MOTION TO DISMISS

COMES NOW Complaint Counsel, pursuant to the Presiding Officer's Order of April 21, 1998, and respectfully submits its Surreply in Opposition to Respondents' Motion to Dismiss this matter.

I. INTRODUCTION

On March 3, 1998, the staff of the Consumer Product Safety Commission filed an Administrative Complaint against Respondents Central Sprinkler Corp. and Central Sprinkler Co. The Complaint seeks a nationwide recall of approximately 10 million "Omega" automatic fire sprinklers manufactured by Respondents since 1982.

On March 26, 1998, Respondents filed a Motion to Dismiss and supporting Memorandum (hereinafter, "Respondents' Motion"), claiming that CPSC lacks jurisdiction over Omega fire sprinklers, and that the staff's Complaint and List and Summary of Documentary Evidence are deficient. On April 6, 1998, Complaint Counsel filed its Opposition to that Motion. On or about April 20, 1998, Respondents filed a Motion for

Leave to Submit a Reply Brief in this matter, attaching their Reply Brief as an exhibit to that Motion (hereinafter, "Respondents' Reply"). Respondents' Motion for Leave was granted by Order of the Presiding Officer on April 21, 1998, and Complaint Counsel was permitted, by that same Order, to file this Surreply.

As detailed below, Respondents' Reply adds little if anything to their original arguments. CPSC clearly has jurisdiction over Omega fire sprinklers, and its Complaint and List and Summary of Documentary Evidence meet all applicable requirements.

II. OMEGA SPRINKLERS ARE CONSUMER PRODUCTS WITHIN THE CPSC'S JURISDICTION

The Consumer Product Safety Act, 15 U.S.C. § 2051 *et seq.,* imposes three basic requirements in order for an item to be a "consumer product" within the Commission's jurisdiction. *See* 15 U.S.C. § 2052 (1997). First, the item must be an "article" (or a component part of such "article") -- a final manufactured product, rather than anything at an intermediate stage of production. *See id.; Consumer Prod. Safety Comm'n v. The Anaconda Co.*, 593 F.2d 1314, 1319 (D.C. Cir. 1979). Second, the article must be customarily produced or distributed for sale to, or for the personal "use, consumption, or enjoyment of a consumer." *Id.* Lastly, the use, consumption or enjoyment of the article must be "in or around a permanent or temporary household or residence, a school, in recreation, or otherwise." *Id.*

As fully detailed in Complaint Counsel's Opposition, Omega sprinklers are "articles" that are "used or enjoyed by consumers in or around a permanent or temporary household or residence, a school, in recreation, or otherwise." Omega sprinklers are a final manufactured product. As recognized by Respondents, they are installed in a "wide range of residential,

commercial and industrial structures." *See* Respondents' Memorandum at 3. Consumers use or enjoy Omegas in their homes, schools, hospitals, recreational facilities and many other places, and are exposed to the risk they create. Omega sprinklers are, without question, "consumer products" within the Commission's jurisdiction.

A. Automatic Fire Sprinklers are Consumer Products Regardless of Whether They are Building Components

Respondents claim that fire sprinklers such as the Omega are not consumer products because they are "integral product components used in building construction." Respondents' Reply at 5. Respondents' argument is misplaced. First, CPSC jurisdiction extends to consumer products that are integrated or installed in buildings. Second, Omegas are not just, as Respondents claim, incorporated into a building as it is constructed.

1. CPSC Jurisdiction Extends to 'Building Components'

Respondents misconstrue *Consumer Product Safety Comm'n v. The Anaconda Co.*, 593 F.2d 1314 (D.C. Cir. 1979), in citing it to support their premise that "integral product components used in building construction" cannot be "consumer products." Respondents' Reply at 5. In *Anaconda*, 593 F.2d 1314, the United States Court of Appeals for the District of Columbia Circuit considered whether aluminum branch circuit wiring systems are consumer products subject to CPSC jurisdiction. Upon determining that such wiring systems are produced and distributed as component parts of residential structures, the *Anaconda* court

looked at whether "housing" is a consumer product. *Anaconda*, 593 F.2d at 1320-21.[1] The court held that "housing" per se is not a consumer product. *Id.* at 1320.

It's inquiry did not end there, however. Housing components, according to *Anaconda*, are consumer products as long as they are "articles." *Anaconda*, 593 F.2d at 1321. *Anaconda* held that as a component part of housing, wiring would nonetheless be a "consumer product" if it is "produced or distributed as a distinct article of commerce." *Id.* (holding that "since housing as such is not a consumer product, a component part of a residence, its aluminum branch circuit wiring system, cannot qualify as a consumer product unless it is produced or distributed as a distinct article of commerce") (emphasis added).[2] Respondents admit that sprinklers are "articles" under the CPSA. *See* Respondents' Reply at 2; Respondents' Reply at 8, n.3. By this admission, they concede the Commission's jurisdiction over Omegas.

---

[1] Although Complaint Counsel and Respondents may differ as to whether it was necessary for the *Anaconda* court to address this question, that issue need not be reached here. We assume, for purposes of this Memorandum, that the inquiry was proper.

[2] In *Anaconda*, the defect that gave rise to the fire hazard in the wiring systems resulted from faulty connections between the wires -- i.e., from "improper design or installation of the wiring system as a whole." *Anaconda*, 593 F.2d at 1317. The *Anaconda* decision ultimately turned on the fact that the wiring systems are not and cannot be sold or distributed as distinct articles of commerce. Although their component parts (the wires) are 'articles' distributed in commerce, the systems themselves are actually created as their components are installed. As such, the systems are not distinct 'articles' of commerce, and thus, are not "consumer products" under the CPSA.

Sprinklers, by contrast, are final, manufactured products distributed in commerce. They are 'articles' in their own right. Unlike wiring systems, sprinklers are not created through installation; they are created by the manufacturer, and are then distributed for the use and enjoyment of consumers.

For further evidence that Respondents misconstrue *Anaconda*, one need look no further than the D.C. Circuit's decision in *ASG Indus. v. Consumer Prod. Safety Comm'n*, 593 F.2d 1323, 1328 (D.C. Cir.), *cert. denied*, 444 U.S. 864 (1979). *ASG* was decided on the same day as *Anaconda*, by the same court, in a decision written by the same judge. In *ASG*, the court considered whether architectural glazing materials, including plastics and glass, are consumer products subject to CPSC jurisdiction. The petitioners in *ASG*, like Respondents herein, argued that such materials belong to a category of construction materials not encompassed by the CPSA's definition of consumer products, and thus outside the Commission's jurisdiction. *Id.* at 1327. **Citing Anaconda**, the ASG court held that glazing materials are consumer products -- they are distinct articles of commerce "customarily produced or distributed for sale to consumers or for the use of consumers in or around a household or residence, a school, in recreation, or otherwise." *Id.* (emphasis added).

The architectural glazing materials in *ASG*, including wired glass used in glazed panels, fire doors, and other fire-retardant barriers, were deemed consumer products despite the fact that they are, to borrow Central's terms, "integral parts of a building's basic structure." *See ASG*, 593 F.2d at 1327. *ASG* demonstrates that regardless of when, how and if a product is installed in a building, it is a consumer product if it is a distinct article of commerce, or component part thereof,

> produced or distributed (i) for sale to a consumer for use in or around a permanent or temporary household or residence, a school, in recreation, or otherwise, or (ii) for the personal use, consumption or enjoyment of a consumer in or around a permanent or temporary household or residence, a school, in recreation, or otherwise . . .

ASG, 593 F.2d at 1327. *ASG* demonstrates that the issue of whether an item is "free-standing" or "integrated" into a building, *see* Respondents' Reply at 5 (arguing that sprinklers have no use as a free standing item), is simply irrelevant to the jurisdictional inquiry. The Commission's authority over a consumer product is in no way diluted or eliminated because the product is 'integrated' or installed.

That products installed or incorporated into buildings, even during initial construction, do not lose their status as "consumer products" is demonstrated by the fact that CPSC has jurisdiction over blown-in fiberglass and household insulation (CPSC Advisory Op. No. 205 (1975); CPSC Advisory Op. No. 230 (1976)); wallpaper and doors (CPSC Advisory Op. No. 200 (1975)); architectural hardware (CPSC Advisory Op. No. 132 (1974)); furnaces (CPSC P.R. 97-012 (1996)); vent pipes (CPSC P.R. 98-073 (1998)); installed lighting fixtures (CPSC P.R. 91-84 (1991)); and pre-wired alarm systems and smoke detectors (*see* CPSC Advisory Op. No. 181 (1975); CPSC Advisory Op. No. 254 (1977)). Even escalators and elevators fall within CPSC's jurisdiction. CPSC Advisory Op. No. 262 (1978); CPSC Advisory Op. No. 182 (1973). Like fire sprinklers, these products are often installed by builders and/or contractors during initial construction or otherwise. Yet they, like fire sprinklers, are "consumer products."

2. Omega Sprinklers are Distinct Articles Used in Other than Initial Building Construction

Respondents attempt to 'back into' *Anaconda* by arguing that products used in construction of a building are not consumer products, because buildings are not consumer products. *See* Respondents' Reply at 5. As demonstrated above, Respondents' premise is invalid. Moreover, the evidence does not support Respondents' claim that fire sprinklers are

"a fixed and integral part of a building's basic structure and are incorporated into the building's fundamental structure as constructed." Respondents' Reply at 5. First, Respondents ignore the thousands of sprinklers they have provided to building owners and operators as replacements for Omegas that have failed in testing. These replacements were clearly not "incorporated into the building's fundamental structure as constructed."

Respondents also ignore the multitudes of existing buildings that have been retrofitted with sprinklers pursuant to numerous sprinkler retrofit ordinances now in effect across the country. *See* Virginia Statewide Fire Prevention Code § 108.0, Virginia Uniform Statewide Building Code, Vol. II (1993), attached hereto as Exhibit A; City of Louisville, Ky. Code of Ordinances § 95.85 (1995), attached hereto as Exhibit B; City of Los Angeles Uniform Building Code, Vol. I, § 8604.6.4 (1996), attached hereto as Exhibit C; City of Scottsdale, Az. Uniform Fire Code § 1003.2.13 (1997), attached hereto as Exhibit D; San Francisco, Ca. Building Code § 1746(a) (1993), attached hereto as Exhibit E; Louisiana Revised Statutes § 40:1641, *et seq.* (1992), attached hereto as Exhibit F; City of Glendale, Ca. Building and Safety Code § 1003.2.9 (1998), attached hereto as Exhibit G.[3] These retrofits are often constructed using exposed piping and, like replacements, are not a "fixed and integral part of a building's basic structure . . . incorporated into the building's fundamental structure as constructed." *See* Respondents' Reply at 5. The Kent Manor Inn in Stevensville, Maryland, one of the sites in which an Omega sprinkler failed to activate in a fire, is a 170-year-old building that was retrofitted with sprinklers in 1987. *See* Affidavit of Donna B. Towers and

[3] Violations of such ordinances carry heavy penalties, including fines and/or imprisonment. *See id.*

Office of the Maryland State Fire Marshal Investigation Report re: fire at Kent Manor Inn on October 27, 1997, attached hereto as Exhibit H. Like other retrofits and replacements, the Kent Manor Inn, which suffered an estimated $50,000 in property damage as a result of an Omega failure, *see id.*, is clear evidence against Respondents' claim that sprinklers exist only as components of new construction.

Sprinklers are distinct "articles" of commerce. That they are incorporated or installed in buildings, and when such installation or incorporation takes place, is irrelevant for purposes of CPSC jurisdiction.

B. By Respondents' Own Admissions, Omegas are Consumer Products

Forgetting that the statutory definition of "consumer product" includes articles produced or distributed for the "personal use, **consumption or enjoyment**" of the consumer, Respondents argued in their initial Motion that **use** of a product by consumers is absolutely necessary for the product to qualify as a "consumer product." *See* Respondents' Memorandum at 7; 10. Respondents further argued that use "must be understood as requiring some sort of active consumer interaction with the product," such as turning the sprinkler on and off, controlling it, activating it, holding it, occupying it, etc. *See* Respondents' Memorandum at 11.

In their Reply, Respondents acknowledge that "use" and "control" are unnecessary, and that consumer "enjoyment" or "availment" of a product is enough to bring a product within the Commission's jurisdiction. Respondents' Reply at 7. To "avail oneself of" something, according to the dictionary definition, is to "take advantage of" it. Webster's New World Dictionary (3d College ed. 1988). Consumers clearly avail themselves and take

advantage of fire sprinklers, relying on them to serve as the first line of defense in a fire. *See* Affidavit of Francis J. Teevan, attached as Exhibit A to Complaint Counsel's Opposition. Consumers "avail" themselves of fire sprinklers in exactly the same way that they "avail" themselves of smoke detectors and fire alarms -- two products that Respondents concede are "consumer products" within CPSC's jurisdiction. Respondents' Memorandum at 6. By Respondents' own admissions, Omega sprinklers are consumer products.

C. CPSC has Jurisdiction Over Fire Sprinklers Regardless of any State, Local or Other Codes that may Address Fire Safety and/or Installation of Sprinkler Systems

Respondents argue in their Reply that building construction is already extensively regulated by local jurisdictions. Respondents' Reply at 10. Respondents further claim that "without a clear statement that Congress intended the Act to displace that entire body of regulatory codes, the [Consumer Product Safety] Act cannot, and should not, be so broadly construed." *Id.* Respondents' argument fails on several grounds.

1. There is No Conflict Between State Law and CPSC Jurisdiction over Fire Sprinklers

Even if building construction is already extensively regulated by state and local authorities, the safety and efficacy of fire sprinklers is not. A review of NFPA 13, the model code which Respondents note "details virtually every aspect of implementing the codes' fire safety provisions," clearly demonstrates this. NFPA 13 is titled "Installation of Sprinkler Systems." *See* NFPA 13, 1996 Ed. (emphasis added), attached as Exhibit B to Respondents' Motion for Leave to File Reply. NFPA 13 regulates sprinkler system construction, design and installation. Although it discusses sprinkler installation, it provides no guidance on, and

in fact makes absolutely no mention of, sprinklers that do not and will not function.[4] NFPA 13 assumes that the sprinklers being put into the systems it regulates actually work.

Nowhere in NFPA 13 or any other local or state code is there anything that would conflict with a CPSC mandate that defective sprinklers not be used in sprinkler systems. If anything, the goals of local and state authorities are aligned with those of CPSC in this matter. There is no conflict between state and federal law such that a preemption or federalism issue even comes into play.[5]

2. Congress Intended for CPSC to Dominate the Field of Defective Consumer Products

Furthermore, even if there were state and local regulation of safety and efficacy of fire sprinklers, Congress has clearly stated its intent that CPSC requirements preempt state regulation of consumer products. Congress' primary goals in establishing the CPSC -- "to develop uniform safety standards for consumer products and to minimize conflicting State and local regulations," *see* H. R. 158, 97th Cong., 1st Sess., 390 (1981), have been cited by

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[4] Section 2-2.1, beginning on page 13-10, requires that "only new sprinklers shall be installed." Section 2-2.2 discusses the "k factor" (relating to flow characteristics), and Section 2-2.3 discusses which sprinklers may be used in which occupancy classifications. Section 2-2.4 discusses temperature ratings of automatic fire sprinklers, and requires that sprinklers have their frame arms colored according to their temperature ratings. Section 2-2.5 requires that only sprinklers listed as "corrosion-resistant" be installed in locations were corrosion can exist. Section 2-2.6 discusses escutcheon plates (which surround the sprinkler head), and requires that they be part of a listed sprinkler assembly where used with a recessed or flush-type sprinklers. Section 2-2.8 requires all locations to maintain a supply of spare sprinklers in a cabinet on the premises. Chapter 4 of NFPA 13 discusses installation requirements, and indicates how far apart sprinklers may be positioned, where sprinklers are and are not required, and which type of sprinkler may be installed in which type of occupancy (and with which type of system or ceiling). *See* NFPA 13, p. 13-27, *et seq.*

[5] As discussed in Complaint Counsel's Opposition, the same is true of the OSHA regulations regarding workplace safety.

numerous courts that have unanimously rejected federalism arguments. *See, e.g., Butcher v. Robertshaw Controls Co.*, 550 F. Supp. 692, 700 (D. Md. 1981) (rejecting federalism argument on the ground that Congress made express finding that "control by State and local governments of unreasonable risks of injury associated with consumer products is inadequate and may be burdensome to manufacturers . . ." and that "regulation of consumer products . . . is necessary to carry out [the protection of the public against said unreasonable risks of injury]"); *Kaiser Alum. & Chem. Corp. v. Consumer Prod. Safety Comm'n*, 574 F.2d 178, 181 (3d Cir.), *cert. denied*, 439 U.S. 881 (1978) (holding that although local building codes continue to play a role in regulating installation and use of consumer products such as electric, gas, or plumbing appliances, design and performance standards for components are now a matter of national concern).[6] The Consumer Product Safety Act itself provides that:

> Whenever a consumer product safety standard under this Act is in effect and applies to a risk of injury associated with a consumer product, no State or political subdivision of a State shall have any authority either to establish or to continue in effect any provision of a safety standard or regulation which prescribes any requirements as to the performance, composition, contents design, finish, construction, packaging, or labeling of such product which are designed to deal with the same risk of injury associated with such consumer product, unless such requirements are identical to the requirements of the Federal standard.

15 U.S.C. § 2075(a) (1997). As such, even if local and state building codes regulate sprinkler system design and installation, the safety and efficacy of sprinklers is still within the Commission's authority.

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[6] Despite arguing that *Kaiser* is "poorly-reasoned," *see* Respondents' Reply at 8, Respondents cite to and rely on *Kaiser* to support their arguments. *See* Respondents' Memorandum at 12, n. 4.

Based on the foregoing, it is clear that the Commission has jurisdiction over Omega sprinklers. Omegas are articles customarily produced or distributed for use or consumption by, or enjoyment of, consumers in or around households, residences, schools, recreational facilities or otherwise. No other standards, regulations or codes negate this jurisdiction.

III. THE COMPLAINT AND LIST AND SUMMARY OF DOCUMENTARY EVIDENCE ARE SUFFICIENT TO PROVIDE RESPONDENTS WITH AN UNDERSTANDING OF THE ALLEGATIONS AGAINST THEM

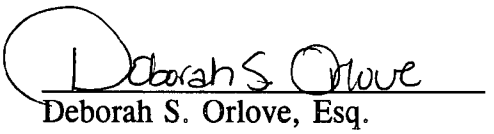
Respondents argue that the Complaint and List and Summary of Documentary Evidence do not provide them with sufficient information to understand the allegations against them. Having already responded to these arguments, Complaint Counsel now adds only that a perusal of Respondents' **148** Interrogatories and **71** Requests for Production to Complaint Counsel clearly demonstrate that Respondents know and understand the allegations against them. The over 2000 pages of documents provided by Complaint Counsel in response to Respondents' discovery requests in the last week are sufficient to provide Respondents with the documentary evidence supporting Complaint Counsel's allegations. The issues Respondents raise regarding sufficiency of the Complaint and List and Summary of Documentary Evidence are not only unsupported, they are moot.

IV. CONCLUSION

Based on the foregoing, the Commission has jurisdiction over Omega fire sprinklers, and the Complaint and List and Summary of Documentary Evidence meet all applicable requirements. Complaint Counsel respectfully requests that Respondents' Motion to Dismiss be denied.

Dated: May 4, 1998

Respectfully submitted,



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CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, Complaint Counsel's **SURREPLY IN OPPOSITION TO RESPONDENTS' MOTION TO DISMISS** was deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

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A copy was also served on the Presiding Officer pursuant to 16 C.F.R. § 1025.16 at:

The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
1099 14th St., NW, Suite 350
Washington, DC 20005

Dated: 5/4/98

certif.ser

1993 Edition
Effective April 1, 1994

Virginia Statewide Fire Prevention Code

Virginia Uniform Statewide Building Code

VOLUME II

COMMONWEALTH OF VIRGINIA
BOARD OF HOUSING AND COMMUNITY DEVELOPMENT

SECTION 107.0.
DEMOLITION OF BUILDINGS.

107.1. Procedures for demolition: Whenever a building is to be demolished pursuant to any provision of this code, the work shall be carried out in compliance with the requirements of Volume I of the USBC.

SECTION 108.0. SPECIAL PROVISIONS.

108.1. General: The provisions of this section contain requirements for improving the safety of certain buildings by requiring the installation of materials or equipment not originally required. Unless otherwise noted, these provisions shall apply equally to both pre- and post-USBC buildings.

108.2. Hotels and motels: Existing hotels and motels shall comply with the provisions of this section.

108.2.1. Fire sprinkler system: An automatic sprinkler system meeting the requirements of the USBC, Volume I, 1987 Edition, Second Amendment (effective date March 1, 1990), for Use Group R-1, shall be installed throughout existing hotels and motels by either March 1, 1997, or within seven years of the date upon which an adequate water supply is made available to meet the needs of the suppression system, whichever is later.

Exceptions:

1. Hotels and motels that are equipped throughout with an automatic sprinkler system.
2. Hotels and motels which are three stories or less in height.

108.2.2. Single and multiple station smoke detectors: Single and multiple station smoke detectors meeting the requirements of the USBC, Volume I, 1987 Edition, Second Amendment, for Use Group R-1, shall be installed in existing hotels and motels.

Exception: Hotels and motels that are equipped throughout with single and multiple station smoke detectors.

108.3. Nursing homes and nursing facilities: Existing nursing homes and nursing facilities licensed by the Virginia Department of Health shall comply with the provisions of this section.

108.3.1. Automatic sprinkler system: An automatic sprinkler system meeting the requirements of the USBC, Volume I, 1987 Edition, Third Amendment (effective date October 1, 1990), for Use Group I-2, shall be installed in existing nursing homes and nursing facilities, as follows:

1. NFiPA 13D Standard for one story buildings.
2. NFiPA 13R Standard for buildings two or three stories in height.
3. Nfipa 13 Standard for buildings four or more stories in height.

Exceptions:

1. Nursing homes and nursing facilities which are equipped throughout with an automatic sprinkler system.
2. Nursing facilities consisting of certified long-term care beds located on the ground floor of general hospitals.

108.3.1.1. Quick response sprinklers: Quick response sprinklers shall be installed in patient sleeping rooms of buildings subject to Section 108.3.1.

108.3.1.2. Exceptions provided for: Buildings equipped throughout with an automatic fire sprinkler system meeting the requirements of Nfipa 13 shall be permitted to use the exceptions provided in the USBC, Volume I, 1987 Edition, Third Amendment including, but not limited to, the following:

1. Section 502.3 (Area Increase)
2. Section 503.1 (Height Increase)
3. Section 610 (Use Group I-2 Areas)
4. Section 807 (Types and Location of Means of Egress)

5. Section 808 (Capacity of Egress Components)
6. Section 809 (Number of Exits)
7. Section 810 (Exit Access Passageways and Corridors)
8. Section 921 (Firestopping and Draftstopping)]

108.3.2. Fire protective signaling system: A fire protective signaling system meeting the requirements of the USBC, Volume I, 1987 Edition, Third Amendment, for Use Group I-2, shall be installed in existing nursing homes and nursing facilities by August 1, 1994.

Exception: Nursing homes and nursing facilities that are equipped throughout with an automatic fire protective signaling system.

108.3.3. Fire detection system: An automatic fire detection system meeting the requirements of the USBC, Volume I, 1987 Edition, Third Amendment, for Use Group I-2, shall be installed in existing nursing homes and nursing facilities by August 1, 1994.

108.3.3.1. Fire detection system in existing sprinklered facilities: Nursing homes and nursing facilities that are exempt from Section 108.3.1 because of an existing automatic sprinkler system shall install a fire detection system meeting the requirements of the USBC, Volume I, 1987 Edition, Second Amendment, for Use Group I-2.

108.4. Homes for Adults: Existing Homes for Adults licensed by the Virginia Department of Social Services shall comply with this section.

108.4.1. Fire protective signaling system and fire detection system: A fire protective signaling system and an automatic fire detection system meeting the requirements of the USBC, Volume I, 1987 Edition, Third Amendment, shall be installed in Homes for Adults by August 1, 1994.

Exception: Homes for Adults that are equipped throughout with a fire protective signaling system and an automatic fire detection system.

108.4.2. Single and multiple station smoke detectors: Battery or AC-powered single and multiple station smoke detectors meeting the requirements of the USBC, Volume I, 1987 Edition, Third Amendment, shall be installed in Homes for Adults by August 1, 1994.

Exception: Homes for adults that are equipped throughout with single and multiple station smoke detectors.

108.5. Identification of handicapped parking spaces: All spaces reserved for the use of handicapped persons shall be identified by an above grade sign with the bottom edge no lower than four feet nor higher than seven feet above the parking surface. Such signs shall be installed in accordance with applicable provisions of the current edition of Volume I of the USBC.

108.6. Family day homes: Family Day Homes as defined in § 63.1-195 of the Code of Virginia shall be provided with at least one exterior exit door from each floor used for the care of children.

NOTE: As of this printing, the above section was suspended by the BHCD.

subchapter. Such rules, regulations and procedures shall be effective when promulgated, and within ten days of promulgation shall be submitted to the Board of Aldermen for their approval.

(4) At least 15 days before the scheduled date of the dance hall event, an application for a dance hall event permit must be filed with the Fire Chief or his designee. Standard dance hall event: When the dance hall event is part of a series of scheduled events, occurring at least twice within a weekly period, all of which features the same activity, only one application may be required to cover the entire series. This application shall cover a period of 365 days from the occurrence of the first event within the series. At that point a new application must be filed.

(5) Such application shall be accompanied with the application fee of $25 and such information, floor plan, details of security, and the like as may be required by the Fire Chief or his designee.

(6) The Fire Chief or his designee shall forward a copy of each application and permit to the Director of Safety for coordination with police and emergency medical personnel. (Ord. 106-1988, approved 4-15-88) Penalty, see § 95.99

§ 95.71 NEGLIGENCE; NONCOMPLIANCE.

In the event of an emergency at a dance hall event from any willful omission or neglect to comply with any provision or condition of a permit or from violation of any of the ordinances pertaining to public assembly, then the person or persons promoting such dance hall event shall reimburse the city for any cost incurred in the assignment of city personnel or equipment to alleviate the emergency. .The cost shall be determined by the Director of Safety and shall be collected by civil action. (Ord. 106-1988, approved 4-15-88)

AUTOMATIC FIRE SPRINKLER SYSTEMS IN EXISTING HIGH-RISE BUILDINGS

§ 95.85 PURPOSE.

(A) The following provisions will require all existing high-rise buildings in the city having floors used for human occupancy located more than 75 feet above the lowest level of Fire Department vehicle access to be equipped throughout with an automatic fire sprinkler system within the time limits set out in § 95.92.

(B) The purpose of this subchapter is to provide a reasonable degree of protection for life and property from fire in high-rise buildings. (Ord. 123-1993, approved 6-25-93)

§ 95.86 INSTALLATION; EXEMPTIONS.

(A) An automatic fire sprinkler system shall be installed throughout all existing high-rise buildings having floors used for human occupancy located more than 75 feet above the lowest level of Fire Department vehicle access.

(B) Exempted from this requirement are the following:

(1) Airport control towers

(2) Open parking structures

(3) Buildings and structures used as use group A-5; outdoor assembly (see F-202.2.6 of Kentucky Standards of Safety)

(4) Low hazard special use. (See section 501.1.1 of the Kentucky Building Code)

(5) Within telephone central office equipment buildings, the automatic fire suppression system is not required in the following rooms or areas when such rooms or areas are protected with an approved automatic fire alarm system:

(a) Generator and transformer rooms.

(b) Communication equipment areas are separated with fire assemblies consisting of one-hour fire-resistance rated walls and two-hour fire resistance rated floor/ceiling assemblies, and are used exclusively for such equipment.

(6) Individual living units in high-rise, owner-occupied, residential condominiums classified as such as of January 1, 1993.

(C) The automatic fire sprinkler systems and related installations shall be installed in accordance with appropriate National Fire Association (NFPA) standards as approved by the City Department of Inspections, Permits and Licenses (I.P.L.). (Ord. 123-1993, approved 6-25-93)

§ 95.87 VARIANCES; ALTERNATIVE METHODS.

The provisions of this subchapter are not intended to prevent variations of the prescribed NFPA standards. An alternative method shall be approved when the Department of Inspections, Permits and Licenses finds that the proposed design is satisfactory and complies with the intent of the provisions of this subchapter and provided that the work offered is, for the purpose intended, at least the equivalent of that prescribed in this subchapter, in quality and effectiveness, durability and safety as related to the building occupants. An alternative method will only be approved by the Department of Inspections, Permits and Licenses when it is a part of an approved automatic fire sprinkler system. (Ord. 123-1993, approved 6-25-93)

§ 95.88 WRITTEN PLANS SUBMITTED FOR APPROVAL.

By July 1, 1994, the owner of every affected existing high-rise building which is not equipped throughout with an automatic fire sprinkler system shall submit to the Department of Inspections, Permits and Licenses, for its approval, a detailed written plan describing the methods to be used for compliance with this subchapter. Concurrently a time schedule for the installation of the automatic sprinkler installation shall be filed with the Department of Inspections, Permits and Licenses, and the City Division of Fire. (Ord. 123-1993, approved 6-25-93)

§ 95.89 PLANS AND SPECIFICATIONS.

Plans and specifications for the automatic fire sprinkler system shall be filed with the Department of Inspections, Permits and Licenses, Construction Review Section, prior to installation in accordance with Chapter 157 of this code of ordinances.
(Ord. 123-1993, approved 6-25-93)

§ 95.90 MODIFICATIONS.

When there are practical difficulties involved in complying with the time frames of this subchapter, the Fire Chief of the Division of Fire is permitted to vary or modify such time frames upon application of the owner's representative, provided that the spirit and intent of the law is observed and public welfare and safety are assured.
(Ord. 123-1993, approved 6-25-93)

§ 95.91 RIGHT TO APPEAL.

(A) Any party to a decision by the Department of Inspections, Permits and Licenses may appeal that decision to the local building code appeals board. Upon receipt of an appeal from a qualified party, the local appeals board shall convene a hearing to consider the appeal within 60 days of receipt.

(B) All parties to the appeal shall be notified of the time and place of the hearing by letter sent by certified mail no later than ten days prior to the date of the hearing.

(C) The local appeals board shall render a decision within 30 working days after the hearing. The board may uphold, amend or reverse the decision of the local building code official. (Ord. 123-1993, approved 6-25-93)

§ 95.92 TIME LIMITS.

(A) Time limits for the installation of automatic fire sprinkler systems, in all high-rise buildings (with exception of high-rise, owner-occupied, residential condominiums classified as such as of January 1, 1993), shall be as follows:

(1) By July 1, 1997, approved water supply shall be installed to all floors of the building. Also all lobby floors and below grade levels shall have installed and operational full automatic sprinkler system protection.

(2) By July 1, 1999, a minimum of 25% of the remaining unsprinklered square footage of the building shall have installed and operational full automatic sprinkler system protection.

(3) By July 1, 2001, a minimum of 50% of the remaining square footage of the building shall have installed and operational full automatic sprinkler system protection.

(4) By July 1, 2003, a minimum of 75% of the remaining square footage of the building shall have installed and operational full automatic sprinkler system protection.

(5) By July 1, 2005, total square footage of the building shall have completed, approved, operational automatic sprinkler system protection.

(B) Time limits for the installation of automatic fire sprinkler systems in high-rise, owner-occupied, residential condominiums shall be as follows:

(1) By July 1, 1997, approved water supply shall be installed to all floors of the building. Also, all lobby floors and below grade areas shall have installed and operational full automatic fire sprinkler protection.

(2) By July 1, 1999, with the exception of individual living units, a minimum of 25% of the remaining square footage of all hallways, stairways and other common areas shall have installed and operational full automatic sprinkler system protection.

(3) By July 1, 2001, with the exception of individual living units, a minimum of 50% of the remaining square footage of all hallways, stairways and other common areas shall have installed and operational full automatic sprinkler system protection.

(4) By July 1, 2003, with the exception of individual living units, a minimum of 75% of the remaining square footage of all hallways, stairways and other common areas shall have installed and operational full automatic sprinkler system protection.

(5) By July 1, 2005, with the exception of individual living units, total remaining square footage of the building shall have complete, approved operational full automatic sprinkler system protection. (Ord. 123-1993, approved 6-25-93)

§ 95.99 PENALTY.

(A) Any person who violates any provision of this chapter or any provision of a lawful order, rule or regulation made under the provisions of this chapter, or who induces another to violate any provisions of this chapter or of any lawful order, rule or regulation made thereunder, upon conviction thereof shall be fined not less than $25 nor more than $1,000, or imprisonment for not more than 60 days, or both. Each day such violations exist shall, in the discretion of the courts, be considered as a separate offense.

(B) The imposition of the penalties herein described shall not prevent the Chief of Fire on behalf of the city, from pursuing other administrative and legal measures to enforce the provisions of Chapter 95. Such measures may include but not be limited to actions to prevent unlawful construction or to restrain, correct or abate a violation; or to prevent illegal occupancy of a building, structure or premises; or to stop an illegal act, conduct of business or use of a building or structure on or about any premises; or to otherwise protect the lives and property of the residents of the city. (Ord. 20-1992, approved 2-11-93)

UNIFORM BUILDING CODE™

Volume 1

1994 EDITION

CITY OF LOS ANGELES 1996 AMENDMENTS

Item No. 133A94

SECTION 8604 — FIRE SAFETY STANDARDS

8604.1 General.

8604.1.1 Notification.

8604.1.1.1 Whenever the Department of Building and Safety determines by inspection that a building does not conform to the minimum requirements of either Section 8604.2, 8604.3, 8604.4 or 8604.5, the Department of Building and Safety shall prepare a written Fire Safety Standards Re-

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pair Order directing the owner to repair and modify the building so as to conform to those minimum requirements. The Department of Building and Safety shall serve the order either personally or by certified or registered mail, upon the owner as shown on the last equalized assessment roll and may serve the order upon the person, if any, in real or apparent charge or control of the building.

The order shall specify the manner in which the building fails to meet the minimum requirements of either Section 8604.2, 8604.3, 8604.4 or 8604.5. The order shall direct the owner of the building to submit plans, obtain the necessary permits and complete the necessary corrections.

8604.1.1.2 Whenever, pursuant to Section 57.01.22 of the Los Angeles Municipal Code, the fire department determines by inspection that a building does not conform to the minimum requirements of Section 8604.6, it shall prepare a written Fire/Life Safety Order directing the owner to repair and modify the building so as to conform to the minimum requirements of Section 8604.6.

The order shall specify the manner in which the building fails to meet the minimum requirements of Section 8604.6. The order shall direct the owner of the building to submit plans, obtain necessary permits and complete the necessary corrections.

The order shall be transmitted to the Department of Building and Safety for service, recordation and enforcement purposes. The Department of Building and Safety shall serve the order, either personally or by certified or registered mail, upon the owner as shown on the last equalized assessment roll and may serve the person, if any, in real or apparent charge or control of the building. The provisions of this section are not intended to prevent the Department of Building and Safety from also making a determination or issuing an order regarding failure to comply with Section 8604.6.

8604.1.2 Time for Compliance.

8604.1.2.1 Whenever the Department of Building and Safety serves a Fire Safety Standards Repair Order pursuant to Section 8604.1.1.1, the owner of a building shall submit plans and obtain necessary permits as required in that order not later than 90 days after service of the order and shall complete necessary corrections not later than one year after service of the order for work under Section 8604.2, 8604.3, 8604.4 or 8604.5. No extension of time, either to submit plans, obtain permits or complete the necessary corrections shall be granted except by the Board of Building and Safety Commissioners upon a finding of unusual circumstances which warrant an extension.

8604.1.2.2 Whenever the Department of Building and Safety serves a Fire/Life Safety Order pursuant to Section 8604.1.1.2, the owner of a building shall:

1. Submit main system plans, which include plans for any required water storage tank, fire pump(s), riser(s), fire department connection(s) and all sprinkler riser valves for sprinkler connections on each floor;

2. Obtain necessary main system permits as required in that order not later than one year after service of the order;

3. Complete necessary corrections required by the Fire/Life Safety Order not later than three years after service of the order for work required under Section 8604.6.

EXCEPTION: For work required under Section 8604.6:

1. Elevator lobbies. The owner of a building may request an extension of time to submit plans and obtain permits for work required by Section 8604.6.6 where strict compliance with the time requirements is not practical. Such an extension of time may be granted for a two-year period and may be renewed for three additional two-year time periods provided all permits for work required by Sections 8604.6.4, 8604.6.5 and 8604.6.7 are obtained prior to the granting of this exception and all necessary permits for work required by Section 8604.6.6 are obtained not later than nine years after service of the Fire/Life Safety Order and all required corrections are completed not later than 11 years after service of the order.

2. Vacant buildings. If a building is vacant and secured from unauthorized entry, the owner of the building may apply to the Department of Building and Safety for an extension of time to comply with the requirements of Section 8604.6. Such an extension of time may be granted for a two-year period and may be renewed for three additional two-year time periods, unless to do so poses a threat to health or safety, provided all necessary permits for compliance with Section 8604.6 are obtained not later than nine years after service of the Fire/Life Safety Order and all required corrections are completed not later than 11 years after service of the order.

3. Partially occupied buildings. If a building is only occupied below the second floor and all floors from the second floor and above are vacant and secured from unauthorized entry, the owner(s) of that building may apply to the Department of Building and Safety for an extension of time to comply with the requirements of Section 8604.6, provided sprinklers are installed on the occupied floor(s) and a two-hour fire-rated separation is provided between the vacant and occupied floors. Such an extension of time may be granted for a two-year period and may be renewed for three additional two-year time periods, unless to do so poses a threat to health or safety, provided all necessary permits for compliance with Section 8604.6 are obtained not later than nine years after service of the Fire/Life Safety Order and all required corrections are completed not later than 11 years after service of the order. No vacant portion of the building may be reoccupied until the requirements of Section 8604.6 are satisfied.

4. Asbestos. If an owner of a building commits to a program of abatement of asbestos, the Department of Building and Safety may grant an extension of time to complete the work required under Section 8604.6, provided that all necessary permits are obtained and the required water storage tank, fire pumps, riser and all sprinkler riser valves for sprinkler connections on each floor are installed and operational prior to the grant of any extension.

5. Other grounds for extension. The owner of a building cited for a violation of Section 8604.6 may request an extension of time to comply with those requirements. This extension shall not be granted in addition to those extensions granted pursuant to Items 1 through 4. The owner shall submit to the department a plan of action for compliance and specify why strict compliance is not practical at the time of application. Extensions of time may be granted for a period of one year from the date of application and may be renewed for three additional one-year periods. The above-referenced plan of action shall include but is not limited to the following:

A. A date for the submittal of plans;

B. A date to obtain plan approval no later than nine months from the extension approval date;

C. A date to obtain a permit for the work no more than one year from the extension approval date;

D. A reporting system designed to provide both the fire and building and safety departments with the status of job progress by the owner of the building; and

E. A copy to the Department of Building and Safety of an affidavit filed by the owner with the Office of the County Recorder agreeing to comply with the conditions of any granted approvals.

Subsequent extension approvals beyond the initial approval shall also be conditioned on progress of work to install sprinklers in conformance with the plan of work submitted with the approved extension of time.

Request for an extension of time under Items 1 through 5 shall be filed on an application form provided by the Department of Building and Safety and signed by the owner of the building. Applications are subject to review and action by the Department of Building and Safety with concurrence by the fire department. An extension of time may be granted only where a good faith effort to comply can be demonstrated by the applicant. Applications shall be processed according to the guidelines set forth in Section 98.0403.2 of the Los Angeles Municipal Code.

8604.1.2.3 Recordation. At the time that the Department of Building and Safety serves a Fire/Life Safety Order or Fire Safety Repair Order, the department shall file with the Office of the County Recorder a certificate stating that the building does not meet the minimum fire safety requirements of Section 8604.2, 8604.3, 8604.4, 8604.5 or 8604.6 and that the owner of the building has been so notified.

After all necessary corrective work has been performed, the Department of Building and Safety shall file with the Office of the County Recorder a certificate terminating the status of the building as nonconforming to the minimum fire safety requirements of Section 8604.2, 8604.3, 8604.4, 8604.5 or 8604.6.

8604.1.2.4 Enforcement. Notwithstanding any other provisions of this code to the contrary, it shall be unlawful for any person, firm or corporation to maintain, use or occupy any building within the scope of this section which does not meet the minimum standards specified in Section 8604.6.

Any person who fails to comply with an order issued pursuant to this section, within each of the time periods set forth in Section 8604.1.2.2, or who causes or permits another person to fail to comply with such an order, is guilty of a misdemeanor which is punishable by a fine of not more than $1,000.00 and/or six months' imprisonment.

For purposes of this section, the phrase "any person" includes an owner, lessor, sublessor, manager or any person in control of a building subject to this section. The legal owner of a building is that

person, firm, corporation, partnership or other entity whose name or title appears in the records in the Office of the County Recorder, as well as all successors or assignees of these owners.

In addition to any other remedy available at law, if the owner or other person in charge and control of the building fails to comply with an aforementioned order within the time periods set forth in Section 8604.1, the Department of Building and Safety may order that the building be vacated and that the building remain vacated until all required corrective work has been completed. Whenever compliance with an order issued pursuant to the provision of this section has not been accomplished within 90 days after the date the building has been ordered vacated, or such additional time as may have been granted by the board, the department may order demolition of the building, in accordance with the provisions of Chapter 89 of this code.

8604.2 Commercial Buildings.

8604.2.1 Purpose. The purpose of this section is to provide a reasonable degree of fire safety for persons occupying existing commercial and industrial buildings.

8604.2.2 Scope. The provisions of this section shall apply to all existing commercial and industrial buildings more than two stories in height which do not conform to the minimum shaft enclosure and exit requirements of this code and which are not required to comply with Section 403.11 of the California Building Code for existing buildings over 75 feet (22 860 mm) in height. The provisions of this section shall not authorize the modification of existing buildings or portions thereof which provide a greater degree of protection against fire than the minimum requirements established by this section.

EXCEPTION: The requirements of this section shall not apply to buildings erected after January 1, 1943.

8604.2.3 Shaft enclosures. Every opening in a floor shall be enclosed as required by Section 711 for shaft enclosures; however, existing enclosure walls constructed of wood lath and plaster or equivalent fire-resistive materials and which are in good condition may be accepted in lieu of enclosure wall construction.

Corridor exits which are interrupted by stairwell enclosures required by this section shall be provided with exit door fire assemblies which will close automatically when activated by an approved smoke detector.

EXCEPTIONS: 1. The shaft protection required by this section may be omitted if the building is sprinklered throughout.

2. Existing metal elevator doors need not be replaced if they are in good condition. Such doors may have openings protected with wire glass.

8604.2.4 Exits. Two reasonably separated and accessible exits shall be provided from each floor.

EXCEPTION: Existing fire escapes which are in structurally sound operational condition may be used as one means of egress.

An exit signal with letters at least 6 inches (152 mm) high shall be installed in conspicuous locations at each exit from the floor and whenever otherwise required to clearly indicate the direction of egress from the area served.

8604.3 Residential Buildings.

8604.3.1 Purpose. The purpose of this section is to provide a reasonable degree of fire safety for persons living and sleeping in apartment houses, hotels, apartment hotels, and in buildings housing Group I, Division 2 Occupancies by requiring alterations to such existing buildings which do not conform to the minimum exiting, shaft enclosure and corridor protection requirements of this code.

8604.3.2 Scope. The provisions of this section shall apply to all existing buildings more than two stories in height which contain Group R, Division 1 and Group I, Division 2 Occupancies. The provisions of this section shall not authorize the modification of existing buildings or portions thereof which provide a greater degree of protection against fire than the minimum requirements established by this section.

8604.3.3 Corridor walls and openings. The walls of every public corridor shall be protected by one-hour fire-resistive construction; however, existing walls constructed of wood lath and plaster and which are in good condition will be acceptable in lieu thereof.

Transoms and openings other than doors from public corridors to guest rooms and dwelling units shall be closed and solidly covered with material which will provide the degree of fire resistiveness as shall be provided by adjacent corridor walls.

All door openings from public corridors to guest rooms and dwelling units shall provide the same degree of fire resistiveness as shall be provided by adjacent corridor walls.

EXCEPTION: Door openings from public corridors to guest rooms and dwelling units may have 20-minute protection, provided:

1. All stairways, hallways, exitways and storage or closet areas adjacent thereto are sprinklered;
2. A sprinkler head is placed inside each unit adjacent to each door opening from the public corridor to the guest room or dwelling unit; and
3. An approved self-closing device is installed on each door opening from the public corridor into the guest room or dwelling unit.

8604.3.4 Shaft enclosures. All stairwells shall be enclosed in approved shaft enclosures; however, existing enclosure walls constructed of wood lath and plaster which are in good condition will be accepted in lieu of approved shaft wall construction.

EXCEPTION: In buildings erected prior to January 1, 1943, stair shaft enclosures may be omitted if the building is sprinklered throughout and the sprinkler system is interconnected to the alarm system required under Section 8604.5 of this code.

8604.3.5 Existing conditions.

8604.3.5.1 Existing means of exit, including fire escapes, are acceptable where they exist in the required number and are maintained in good condition.

8604.3.5.2 No standpipes will be required where none exist.

8604.3.5.3 No emergency hallway illumination will be required where none exists.

8604.3.5.4 Dead-end corridors not over 20 feet (6096 mm) in length may have access to a second exit through a stair shaft enclosure.

8604.4 Fire Safety for Existing Group I, Division 2 Occupancies. Every existing Group I, Division 2 Occupancy over two stories in height which does not conform to the minimum shaft and corridor protection requirements of this code shall be made to conform to the minimum requirements as specified in Section 8604.3.

8604.5 Fire Protection Standards for Existing Group R, Division 1 Occupancies Erected Prior to January 1, 1943.

8604.5.1 Scope. The provisions of this section are in addition to those in Section 8604.3 and apply to all existing buildings three or more stories in height which contain Group R, Division 1 Occupancies and which were erected prior to January 1, 1943.

8604.5.2 Closure of doors. All required stair shaft, cutoff and area separation doors shall be equipped with approved self-closing devices and electrically operated hold-open devices designed to release the door by the activation of smoke detectors located on each side of the doorway and within 12 inches (305 mm) of the ceiling.

8604.5.3 Sprinklers. All interior stairways, hallways, exits and storage or closet areas adjacent thereto shall be provided with an approved automatic sprinkler system connected with an alarm system that emits an audible signal throughout the premises. In any room having a door opening into an interior hallway, stairway or exitway, a sprinkler head shall be located inside the room directly over the door. Sprinklers so installed shall be equipped with listed residential sprinkler heads

and may utilize polybutylene plastic pipe for laterals only. Sprinkler materials and installation shall comply with the Plumbing Code and Supplemental Rules and Regulations.

8604.5.4 Self-closing device. Each apartment or guest room door opening into an interior stairway, hallway or exit shall be equipped with an approved self-closing device.

8604.5.5 State Fire Code. Where the Group R, Division 1 Occupancy regulated by this section has floors used for human occupancy more than 75 feet (22 860 mm) above the lowest floor level having building access, the provisions of Part 2, Title 24 of the California Building Code relating to such occupancy shall apply in lieu of any less restrictive provisions set forth in this section.

8604.6 Fire Safety Standards for Existing High-rise Buildings.

8604.6.1 Purpose. The purpose of this section is to provide a reasonable degree of fire safety for persons occupying existing high-rise buildings.

8604.6.2 Scope. The provisions of this section shall apply to every existing high-rise building for which a building permit was issued prior to July 1, 1974.

EXCEPTION: The provisions of this section shall not apply to Group R, Division 1 Occupancies, as defined in Section 310.1. The provisions of this section shall not authorize the modification of existing buildings or portions thereof which provide a greater degree of protection against fire than the minimum requirements established by this section.

8604.6.3 Definition. For the purposes of this section, a high-rise building is a building of any type of construction having floors (as measured from the top of the floor surface) that may be used for human occupancy located more than 75 feet (22 860 mm) above the lowest floor level having building access.

8604.6.4 Requirements. Every building within the scope of this section shall be provided with an automatic fire sprinkler system complying with all applicable sections of the Los Angeles Municipal Code. The sprinkler system shall cover all areas of the building.

EXCEPTIONS: 1. Sprinklers need not be installed in locations expressly excepted in the Los Angeles Plumbing Code provided other approved fire-protection equipment is installed.

2. The Department of Building and Safety may review, on a case-by-case basis, buildings within the scope of this section and may approve alternative fire-protection systems which meet the intent of the high-rise sprinkler requirements.

3. The Department of Building and Safety may, with the concurrence of the fire department, grant exceptions from the requirements of Division 20 of Article 4, Chapter IX, of the Los Angeles Municipal Code as specified in Section 8604.6.5.

8604.6.5 Conditional exceptions. The following exceptions from the requirements set forth in Section 94.2001.0 of the Los Angeles Municipal Code are available upon application to the department, provided all the stated conditions are met for each category of building.

8604.6.5.1 Existing buildings 75 feet to 150 feet (22 860 mm to 45 720 mm) in height.

EXCEPTIONS: 1. Existing risers may be used when maintained in a safe and operable condition.

2. New, on-site water storage need not be provided. (When existing on-site water storage is available, it may be integrated into the fire sprinkler system.)

CONDITIONS: 1. A 3-inch (76 mm) test drain shall be provided in stair shafts where pressure-regulator valves are used. Valves, equipment and devices shall conform to Los Angeles Plumbing Code requirements.

2. A single pump having a minimum capacity of 750 gallons per minute (gpm) (2839 L/m) shall be provided. (Diesel pumps shall have a four-hour fuel supply.)

3. There shall be a flow of 750 gpm (2839 L/m) at 65 psi (448 kPa) at the roof and the sprinkler system design shall meet code requirements.

4. Existing sprinkler systems, existing or new standpipe systems, and existing or new sprinkler risers shall be interconnected at the base of the riser system with a minimum of one fire department connection.

5. Emergency standby electrical power with a four-hour fuel supply shall be provided for fire pumps and the following new installations: fire-protective signaling systems, emergency exit lighting, and exit and directional signs.

8604.6.5.2 Existing buildings over 150 feet to 275 feet (45 720 mm to 83 820 mm) in height.

EXCEPTION: Existing risers may be used when maintained in a safe and operable condition.

CONDITIONS: 1. A 3-inch (76 mm) test drain shall be provided in each stair shaft where pressure-regulator valves are used. Valves, equipment and devices shall conform to Los Angeles Plumbing Code requirements.

2. At least two pumps connected to the automatic sprinkler system having a minimum capacity of 750 gpm (2839 L/m) each shall be provided. (Diesel pumps shall have a four-hour fuel supply.)

3. There shall be a flow of 750 gpm (2839 L/m) at 65 psi (448 kPa) at the roof and the sprinkler system design shall meet code requirements.

4. Existing sprinkler systems, new and existing standpipe systems, and new and existing sprinkler risers shall be interconnected at the base of the riser system with at least one fire department connection.

5. Emergency standby electrical power with a four-hour fuel supply shall be provided for fire pumps and the following new installations: fire-protective signaling systems, emergency exit lighting, and exit and directional signs.

6. A minimum usable capacity of a 20,000-gallon (75 700 L) storage tank shall be provided on site.

8604.6.5.3 Existing buildings greater than 275 feet (83 820 mm) in height.

EXCEPTION: Existing risers may be used when maintained in a safe and operable condition.

CONDITIONS: 1. A 3-inch (76 mm) test drain shall be provided in each stair shaft where pressure-regulator valves are used. Valves, equipment and devices shall conform to Los Angeles Plumbing Code requirements.

2. At least three pumps connected to the automatic sprinkler system having a minimum capacity of 750 gpm (2839 L/m) each shall be provided. At least one pump shall be an electric motor-driven pump. (Diesel pumps shall have a four-hour fuel supply.)

3. There shall be a flow of 1,000 gpm (3785 L/m) at 65 psi (448 kPa) at the roof and the sprinkler system design shall meet code requirements.

4. Existing sprinkler systems, new and existing standpipe systems, and new and existing sprinkler risers shall be interconnected at the base of the riser system with at least one fire department connection.

5. Emergency standby electrical power with a four-hour fuel supply shall be provided for fire pumps and the following new installations: fire-protective signaling systems, emergency exit lighting, and exit and directional signs.

6. A minimum usable capacity of a 40,000-gallon (151 400 L) water storage tank shall be provided on site.

8604.6.6 Elevator lobbies. Existing high-rise buildings within the scope of this section shall comply with the following:

1. Except for the main entrance level, every elevator on each floor shall open into an elevator lobby which is separated from the remainder of the building, including corridors and other exits, by walls having a fire-resistive rating of not less than one hour. All lobby openings other than those for elevator doors, stairway enclosures and ducts shall be protected with three-fourths-hour self-closing fire assemblies actuated by combustion products-type smoke detectors.

2. Except for the main entrance level, each elevator lobby shall be provided with an approved smoke detector located on the lobby ceiling. When the detector is activated, elevator doors shall not open and all cars serving that lobby shall return to the main floor and be under manual control only. The smoke detector shall meet the requirements of Title 8, California Administrative Code (Elevator Safety Orders). The detector may serve to close the lobby doors.

8604.6.7 Stair shaft ventilation. Each stair shaft which extends to the roof shall be provided with a minimum ventilation opening of 20 square feet (1.9 m^2) at the roof level.

ORDINANCE NO. 3100

AN ORDINANCE OF THE COUNCIL OF THE CITY OF SCOTTSDALE, MARICOPA COUNTY, ARIZONA, AMENDING ARTICLE II OF CHAPTER 36, RELATING TO FIRE PREVENTION AND PROTECTION, REPEALING THE ADOPTION OF THE UNIFORM FIRE CODE, 1994 EDITION AND RELATED STANDARDS AND AMENDMENT AND ADOPTING THE 1997 UNIFORM FIRE CODE VOLUME 1, 2, APPENDICES, AND AMENDMENTS TO IT.

BE IT ORDAINED by the Council of the City of Scottsdale, Arizona, as follows:

Sec. 36-16. Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Chief means the chief of the fire department.

Duly authorized agent shall mean an individual employed by Rural/Metro Fire Department who has been appointed by the fire chief, in writing, to have the authority to issue civil fire code violations. Such authorization shall be filed with the City Clerk.

Fire department means the Rural/Metro Fire Department or, in the event that the city shall provide its own fire protection service, that organization.

Hillside landform area, is defined as any parcel of land or portion thereof with surface slope that can easily exceed 15%. Where major collection streets have a maximum grade of 9%, and minor and local collector streets have a maximum grade 12%, and local residential streets have a maximum grade of 15%.

NICET means the national Institute for the Certification of Engineering Technologies, 1420 King Street, Alexander, VA. 22314-2915.

Uniform Fire Code means the Uniform Fire Code, 1997 Edition.

Uniform traffic complaint shall mean the form approved by the State Supreme Court in their Rules of Procedure in Civil Traffic Violation cases.

"1003.2.11 Group S occupancies."

"1003.2.11.1 General. An automatic sprinkler system shall be installed throughout all Group S occupancies in accordance with section 1003.1.2 through 1003.2.2, 1003.2.3 and written city Fire Department Standards."

"1003.2.12 Group U occupancies."

"1003.2.12.1 General. An automatic sprinkler system shall be installed throughout all Group U occupancies in accordance with section 1003.1.2 through 1003.2.2, 1003.2.3 and written city Fire Department Standards."

"1003.2.13 Additions, alterations and repairs."

"1003.2.13.1 General. When additions, alterations or repairs within a twelve-month period exceed fifty (50) percent of the value of an existing building or structure, such building or structure shall be made to conform to the requirements for new buildings or structures."

"Exception: Such building or structures shall be equipped with an approved fire sprinkler system when work exceeds ten (10) percent of the value of an existing building of assembly use or twenty-five (25) percent of the value of an existing building or structure of other occupancies."

"1003.2.13.2 Partial systems prohibited. In all new additions to existing buildings and structures an automatic sprinkler system shall be installed in accordance with this section. There shall be no partially sprinklered compartments. Sprinklered and unsprinklered parts of a structure shall be separated in accordance with all applicable codes and standards."

"Exception: Structures in existing R-3 developed parcels which contain existing non-sprinklered requirements (i.e. seven-hundred foot (213,360mm) hydrant spacing.)"

"1003.2.13.3 Furring, or other means of altering or modifying room sizes for the purpose of deleting fire sprinklers from compartments such as closets is prohibited without resubmittal of building plans thru building department review."

Section 1004 subsections, 1004.1.1, 1004.2, and 1004.5 are amended to read:

"1004.1.1 General. Standpipes shall comply with the requirements of this section, written city Fire Department Standards and U.B.C.Standards."

EXHIBIT E

FILE NO. 114-91-2

Amendment of the Whole as further amended 11/15/93

ORDINANCE NO. 777-93

(Automatic Sprinkler Systems - Existing High-Rise Buildings)

AMENDING PART II, CHAPTER 1, OF THE SAN FRANCISCO MUNICIPAL CODE (BUILDING CODE) BY AMENDING SECTION 1746 TO REQUIRE INSTALLATION OF AUTOMATIC SPRINKLER SYSTEMS IN EXISTING HIGH-RISE BUILDINGS EXCEPT FOR APARTMENT BUILDINGS, RESIDENTIAL HOTELS, AND MIXED-USE BUILDINGS CONTAINING AN R-1 OCCUPANCY; EFFECTIVE DATE.

NOTE: Additions or substitutions are underlined; deletions are indicated by ((double parentheses)).

Be it ordained by the People of the City and County of San Francisco:

Section 1. Part II, Chapter 1, of the San Francisco Municipal Code (Building Code) is hereby amended by amending Section 1746 thereof to read as follows:

Automatic Sprinkler Systems - Existing High-rise Buildings

Sec. 1746. (a) General. Regardless of any other provisions of these regulations, every existing high-rise building ((of Type II-N, Type III-N or Type V-N construction)) as defined in Section 1711 shall be provided with an approved sprinkler system conforming to ((NFPA 13)) Chapter 18. Existing high-rise buildings that are also qualified historical buildings as defined in California Health and Safety Code Section 18950 shall be provided with an approved automatic fire sprinkler system when and as required by the State Historical Building Code and need not comply with this section.

EXCEPTIONS: 1. An apartment house, condominium or other building used for "R-1" occupancy as defined in this Code, excluding tourist hotels as defined in Section 41.4(r) of the San Francisco Administrative Code.

2. A mixed-use occupancy building containing an "R-1" occupancy.

The following additional requirements shall also apply:

1. A sprinkler control valve and a waterflow detecting device shall be provided at the lateral connection to the riser for each floor.

2. A separate and distinct supervisory signal shall be provided to indicate a condition that will impair the satisfactory operation of the sprinkler system. This shall include, but not be limited to, monitoring control valves, fire pump power supplies, and pump running conditions. Such supervisory signals shall be annunciated at a constantly attended building security control center; when that location is not under constant supervision by qualified personnel, the signal shall be transmitted to a remote monitoring station in accordance with NFPA 72, NFPA 72C, or NFPA 71.

Supervisors Hsieh, Shelley, Bierman

BOARD OF SUPERVISORS

BOARD OF SUPERVISORS

3. The minimum water supply requirement for the sprinkler system shall be determined without regard to inside hose stream demand.

4. Existing standpipes may be converted to sprinkler risers, provided that they are hydrostatically tested for 2 hours at not less than 50 psi in excess of the maximum pressure to be maintained in the system.

5. Additional hangers, braces, or other attachments for support of existing standpipes which have been converted in accordance with Exception 4 shall be provided if they are necessary to meet the requirements of NFPA 13. The installation of additional flexible fittings in such risers is not required.

6. Any type pipe which has been listed by an approved testing agency for use in automatic sprinkler installations may be used when installed in accordance with its listing limitations.

(b) Permissible omissions. The following features required in new high-rise buildings are not required in systems installed under the provisions of this Section:

1. Redundant fire pump;

2. Secondary on-site supply of water;

3. More than one fire department connection;

4. Connection of the system to two risers on each floor. Hydraulic calculations may consider all risers in service.

5. In an R-1 occupancy building, sprinklers in bathrooms and closets.

See Section 1804 for additional permissible sprinkler omissions.

(c) Effective Date. The effective date of this ordinance shall be February 15, 1994.

(d) Notification. Not later than 60 days after the effective date of this ordinance, the Superintendent shall notify in writing by certified mail the owner of each building within the scope of this Section. The notice shall contain a copy of this Section, a commentary on it, and a Notice of Intent form. The Notice of Intent shall be designed to elicit information regarding proposed water supply connections, pumps, risers, and existing partial sprinkler systems. The Notice of Intent shall include a tentative schedule for phasing the installation of the complete sprinkler system.

If a building within the scope of this Section is not discovered by the Superintendent until after the deadline for notification, the building owner shall be notified within 30 days of such discovery.

Failure to receive notification does not exempt a building owner from compliance with this Section.

(e) Authority of Superintendent. For the purpose of applying the provisions of this Section, the Superintendent, in consultation with the Chief of the Division of Fire Prevention and Investigation, shall have the authority to be flexible in the event of extenuating circumstances that may exist in an individual case and to do the following, but only when it is clearly evident that a reasonable degree of fire safety consistent with the public interest is provided:

1. Consider alternate protection based on nationally recognized standards, principles and tests, and generally recognized and well-established methods of fire protection;

2. Waive specific individual requirements if it can be shown that such requirements are not physically possible, require disproportionate effort, or pose an undue hardship with little increase in life safety and that a practical alternative cannot be provided; and

3. Grant necessary extensions of time when it can be shown that the specified time periods are not physically practical or pose an undue hardship. The granting of an extension of time

for compliance shall be based on the showing of good cause and subject to the filing of an acceptable, systematic, progressive plan of correction with the Superintendent.

(f) Appeal; Board of Examiners - High-Rise Sprinklers. There is hereby created a Board of Examiners ("Board") consisting of nine (9) members. The Board shall hear and determine appeals concerning the application of the requirements of this Section filed by the owner or the authorized agent of the owner of a building subject to the provisions of this Section.

Six of the members of the Board shall be the same persons and with the same terms as those appointed to the Board of Examiners pursuant to Section 204 of this Code. One member of the Board shall be a licensed plumbing contractor, and shall be the same person and with the same term as the plumbing contractor member of the Board of Examiners - Plumbing, appointed pursuant to Section 28.13 of the San Francisco Plumbing Code. The two additional members of the Board shall be a registered fire protection engineer and a representative of owners of buildings subject to the requirements of this Section, and shall be appointed by the Director of Public Works pursuant to the provisions of Section 204 of this Code. The following shall constitute ex-officio members of the Board, without vote and without compensation: The Chief of the Bureau of Fire

Prevention and Investigation, and the Superintendent of the Bureau of Building Inspection who shall act as Secretary of the Board.

To the extent they reasonably apply, the procedures set forth in Section 204 of this Code shall govern the proceedings of the Board.

(e) Implementation. The requirements stated in Paragraph (a) above shall be accomplished by the following steps. Failure to complete any step within the required time frame is a violation of this code, and the Superintendent shall have the power to abate the building in accordance with Section 203.

Step 1. Notice of Intent. The owner shall submit a properly completed, Bureau-provided Notice of Intent to the Superintendent not later than three years after the effective date of this ordinance.

EXCEPTION: No Notice of Intent is required if an approved sprinkler system is completed prior to the deadline above.

Step 2. Water supply. The owner shall install the system riser, including floor-control valves, and shall connect it to an approved automatic water supply not later than five years after the effective date of this ordinance. For purposes of this paragraph, an automatic water supply shall consist of a connection to the public water works system and, if required by hydraulic analysis, installation of a fire pump.

Step 3. Piping and Sprinklers. The owner shall complete the sprinkler system, including required electrical monitoring, not later than twelve years after the effective date of this ordinance.

APPROVED AS TO FORM:

LOUISE H. RENNE
City Attorney

Judith A. Boyajian
Deputy City Attorney

(Automatic Sprinkler Systems - Existing High-Rise Buildings)
ENDORSING THOSE CHANGES AND PROVIDING FINDINGS AS TO THE LOCAL CONDITIONS REQUIRING CHANGES FROM THE CALIFORNIA BUILDING STANDARDS CODE, AS REQUIRED BY THE CALIFORNIA HEALTH AND SAFETY CODE.

WHEREAS, The Board of Supervisors is enacting an amendment to the Building Code for the City and County of San Francisco; and

WHEREAS, This San Francisco Building Code amendment changes or modifies the requirements contained in the California Building Standards Code by adding more stringent requirements regarding fire sprinkler protection in existing high-rise buildings; and

WHEREAS, California Health and Safety Code Sections 17958.5 and 17958.7 require the City to furnish reasons to the State Building Standards Commission for such modifications based upon local conditions; and

WHEREAS, San Francisco is in a zone of high seismic risk; therefore, it requires additional fire safety standards particularly in high-rise buildings; and

WHEREAS, Wind conditions in San Francisco are conducive to the spread of fire; and

WHEREAS, San Francisco has many narrow lots, often smaller than lots in other California communities; most buildings extend the entire width of the lot and abut against neighboring buildings; these abutting buildings result in openings being

close to property lines; building and rental costs Francisco lead to more people in smaller spaces; a

WHEREAS, Special fire hazards exist in San F result of these crowded conditions and high popula both in the City as a whole and within individual

WHEREAS, San Francisco has many steep hills, and sidewalks, and old, wood-frame buildings, all additional dangers to the public health, safety an unless special provisions are added to the Califor Code; and

WHEREAS, The San Francisco Fire Department u size firefighting equipment than specified in the Housing Code; and

WHEREAS, It is well known that sprinklers pr fastest water response to a fire; and

WHEREAS, The Board of Supervisors has review set forth above for the modifications to the Calif Code, and the Board finds and determines that the are reasonably necessary based upon local conditio therefore, be it

RESOLVED, That the Board of Supervisors does and determine that the aforesaid amendment to the Building Code is reasonably necessary due to local the reasons set forth above; and be it

///

FURTHER RESOLVED, That the Clerk of the Board of Supervisors is hereby directed to transmit this Resolution together with the San Francisco Building Code amendment to the State Building Standards Commission for filing, pursuant to the applicable provisions of law.

19233

BOARD OF SUPERVISORS

3

08/31/93

Adopted - Board of Supervisors, San Francisco November 15, 1993

Ayes: Supervisors Alioto Bierman Conroy Hsieh Kaufman Kennedy Leal Maher

Noes: Supervisor Hallinan

Absent: Supervisors Migden Shelley

I hereby certify that the foregoing resoluti was adopted by the Board of Supervisors of the City and County of San Francisco

John L. Taylor
Clerk

File No. 114-91-2.1

NOV 23 1993
Date Approved

Frank M. Jordan
Mayor

Board of Supervisors, San Francisco

Passed for Second Reading	Finally Passed
November 15, 1993	November 22, 1993
Ayes: Supervisors Alioto Bierman Conroy Hsieh Kaufman Kennedy Leal Maher	Ayes: Supervisors Alioto Bierman Conroy Hsieh Kaufman Kennedy Leal Maher Migden Shelley
Noes: Supervisor Hallinan	Noes: Supervisor Hallinan
Absent: Supervisors Migden Shelley	

I hereby certify that the foregoing ordinance was finally passed by the Board of Supervisors of the City and County of San Francisco

John Taylor
Clerk

File No. 114-91-2

DEC 2 1993
Date Approved

Frank M. Jordan
Mayor

LOUISIANA DEPARTMENT OF PUBLIC SAFETY AND CORRECTIONS

OFFICIAL MANUAL
of the
OFFICE OF STATE FIRE MARSHAL

Contains the Statutes, Code References and Administrative Rulings of the Office of the Fire Marshal relative to the design, construction and occupancy of buildings (structures, watercraft and movables) as of September, 1992

THIS PUBLIC DOCUMENT WAS PUBLISHED AT A TOTAL COST OF $1,432.00. FOUR HUNDRED (400) COPIES OF THIS PUBLIC DOCUMENT WERE PUBLISHED IN THIS FIRST PRINTING AT A TOTAL COST OF $1,432.00. THE TOTAL COST OF ALL PRINTINGS OF THIS DOCUMENT INCLUDING REPRINTS IS $1,432.00. THIS DOCUMENT WAS PUBLISHED FOR LOUISIANA DEPARTMENT OF PUBLIC SAFETY AND CORRECTIONS, OFFICE OF FIRE MARSHAL, 5150 FLORIDA BLVD., BATON ROUGE, LA 70806 BY THE LOUISIANA DEPARTMENT OF PUBLIC SAFETY AND CORRECTIONS, PRISON ENTERPRISES PRINT SHOP, P.O. BOX 44314, BATON ROUGE, LA 70804. TO PROVIDE CURRENT STATE RULES AND REGULATIONS GOVERNING FIRE HAZARDS AND LIFE SAFETY REQUIREMENTS TO ALL FIREFIGHTING AGENCIES WITHIN THE STATE, BUILDING OWNERS AND UPON REQUEST, ANY INTERESTED PERSON. THIS MATERIAL WAS PRINTED IN ACCORDANCE WITH THE STANDARDS FOR PRINTING BY STATE AGENCIES ESTABLISHED PURSUANT TO R.S. 43:31.

SUB-PART D-1. FIRE SPRINKLER SYSTEMS IN EXISTING BUILDINGS

40:1641. Purpose

A. The legislature hereby finds that existing high rise buildings which do not have fire protection sprinkler systems represent a serious threat to life and property. High rise building fires are particularly dangerous due to the fact that present fire fighting apparatus can only reach floor levels below seventy-five feet in height, leaving upper floors in high rise facilities vulnerable to the unchecked spread of fire, thereby endangering the occupants of those upper floor levels.

B. It is therefore the policy of this state in order to protect life and property from the hazards of fire and panic which may arise from fire or from the threat of fire in high rise buildings to require existing high rise buildings to be protected throughout by an approved fire protection sprinkler system.

40:1642. Definitions

As used in this Subpart, the following terms have these meanings:

(1) "Fire protection sprinkler system" means a system of overhead piping designed in accordance with fire protection engineering standards. The system must be supplied from a reliable, constant, and sufficient water supply such as a gravity tank, fire pump, reservoir or pressure tank, or connection by underground piping to a city main or any combination of these. The portion of the sprinkler system above ground is considered the fire protection sprinkler system for purposes of this Subpart and is a network of specially sized or hydraulically designed piping installed in a building, structure, or area, generally overhead, and to which sprinklers are connected in a systematic pattern. The system includes a controlling valve and device for actuating an alarm when the system is in operation. The system is usually activated by heat from a fire and discharges water over the fire area. Fire protection sprinkler system, dry-pipe systems, preaction systems, deluge systems, combined dry-pipe and preaction systems, antifreeze systems, and circulating closed loop systems, have meanings as defined and continuously revised in National Fire Protection Association Pamphlet 13, entitled Standard for the Installation of Sprinkler Systems.

(2) "Existing high rise buildings" means any building having floor surfaces used for human occupation located more than seventy-five feet above the lowest level of fire department vehicle access constructed before January 1, 1975.

(3) "Master plan" means a specific scheme or plan detailing the number of floors, total square footage, present occupancy and a proposed completion date of the implementation and completion date of total compliance with the requirement of this Subpart.

40:1643. Fire protection sprinkler system required in existing high rise buildings

A. All existing high rise buildings as defined in this Subpart shall be protected throughout by an approved fire protection sprinkler system.

B. All existing high rise buildings shall comply with the rules and regulations to be promulgated by the fire marshal in conformity with the Administrative Procedure Act, which shall establish as minimum standards the provisions of NFPA 13 as published by National Fire Protection Association, and the fire marshal shall be the authority having jurisdiction to enforce compliance with such regulations.

C. Notwithstanding any provision to the contrary, all existing high rise buildings as defined in this Subpart shall be protected throughout by an approved fire protection sprinkler system by January 1, 1999.

D. The owners of existing high-rise buildings which are not, as of September 1, 1988, protected throughout by an approved fire protection sprinkler system shall submit a written master plan to the state fire marshal on or before January 1, 1991, detailing with specificity a schedule for compliance with this Subpart.

E. Notwithstanding any other provision of law to the contrary, the state fire marshal may authorize alternative approaches for existing high-rise telephone equipment buildings occupied solely by telecommunications service providers which were not, as of September 1, 1988, protected throughout by an approved fire protection sprinkler system but which will provide an equivalent level of safety as provided by an approved automatic sprinkler system. Such alternative approaches shall be implemented on or before January 1, 1999. To obtain such approval, the telecommunications service provider shall submit a written master plan or a completed

fire safety evaluation form, as published by the National Fire Protection Association, to the state fire marshal on or before January 1, 1993. Upon receipt, such master plan or fire safety evaluation shall be evaluated by the state fire marshal to ensure that the building complies with either:

(1) The 1967 edition of the NFPA 101 (Life Safety Code). Such plan or evaluation shall also indicate that an equivalent level of safety is achieved by the proposed alternative.

(2) The compartmentation exception of Section 506 of the 1988 Standard Building Code. Such compliance shall be documented by a certificate signed by a licensed architect or civil engineer.

Suspension in Part

House Concurrent Resolution No. 23 of the 1990 Regular Session provides in part:

"WHEREAS, ACT No. 422 of the 1988 Regular Session of the Louisiana Legislature requires all existing high rise buildings over seventy-five feet in height with occupancies to be protected throughout with an approved automatic sprinkler system by the year 1999 and R.S. 40:1643(D) further requires that an implementation plan be submitted to the state fire marshal prior to January 1, 1991; and

"WHEREAS, 'business occupancies' include those occupancies used for the transaction of business, other than 'mercantile', for the keeping of accounts and records, and similar purposes as defined in NFPA 101:4-1.8; and

"WHEREAS, alternative features have not been considered that may provide an equivalent level of protection or safety for occupants within high rise buildings with business occupancies as that level of safety provided by the sprinkler protection required by Act No. 422.

"THEREFORE, BE IT RESOLVED that the Legislature of Louisiana hereby suspends the provisions of R.S. 40:1643(D), to the extent that those provisions require the submission of a written master plan to the state fire marshal for the installation of fire protection sprinkler systems in business occupancies in existing high rise buildings on or before January 1, 1991.

as to if the valve was adjusted or not, and if so, what the results were before and after adjustment; statement that by order of the Chief the tag shall not be removed.

SECTION 108. Section 1003.1.2, Exception 3 of Volume VI of the Building and Safety Code is repealed.

SECTION 109. Section 1003.2.1.1 of Volume VI of the Building and Safety Code is added to read:

1003.2.1.1 New Occupancies. An automatic fire sprinkler system shall be installed in all new occupancies.

EXCEPTION: Group B, Group F, Divisions 1 and 2, Group M, and Group S, Divisions 1 and 2 occupancies less than 1000 total square feet (92.9 m^2).

SECTION 110. Section 1003.2.9 of Volume VI of the Building and Safety Code is added to read:

1003.2.9 Existing occupancies. An automatic fire sprinkler system shall be installed and maintained in all existing occupancies as follows:

1. Throughout existing and new sections of any existing building whenever total additions result in an increase of more than 1000 square feet (92.9 m^2) in the total floor area, including mezzanines or additional stories, regardless of ownership. Additions shall be cumulative with each application for building permit from the effective date of Ordinance 4850 (7-20-89).

   EXCEPTION: Group R, Division 3 occupancies.

2. Throughout existing and new sections of any existing building whenever alterations exceed fifty percent (50%) of the replacement value, as determined by the buildin

official. Alteration values shall be cumulative with each application for a building permit from the effective date of Ordinance 4850 (7-20-89).

EXCEPTION: Expenditures for tenant improvements, maintenance and repairs such as interior and exterior painting, carpeting, interior window coverings, drapes, movable partitions, surface re-roofing or plumbing, mechanical and electrical repairs.

3. Throughout existing and new sections of any existing building for which there is an occupancy classification change to a more hazardous use, as determined by the Chief.

SECTION 111. Section 1003.2.9.1 of Volume VI of the Building and Safety Code is added to read:

1003.2.9.1 Existing High-Rise Buildings. Existing high-rise buildings, as defined in Volume VI, Section 209-H of the Glendale Building and Safety Code, shall have an automatic fire sprinkler system installed and operational throughout within forty-eight (48) months of the effective date of Ordinance 4850 (7-20-89).

SECTION 112. Section 1003.2.9.2 of Volume VI of the Building and Safety Code is added to read:

1003.2.9.2 Existing Mid-Rise Buildings. Existing mid-rise buildings, as defined in Volume VI, Section 214-M of the Glendale Building and Safety Code, shall have an automatic fire sprinkler system installed and operational throughout within sixty (60) months of the effective date of Ordinance 4850 (7-20-89).

SECTION 113. Section 1003.2.9.3 of Volume VI of the Building and Safety Code is added to read:

1003.2.9.3 Existing Low-Rise Building. Existing low-

rise buildings, as defined in Volume VI, Section 213-L of the Glendale Building and Safety Code, shall have an automatic fire sprinkler system installed and operational throughout within seventy-two (72) months of the effective date of Ordinance 4850 (7-20-89).

SECTION 114. Section 1003.2.9.4 of Volume VI of the Building and Safety Code is added to read:

1003.2.9.4 Notification, Recordation, Enforcement, and Standards. Notification, recordation, enforcement and standards addressed in this subsection shall be enforced by the Chief to ensure compliance with Sections 1003.2.9.1, 1003.2.9.2 and 1003.2.9.3.

1. Notification. Whenever, pursuant to Section 1003.2 of Volume VI of the Glendale Building and Safety Code, the Chief determines by inspection, that a building does not conform to the minimum requirements of Subsections 1003.2.9.1, 1003.2.9.2 or 1003.2.9.3 of this Code, the Chief shall prepare a fire/life safety notice in writing that the building be repaired and modified to conform to the minimum requirements of those Subsections.

The notice shall specify in what manner the building fails to meet the minimum requirements of Subsections, 1003.2.9.1, 1003.2.9.2 or 1003.2.9.3 of this Code. It shall direct that plans be submitted, and that necessary permits be obtained not later than one year after the service of the notice, and that necessary corrections be completed not later than three years thereafter for work required under Subsection 1003.2.9.1, not later than four years thereafter for work required under Subsection 1003.2.9.2 a

not later than five years thereafter for work required under Subsection 1003.2.9.3.

The notice shall be transmitted by the Chief for enforcement purposes. The Chief shall serve the notice either personally or by certified or registered mail upon the owner as shown on the last equalized assessment roll and upon the person, if any, in real or apparent charge or control of the building. The provisions of this Section are not intended to prevent the Chief from also making a determination or issuing an order regarding failure to comply with Subsections 1003.2.9.1, 1003.2.9.2 or 1003.2.9.3 of this Code.

2. Recordation. At the time that the Chief serves the aforementioned order or notice, the Chief shall file with the Office of the County Recorder, a certificate stating that the subject building does not meet the minimum fire safety requirements of Subsections 1003.2.9.1, 1003.2.9.2 or 1003.2.9.3 of this Code and that the owner thereof has been so notified.

After all necessary corrective work has been performed, the Chief shall file with the Office of the County Recorder, a certificate terminating the status of the subject building as nonconforming to the minimum fire safety requirements of Subsection 1003.2.9.1, 1003.2.9.2 or 1003.2.9.3 of this Code.

3. Enforcement. If the owner or other person in charge and control of the subject building fails to comply with the aforementioned order or notice within the time periods set forth in Section 1003, such person is guilty of a misdemeanor punishable by a fine of not more than five hundred dollars ($500), or by imprisonment for not more than six (6) months, or by both such

fine and imprisonment. A person is guilty of a separate offense each day during which he or she commits, continues or permits a violation of Subsection 1003.2.9.1, 1003.2.9.2 or 1003.2.9.3 of this Code.

The Chief shall also order that the building post a notice of non-conformance. The notice shall be placed in a conspicuous area of the building until all required corrective work has been completed. Permits for work required under Subsections 1003.2.9.1, 1003.2.9.2 and 1003.2.9.3 of this Code that have not been obtained prior to one year following notification will be subject to a fee three times the amount of the customarily required permit fee.

4. Standards. All automatic fire sprinkler systems required by this Section, shall comply with those standards and policies established by the Chief.

SECTION 115. Section 1003.3.1 of Volume VI of the Building and Safety Code is amended to read:

1003.3.1 Sprinkler System Monitoring and Alarms. Where required. All new and existing automatic sprinkler systems shall be monitored for water flow and control valve supervision by a central station, remote station or proprietary monitoring station as defined by U.F.C. Standard 10-2 and shall be listed by Underwriters Laboratories, Inc., and hold a valid fire permit as specified under Section 105 when the number of sprinklers are:

1. Twenty or more in Group I, Divisions 1.1 and 1.2 Occupancies.
2. One hundred or more in all other occupancies.

3. As required by the Chief for special hazards.

Exception: Local alarms may be supervised at a constantly attended location when approved by the Chief.

SECTION 116. Section 1003.4 of Volume VI of the Building and Safety Code is amended to read:

1003.4 **Permissible Sprinkler Omissions.** Subject to the approval of the Chief, sprinklers may be omitted in rooms or areas as follows:

1. When the application of water or flame and water to the contents may constitute a serious life or fire hazard, as in the manufacture or storage of quantities of aluminum powder, calcium carbide, calcium phosphide, metallic sodium and potassium, quicklime, magnesium powder and sodium peroxide;

2. When other automatic fire-extinguishing systems are installed to protect special hazards or occupancies.

SECTION 117. Section 1003.5 of Volume VI of the Building and Safety Code is added to read:

1003.5 **Fire Protection System Valves - Identification.** All fire protection system valves shall be provided with approved custom signage of plastic or metal engraved materials which shall state the specific function of the valve and its normal position. If more than one valve controls the same function or zone, the signage shall so indicate and give the location of the other valve(s).

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents	)	

AFFIDAVIT OF DONNA B. TOWERS

I, DONNA B. TOWERS, hereby declare, under penalty of perjury, that the following is true and correct:

1. I am employed by the Eastern Regional Office of the Office of the Maryland State Fire Marshall. My title is Office Secretary Three. I have held this position for 27 years. My business address is 315 Aurora Park Drive, Unit 2, Easton, MD 21601.

2. In my capacity as Office Secretary Three, I am the custodian of all records and reports filed with the Eastern Regional Office of the Office of the Maryland State Fire Marshall.

3. In my capacity as Office Secretary Three, I received the official Eastern Regional Office of the Office of the Maryland State Fire Marshall Investigation Report (and Supplemental Reports) of the fire which occurred on October 27, 1997, at the Kent Manor Inn, 500 Kent Manor Drive, Stevensville, MD 21666.

4. The attached report is a true and correct copy of the official Eastern Regional Office

of the Office of the Maryland State Fire Marshall Investigation Report (and Supplemental Reports) of the fire at the Kent Manor Inn, 500 Kent Manor Drive, Stevensville, MD 21666.

Date: 5-1-98

Signed: Donna B. Towers
DONNA B. TOWERS

OFFICE OF THE MARYLAND STATE FIRE MARSHAL

INVESTIGATION REPORT

1. COMPLAINT CONTROL NO. OSFM- 17-9704 3

2. EDID # 17001 | Incident # F-1297

3 Victim's Name (Firm Name If Business) Last, First, Middle: Kent Manor Inn | Code: V

4. Victim's Sex-Race-D O.B.: NA

5. Victim's Residence Address City: 500 Kent Manor Drive, Stevensville, Maryland 21666

6. Residence Phone: NA

7. Victim's Employer or School Attends: NA City:

8 Business Phone: 410-643-5757

COMPLAINANT — OTHER VICTIMS — O = OCCUPANT X = OWNER V = VICTIM (Other Than In Item #1 Above); C = COMPLAINANT; P = PARENT/GUARDIAN

9 Name (Last, First, Middle)	Code	Sex-Race-DOB	Residence Phone	Business Phone
(b) (6)	X	M-W-Unk.	(b) (6)	(b) (6)
Residence Address: (b) (6) City: Maryland				
NA				
Residence Address: City:				

15. TIME OF ALARM: 0250

11 Crime/Incident: Structure Fire | 12 Weather: cool/cloudy | 13 Date & Time Occurred: 10-27-97 0250 hrs. | 14. Day: Mon. | FD ON SCENE: 0257

16 Location of Incident (Address): 500 Kent Manor Drive, Stevensville, Maryland 21666 | OSFM NOTIFIED: 0312

17. Location of Incident Or Type Of Premise: Hotel | Co. Code: 17 | Mu Code: — | OSFM ON SCENE: 0332

18. WAS THERE A WITNESS TO THE INCIDENT? ☐ No ☒ Yes

No. 1 Witness Or Neighborhood Check	Last, First, Middle	Sex-Race-DOB	Residence Phone	
(b) (6)		M-W (b) (6)	(b) (6)	☒ Interviewed
Location/Address: (b) (6) PA (b) (6)			Business Phone: Unk.	☐ Statement Interviewed
No. 2 Witness Or Neighborhood Check		Sex-Race-DOB	Residence Phone	
(b) (6)		M-W (b) (6)	(b) (6)	☒ Interviewed
Location/Address: (b) (6) MD (b) (6)			Business Phone: Unk.	☐ Statement Interviewed

19. SUSPECT? ☐ Named ☐ Known ☐ Known Location ☐ Identified ☐ Previously Seen ☐ Description ☒ No ☐ Yes

	Name (Last, First, Middle)	Alias	Sex-Race-DOB	Height	Weight	Hair	Eyes
#1	NA						
	Address/Location	Occupation/Employer			CA # SS #		
#2	NA						
	Address/Location	Occupation/Employer			CA # SS #		

20. SUSPECT VEHICLE ☐ Stolen ☐ Recovered ☐ Other ☒ No ☐ Yes

21. Vehicle Info	Color	Year	Make	Model	BodyStyle	Reg. Yr.	Reg. State	Reg. No.	Vin

22. ☐ SIGNIFICANT M.O., OR ☐ LIMITED OPPORTUNITY TO COMMIT THE CRIME? ☒ No ☐ Yes

23. Mode of Operation: Fire originated in cooking area of hotel,

fire damage to kitchen area and contents, smoke damage throughout

24. Scene Processing ☐ N/A Explain ☒ Photo ☐ Fingerprinting ☒ Other | Crime Lab ☐ Yes ☒ No | Crime Lab Tech: NA

25. WAS THERE ☐ TRACEABLE PROPERTY ☐ PHYSICAL EVIDENCE? ☐ No ☒ Yes

26 Property Insured, By Whom? Gordon Insurance Agency | Policy # Unknown

27. TYPE OF INCIDENT: ☒ Structure ☐ Vehicle/Boat ☐ Explosion ☐ False Alarm ☐ Fireworks ☐ Bomb Threat ☐ Explosive Incident ☐ Blasting Complaint ☐ Other ☐ Injury ☐ Fatality

28. REQUESTED BY: (b) (6) Kent Island VFD

29. DESCRIPTION OF PROPERTY DAMAGED: three-story wood frame building

30. ESTIMATED LOSS:

Structure	Contents	Other	Total
20,000	30,000		50,000

31. POINT OF ORIGIN: wheeled cart in cooking area

2 CAUSE: ☐ Incendiary ☐ Accidental ☒ Undetermined

33 USE AND OCCUPANCY: ☐ Single Family ☐ Multi-Family ☒ Commercial ☐ Other ☒ Occupied ☐ Unoccupied

34 PREMISES SECURED. BY WHOM: ☒ Yes ☐ No staff

35 FORCIBLE ENTRY USED ☒ Yes ☐ No

36 WHERE/HOW: basement door/kicked

37. BY WHOM: FD

38 Assisting Agencies: QACSD, USCPSC, Fairfax Co., VA FD

39 Vehicle Identification No: NA

40. Registration No	State	Year	41. Vehicle Year-Make-Body-Color(s)	42 Ignition Locked ☐ Yes ☐ No ☐ Unk	43 Keys in Ignition ☐ Yes ☐ No ☐ Unk
44. Lienholder (Name-Address-Name of Agent)				45 Doors Locked ☐ Yes ☐ No ☐ Unk	46 Windows Closed ☐ Yes ☐ No ☐ Unk

47. IS THERE SOMETHING UNIQUE ABOUT THIS INCIDENT? ☐ No ☒ Yes

NARRATIVE: *USE CONTINUATION SHEET FOR NARRATIVE. DETAIL ALL ADDITIONAL INFORMATION RELATING TO THE INVESTIGATION*

OFFICE OF THE STATE FIRE MARSHAL **SUPPLEMENT REPORT**

PAGE	OF	COMPLAINT CONTROL NO
2	4	OSFM—17-9704 3

VICTIM, COMPLAINANT, OCCUPANT OR ARRESTEE (LAST, FIRST, MIDDLE): Kent Manor Inn

INCIDENT, OFFENSE OR CHARGE ON ORIGINAL REPORT: Structure Fire

CORRECT INCIDENT OR OFFENSE CLASS

CHANGED? ☐ YES

MULTIPLE CLEAR-UP ☐ YES ☐ NO

NARRATIVE

ITEM NO.

Building:

This fire occurred in a three story wood frame building. The building was a originally constructed in 1820. The entire building was renovated in 1987. The building was retro-fitted with complete automatic sprinkler protection in 1987. This building is equipped with a local fire alarm system consisting of manual pull stations, heat detectors, smoke detectors and a/v devices. The building contains twenty four guest rooms and has no after hours staff. The building manager resides in a dwelling adjacent to the hotel.

Guest:

The hotel was occupied by four guests at the time of this fire. Guest (b) (6) (#18-1) and guest (b) (6) (#18-2) were interviewed by DFM (b) (6) at the scene on 10-27-97. (b) (6) and (b) (6) stated that they and their female companions were alerted to the fire by the building fire alarm system. (b) (6) and (b) (6) stated that they went to the rear of the building and observed smoke coming from the rear kitchen window. (b) (6) stated that he and (b) (6) obtained portable fire extinguishers and attempted to extinguish the fire. According to (b) (6) the fire was near the window and the corner of the kitchen by the dining room. The female companions stated that they had attempted to call 911 from a cellular phone but had been cut off. The women stated that they re-entered Kent Manor Inn to call 911. The Queen Anne's County 911 center was advised only of an alarm sounding.

Queen Anne's County Sheriff's Department:

Deputies (b) (6) were dispatched to the Kent Manor Inn for a 911 hang up reporting an unknown type of alarm. The Sheriff's Department units arrived at approximately 0250 hrs. to find smoke coming from the rear of the kitchen area. Deputy (b) (6) conducted a search of the entire building in an attempt to locate anyone remaining in the building. Deputy (b) (6) obtained the portable fire extinguisher from his vehicle and went to the rear of the building. Upon arrival at the rear of the structure Deputy (b) (6) observed fire and smoke coming from the rear kitchen window. Deputy (b) (6) gained access to the window and discharged the fire extinguisher knocking down the main body of fire. Deputy (b) (6) acted to coordinate the efforts of the Sheriff's Department and the responding fire departments.

				48. Date Supplemental Report Due	
49. Initial Status ☒ Open ☐ Suspended ☐ Unfounded ☐ Closed	50. Initial Investigator (b) (6)		I.D. Number 1055	51. Date 11/4/97	
52. Supervisor Status ☑ Agree ☐ Disagree	53. Recommended ☐ Suspend ☐ Investigation	54. Reviewing Supervisor	I.D. Number	55. Date	
	56. Investigation Supervisor (b) (6)	I.D. No. 1033	57. Date 11/5/97	58 Assigned Investigator	59. Date
60. ☐ NCIC Entered ☐ Miles Entered ☐ NCIC Cleared ☐ Miles Cleared	61. Final Status (Check One) ☑ Open ☐ Suspended ☐ Closed				62. Hours 16

DPSCS-SFMP 013
(REV. 7/90)

Related Report Numbers

WHITE—Office File Copy • CANARY—Investigator Copy

Fire Department:

This fire occurred in the first due area of the Kent Island Volunteer Fire Department. The first arriving units on the scene of this fire were Chief 1 and Engine 16. Chief (b) (6) assumed incident command. Second Assistant Chief (b) (6) assumed operations at the rear of the building. Initial attack was made from the rear of the building utilizing a single 1¾ inch hose line. A single 3 inch line was connected to the fire department connection of the sprinkler system. The line was charged for a few seconds by Engine 16 utilizing tank water. According to Chief (b) (6) the 3 inch line had not been fully charged when it was shut down. The installed fire pump was operating upon the arrival of the fire department. Second Assistant Chief (b) (6) stated that no problems were encountered during suppression efforts. Overhaul of the fire had begun prior to the arrival of DFM (b) (6) The following equipment responded to this fire:

Kent Island Volunteer Fire Department- Chief 1, Engine 16, Engine/Tanker 1, Rescue 1, Utility 1, and Ambulance 10

Grasonville Volunteer Fire Department- Truck 2, Engine/Tanker 2,

Queenstown Volunteer Fire Department- Engine 32, Engine/Tanker 3

United Communities Volunteer Fire Department- Engine 91, Engine/Tanker 9

Queen Anne's County Advanced Life Support

No injuries were reported to this investigator.

Origin and Cause:

DFM (b) (6) was contacted by the Queen Anne's County 911 center to respond to the Kent Manor Inn for a building fire at the request of Chief (b) (6) Upon arrival DFM (b) (6) was directed by suppression personnel to the rear of the kitchen area. Exterior examination showed only fire damage on the rear of the building. Smoke staining and some evidence of flame damage was noted at the rear window of the cooking area. Interior examination showed smoke light smoke staining in the food preparation area of the kitchen. Examination of the cooking area showed heavier smoke staining than had been noted in the food preparation area. DFM (b) (6) determined this area to be the area of origin. Examination showed the area of most burn to be in the area of the rear wall near a vertical cooler. According to suppression personnel a wheeled cart had been located next to the vertical cooler. The cart and its contents had been removed during overhaul operations. Examination of the cooler showed the side and rear of the cooler to have been exposed to high heat as evidenced by the melting of the outer metal covering of the cooler. The melting of the cooler case appears to have originated at approximately two feet from the floor surface. Examination of the electrical components of the cooler showed no apparent fire damage. An exhaust fan is located in the rear wall of the cooking area near the area of origin. Examination of the fan showed it to have minimal fire damage. The damage to the fan appears to be from fire exposure. The fan motor was not seized and spun freely. The wiring for the fan showed no evidence of internal heating. DFM (b) (6) located the wheeled cart outside of the rear of the building. Examination of the wheeled cart showed the aluminum frame to be melted starting at a point approximately two feet from the bottom of the cart. At the time of this examination it was unclear as to what was stored on the wheeled cart other than food. On 10-27-97 DFM (b) (6) interviewed (b) (6) who was in charge of the kitchen on the night prior to this fire. (b) (6) stated that he left the building at approximately 2100 hours on 10-26-97.

Origin and Cause (continued):

(b) (6) stated that he had washed and dried rags and aprons. (b) (6) stated that he had removed the rags and aprons from the dryer at approximately 2015 to 2030 hours on 10-26-97. (b) (6) stated that he placed the rags and aprons in a plastic trash bag and placed the bag on the wheeled cart. According to (b) (6) the rags and aprons seemed to be warm to the touch when he placed the rags and aprons in the plastic bag. (b) (6) stated that the only other items on the rack were bread, rolls and pans. Two 5 gallon containers of cooking oil were located on the floor adjacent to the wheeled cart. The cause of this fire could not be determined as the items from the area of origin had been removed from the building prior to the initiation of origin and cause investigation. The cause of this fire is undetermined.

Sprinkler system:

The sprinkler system in this building is regularly serviced by Livingston Fire Protection Company. On 10-27-97 DFM (b) (6) met with a service technician from Livingston Fire Protection. The sprinkler heads in the cooking area and from the food preparation area were removed by the service technician and collected as evidence by DFM (b) (6) A total of eight Omega heads were removed from the building. DFM (b) (6) prepared a diagram showing the location of each head. The numbers on the diagram correspond to the exhibit number of each head collected. DFM (b) (6) placed each sprinkler head in a quart evidence container and covered each sprinkler head with water drained from the building sprinkler system. The heads were submitted to the United States Consumer Product Safety Commission for testing. The results of the testing have not been received by this investigator.

OFFICE OF THE STATE FIRE MARSHAL **SUPPLEMENT REPORT**

PAGE	OF	1. COMPLAINT CONTROL NO.
1	2	OSFM—17–97043

VICTIM, COMPLAINANT, OCCUPANT OR ARRESTEE (LAST, FIRST, MIDDLE): Kent Manor Inn 500 Kent Manor Dr. – Stevensville

INCIDENT, OFFENSE OR CHARGE ON ORIGINAL REPORT

CORRECT INCIDENT OR OFFENSE CLASS

CHANGED? ☐ YES

MULTIPLE CLEAR-UP ☐ YES ☐ NO

NARRATIVE

ITEM NO.

On October 28, 1997 the writer, accompanied by DFM (b) (6) of this Office, returned to the scene of the fire at the above referenced location. This fire incident occurred in the ground floor Kitchen of the above referenced property at 0250 hrs. on October 27, 1997. The cause of the fire is currently under investigation by DFM (b) (6) The purpose of this inspection was to review the location and operation of automatic sprinklers installed in this area of the building.

This building is a three-story structure of wood frame construction with automatic sprinkler protection provided throughout in accordance with the protection of residential properties. Although the actual installation of this system predated the adoption of NFPA 13R, the system design was intended to provide the level of protection intended for installation in residential properties including the use of residential style sprinklers, limited water supplies, and elimination of protection from unoccupied spaces. This building was converted from a single-family residence to a hotel occupancy with 24 guest rooms and dining room in 1987. At that time, automatic wet pipe sprinkler protection supplied by a 150 gpm @ 95 psi electrically driven fire pump and on-site water storage tank was installed as described herein. A static pressure of 80 psi was maintained in the system at all times by a small jockey pump installed as a part of this system. Since that date, several additions and modifications have been completed to the system, but not documented by this office. Sprinklers installed in the area of fire origin were Central C-1 Omega heads on CPVC pipe, and located beneath a smooth, flat horizontal ceiling of drywall construction.

The sprinkler closest to the origin of the fire was installed approximately 1 ft. from that point. The exhaust duct from the kitchen hood was approximately 1-2 in. from the side of this sprinkler and located on the side of the sprinkler opposite the point of fire origin. The top of this duct was approximately 3 in. below the sprinkler deflector and extended 6 in. to 8 in. below that level. This sprinkler did not activate at the time of the fire. The next closest sprinkler was installed at a horizontal distance of approximately 11 ft. 6 in. from the point of fire origin. This sprinkler was positioned adjacent to a 2 in. metal channel used to support a suspended rack for the hanging storage of cooking utensils, with no obvious obstructions. This sprinkler did not activate at the time of the fire, however a fixed temperature heat detector installed adjacent to this sprinkler did activate and sounded the building fire alarm. The next closest sprinkler was installed at an additional 7 ft. horizontally away from the point of fire origin with no horizontal or vertical obstructions. This sprinkler did activate at the time of the fire. The next closest sprinkler was installed approximately 8 ft. horizontally and at an angle of 90 degrees to the point of fire origin. This sprinkler did not activate. The next closest sprinkler was installed 8 ft. from the fourth described sprinkler in a direction toward the point of fire origin, but on the opposite side of the kitchen commercial-style cooking equipment and full height partition from that point. This sprinkler did activate at the time of the fire. The remaining sprinklers in the room were at greater distances from the point of fire origin, and did not activate at the time of the fire. There were no horizontal or vertical obstructions to the fourth or fifth sprinklers described herein. (Also see attached diagram).

48. Date Supplemental Report Due

49. Initial Status	50. Initial Investigator	I.D. Number	51. Date
☐ Open ☐ Suspended ☐ Unfounded ☐ Closed	(b) (6) (b) (6)	1034	10/29/97

52. Supervisor Status	53. Recommended	54. Reviewing Supervisor	I.D. Number	55. Date
☐ Agree ☐ Disagree	☐ Suspend ☐ Investigation			

	56. Investigation Supervisor	I.D. No.	57. Date	58. Assigned Investigator	59. Date

60. ☐ NCIC Entered ☐ Miles Entered ☐ NCIC Cleared ☐ Miles Cleared	61. Final Status (Check One) ☐ Open ☐ Suspended ☐ Closed		62. Hours 2

DPSCS-SFMP 013 (REV. 7/90)

Related Report Numbers

WHITE—Office File Copy • CANARY—Investigator Copy

Seven sprinklers, including all of those described above, were removed from the room of fire origin by service personnel from Livingston Fire Protection Co. An additional sprinkler was removed from the corridor adjacent to the kitchen. The purpose of this sprinkler was to act as a control for any testing that is to be conducted. All such sprinklers were placed in metal evidence containers and immersed in water drawn from the building sprinkler system. These sprinklers were forwarded to the Consumer Product Safety Commission Laboratory in Washington DC for operational testing. The results of those tests have not been received by this office at this time.

Further investigation on the cause and origin of the fire, and the circumstance of automatic sprinkler operation continue at this time.

OFFICE OF THE STATE FIRE MARSHAL **SUPPLEMENT REPORT**

PAGE OF	1. COMPLAINT CONTROL NO.
1 1	OSFM—17-9704 3

VICTIM, COMPLAINANT, OCCUPANT OR ARRESTEE (LAST, FIRST, MIDDLE)
Kent Manor Inn 500 Kent Manor Dr. - Stevensville

INCIDENT, OFFENSE OR CHARGE ON ORIGINAL REPORT

CORRECT INCIDENT OR OFFENSE CLASS

CHANGED? ☐ YES

MULTIPLE CLEAR-UP ☐ YES ☐ NO

NARRATIVE

ITEM NO.

At the direction of Fire Marshal (b) (6) on October 29, 1997 the writer met BC (b) (6) Capt. (b) (6) and three other representatives of the Fairfax County Fire and Rescue Department at the above referenced location. The purpose of this meeting was to describe the results of the sprinkler operation at the time of the 10/27/97 fire incident, as well as to provide information regarding the general fire protection measures installed at this location.

It was understood that this information will be used by that department as a part of the study regarding the operational failures of Central Omega residential sprinklers. During this meeting, a general survey, including photographs, was made of the kitchen area and selected locations in the building where various fire protection system equipment was installed. All information was recorded by representatives of Fairfax County, who also requested copies of all official reports from this office concerning this incident, and offered assistance available from that department regarding the study of Omega sprinkler operations.

No further action in this regard is required by this office at this time.

48. Date Supplemental Report Due

49. Initial Status	50. Initial Investigator	I.D. Number	51. Date
☐ Open ☐ Suspended ☐ Unfounded ☐ Closed	(b) (6) (b) (6)	1034	10/30/97

52. Supervisor Status	53. Recommended	54. Reviewing Supervisor	I.D. Number	55. Date
☐ Agree ☐ Disagree	☐ Suspend ☐ Investigation			

56. Investigation Supervisor	I.D. No.	57. Date	58. Assigned Investigator	59. Date

60. ☐ NCIC Entered ☐ Miles Entered ☐ NCIC Cleared ☐ Miles Cleared	61. Final Status (Check One) ☐ Open ☐ Suspended ☐ Closed			62. Hours
				3

DPSCS-SFMP 013
(REV. 7/90)

Related Report Numbers

WHITE—Office File Copy • CANARY—Investigator Copy

MARYLAND STATE POLICE

REQUEST FOR LABORATORY EXAMINATION-CHAIN OF CUSTODY LOG

CRIME LABORATORY FILE #

AGENCY TELEPHONE #: 410-822-7609

INSTALLATION/AGENCY: MD. Fire Marshal (b) (6)

CASE #: 17-97043

PROPERTY HELD #: N/A

SUSPECT: N/A

VICTIM: Kent Manor Inn

OFFENSE: Building Fire

DATE OF OFFENSE: 10-27-97

COUNTY: Queen Anne's

TYPE EXAMINATION REQUESTED: None - Chain of Custody ONLY

EXAMINATION REQUESTED BY: (b) (6) FM-1005 (b) (6)

TRACE EVIDENCE ONLY

(SEX, RACE, D.O.B OF VICTIM AND/OR SUSPECT - BRIEFLY DESCRIBE LOCATION OF CRIME SCENE AS TO OWNERSHIP AND IMMEDIATE SURROUNDINGS - EXAMPLE - BEDROOM, CAR, WOODS, ETC.)

LIST OF ARTICLES

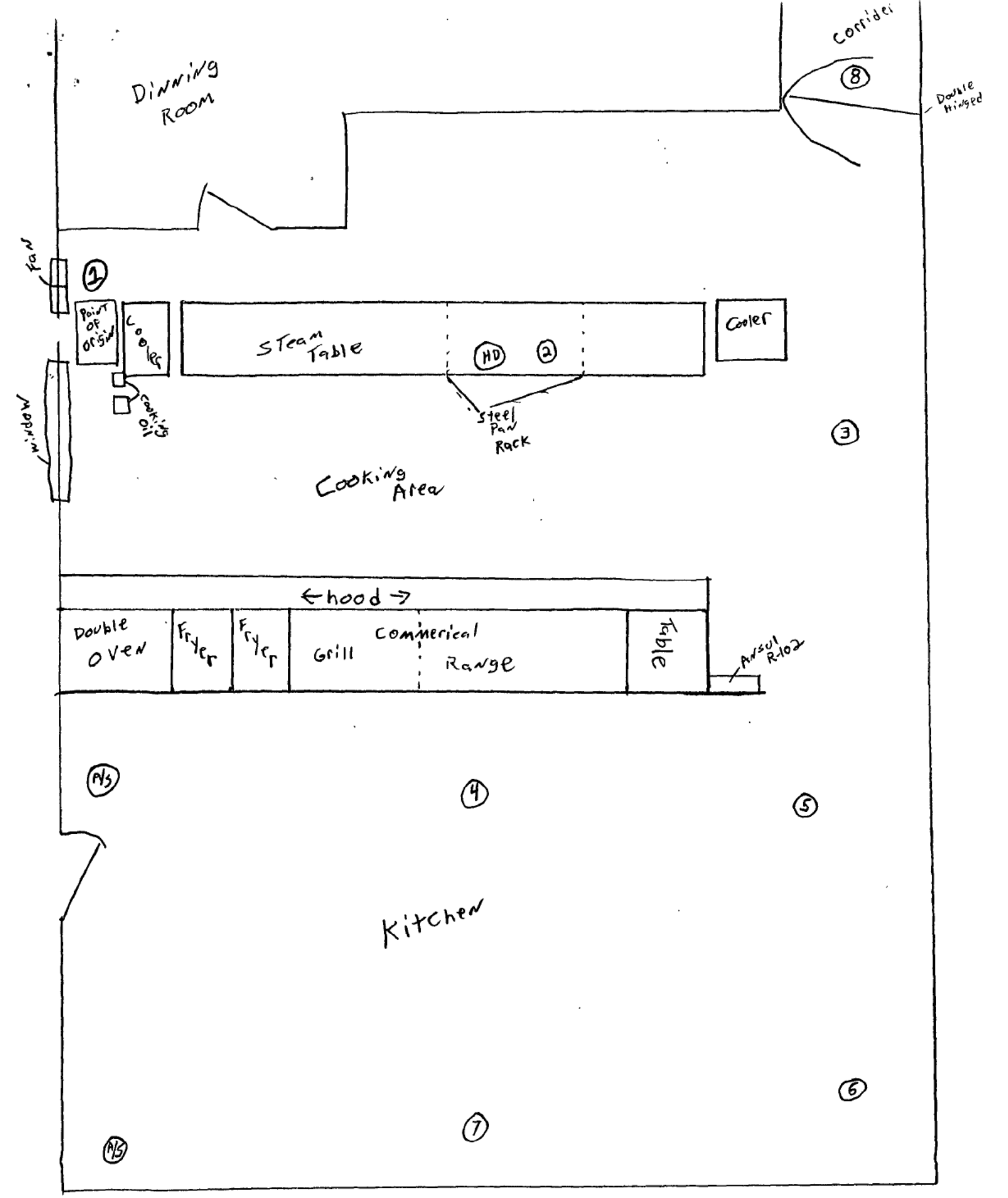
1) one quart can containing Omega sprinkler head.
2) one quart can containing Omega sprinkler head
3) one quart can containing Omega sprinkler head
4) one quart can containing Omega sprinkler head
5) one quart can containing Omega sprinkler head
6) one quart can containing Omega sprinkler head
7) one quart can containing Omega sprinkler head
8) one quart can containing Omega sprinkler head.

* - All cans contain water drained from sprinkler system. All heads are submerged in water.

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THE EVIDENCE SUBMITTED IN THIS CASE, AND LISTED ABOVE, WHILE IN MY CUSTODY, REMAINED AND WAS DELIVERED IN ESSENTIALLY THE SAME CONDITION AS WHEN I RECEIVED IT, EXCEPT THAT MATERIAL OR PORTION THEREOF CONSUMED IN THE ANALYTICAL PROCESS AT THE CRIME LABORATORY, AND THAT I RECEIVED AND DELIVERED IT TO THE PERSON INDICATED ON THE DATE AND TIME STATED.

EVIDENCE RECEIVED FROM	DATE/TIME	EVIDENCE RECEIVED BY	EVIDENCE RELEASED TO	DATE/TIME
Scene	10/27/97 1430	(b) (6)	(b) (6)	10/28/97
(b) (6)	10/27/97 1515			

MSP FORM # 67 (3-81)

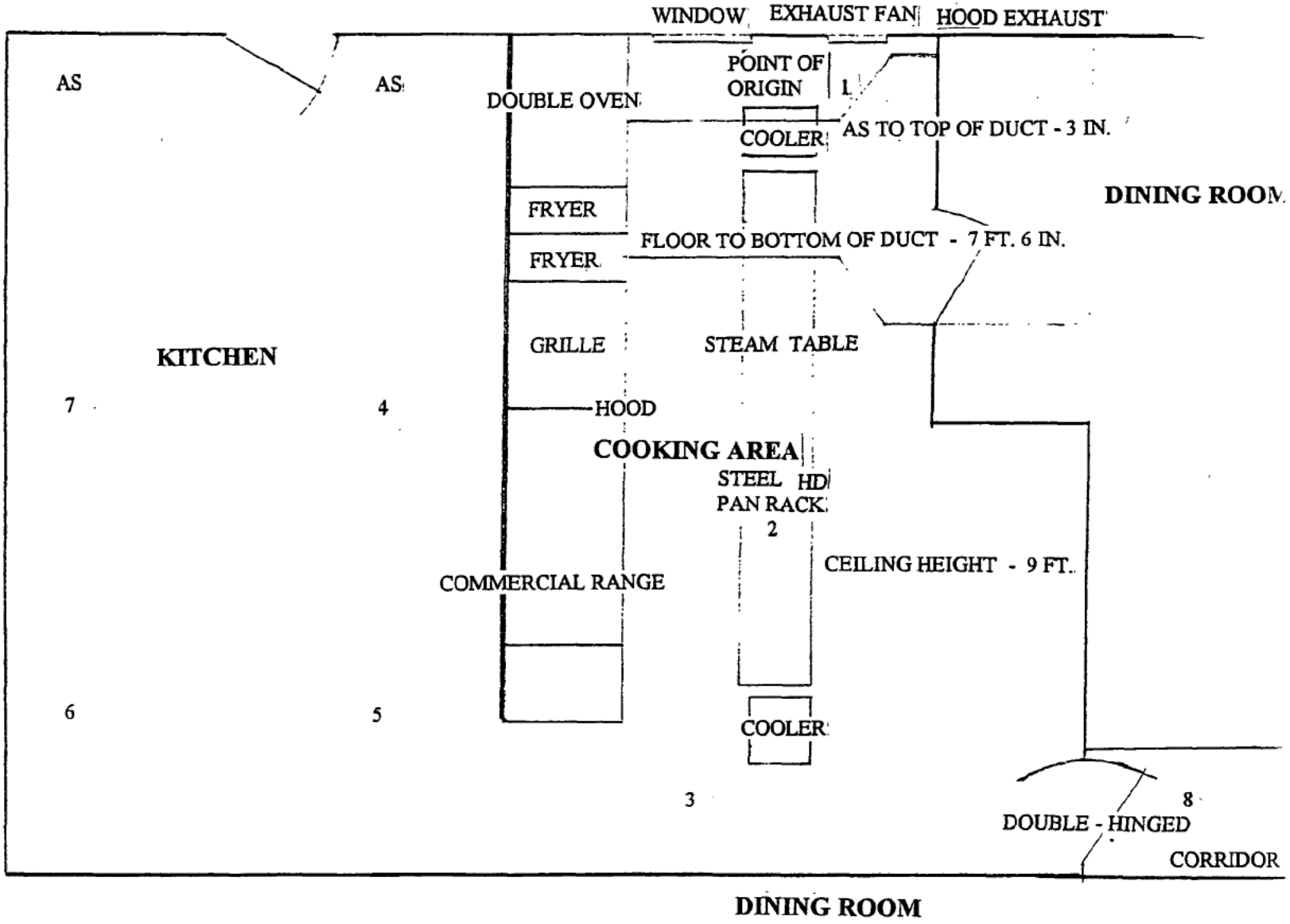


(1) = sprinkler head = # = exhibit

(HD) = Heat Detector

NOT TO Scale

Kent Manor Inn
#17-97043
10-27-97
DFM (b) (6)



SCALE ¼ IN. = 1 FT.
EQUIPMENT SIZES AND LOCATIONS NOT TO SCALE

1 - 8 - SPRINKLERS REMOVED AS EXHIBITS
AS - AUTOMATIC SPRINKLERS
HD - HEAT DETECTOR

KENT MANOR INN - # 17-97043
500 KENT MANOR DRIVE
OCTOBER 27, 1997

10/31/97 [redacted]

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION
1998 MAY -7 P 4: 04

U.S. CONSUMER PRODUCT SAFETY COMMISSION
WASHINGTON, D.C. 20207-0001

OFFICE OF COMPLIANCE
Legal Division

Deborah S. Orlove
Trial Attorney
Tel: 301-504-0626 ext. 1347
Fax: 301-504-0359

May 7, 1998

VIA CERTIFIED UNITED STATES MAIL

J. Gordon Cooney, Jr., Esq.
Thomas P. Hogan, Jr., Esq.
Emily J. Lawrence, Esq.
MORGAN, LEWIS & BOCKIUS LLP
2000 One Logan Square
Philadelphia, PA 19103

Re: ***In the Matter of Central Sprinkler Corp. and Central Sprinkler Co.*, CPSC Docket No. 98-2**
Complaint Counsel's Responses to Respondents' First Request for Production of Documents

Dear Counsel:

Pursuant to the parties' continuing duty to supplement discovery responses as mandated by 16 C.F.R. § 1025.31(f), enclosed please find a supplemental package of documents responsive to Respondents' First Request for Production of Documents. Bates pages 2141 - 2212 are or may be responsive to Request Nos. 1, 9, 48, 49, 50, 51, 52, 53 and 60; Bates page 2213 may be responsive to Request Nos. 42 and/or 43; Bates pages 2214 - 2215 are responsive to Request No. 4; Bates page 2216 is responsive to Request No. 5; and Bates pages 2217 - 2227 are or may be responsive to Request Nos. 1, 9, 48, 49, 50, 51, 52, 53 and 60. All documents are provided without waiving objections stated in Complaint Counsel's Responses to Respondents' First Request for Production of Documents.

As we indicated in our letter yesterday, a number of documents that Complaint Counsel has that may be responsive to Respondents' requests were provided to Complaint Counsel by third parties. As you know, Complaint Counsel is prohibited by statute from disclosing any information received from third parties that may be confidential commercial information or trade secret. To ensure speedy disclosure of information to Respondents, Complaint Counsel has attempted to negotiate with the third parties directly to obtain permission to provide all such information to Central.

At this time, we have received such permission from two parties - Marriott and Sheraton. The Marriott documents were produced in the box of documents forwarded to you

last week. Having just received final permission from counsel for Sheraton, those documents have been Bates stamped and copied, and are being produced to you at this time.

We continue to await a final response regarding possible claims of confidentiality and/or trade secret from counsel for a testing laboratory that has provided information to Complaint Counsel regarding the Omega. Complaint Counsel will prepare and forward those documents to Respondents immediately upon receipt of permission to disclose. If such permission is not granted by next Wednesday, May 13, 1998, we will forward the documents to the Presiding Officer for a determination of whether the third party's claims are valid, and for appropriate disclosure procedures.

You indicated in your correspondence your desire to obtain a copy of the data compilation prepared by Complaint Counsel with respect to Omega failures. Although Complaint Counsel has provided you with the underlying test data upon which its compilation is based, and although the compilation is continually evolving and is Complaint Counsel and its staff's work product, in the interest of full disclosure, Complaint Counsel has included in this supplemental response a copy of its compilation as it existed at the time the complaint was filed, with probability range categories (which are Complaint Counsel's analysis of the compilation) redacted.

Sincerely,

Deborah S. Orlove

Deborah S. Orlove, Esq.
Complaint Counsel

cc: The Honorable William B. Moran
Sayde Dunn, Secretary
Michael F. Healy, Esq.
John C. Fenningham, Esq.

dso/discov3ltr

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION

1998 MAY -7 P 4:04

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents	)	

COMPLAINT COUNSEL'S NOTICE OF SERVICE OF SUPPLEMENTAL DOCUMENTS IN RESPONSE TO RESPONDENTS' FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS

Pursuant to its continuing duty to supplement discovery responses as mandated by 16 C.F.R. § 1025.31(f), Complaint Counsel hereby provides supplemental documents in response to Respondents' First Request for Production of Documents and Things.

DATED: May 7, 1998

Deborah S. Orlove

Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.

Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, Maryland 20814
301-504-0626

supp.doc

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, **COMPLAINT COUNSEL'S NOTICE OF SERVICE OF SUPPLEMENTAL DOCUMENTS IN RESPONSE TO RESPONDENTS' FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS** was filed with the Secretary of the Commission, and deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

J. Gordon Cooney, Jr., Esq.
Thomas P. Hogan, Jr., Esq.
Emily J. Lawrence, Esq.
MORGAN, LEWIS & BOCKIUS LLP
2000 One Logan Square
Philadelphia, PA 19103
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Pursuant to Respondents' instructions, documents were served only upon J. Gordon Cooney, Jr., Esq., at the above address.

A copy was also served on the Presiding Officer pursuant to 16 C.F.R. § 1025.31(h) at:

The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
401 M St., S.W.
Mail Code 1900 L
Washington, DC 20460

Dated: 5/7/98

certif.sup

The SAS System

OBS	LEVEL		SITES	SAMPSIZE	FAILURES	P
1	OVERALL(7)		376	5858	2377	0.406
2	OVERALL(20)		376	5858	2128	0.363
3	OVERALL(40)		376	5858	1767	0.302
4	OVERALL(60)		376	5858	1454	0.248
5	OVERALL(80)		376	5858	1220	0.208
6	OVERALL(100)		376	5858	1009	0.172
7	COPPER		12	110	27	0.245
8	PLASTIC		11	334	120	0.359
9	STEEL		170	3057	1143	0.374
10	UNKNOWN		183	2357	1087	0.461
11	CENTRAL		169	1999	993	0.497
12	FAIRFAX		12	314	130	0.414
13	FM		96	843	251	0.298
14	UL		143	2702	1003	0.371
15	CENTRAL	STEEL	47	307	115	0.375
16	CENTRAL	UNKNOWN	122	1692	878	0.519
17	FAIRFAX	COPPER	1	8	7	0.875
18	FAIRFAX	PLASTIC	4	238	95	0.399
19	FAIRFAX	STEEL	7	68	28	0.412
20	FM	STEEL	41	235	61	0.260
21	FM	UNKNOWN	55	608	190	0.313
22	UL	COPPER	11	102	20	0.196
23	UL	PLASTIC	7	96	25	0.260
24	UL	STEEL	119	2447	939	0.384
25	UL	UNKNOWN	6	57	19	0.333
26	1983		6	48	26	0.542
27	1984		17	63	16	0.254
28	1985		41	355	21	0.059
29	1986		61	385	119	0.309
30	1987		91	956	715	0.748
31	1988		82	723	393	0.544
32	1989		117	884	297	0.336

The SAS System

OBS	LEVEL		SITES	SAMPSIZE	FAILURES	P
33	1990		101	799	341	0.427
34	1991		51	322	147	0.457
35	1992		36	277	141	0.509
36	1993		57	304	41	0.135
37	1994		39	231	34	0.147
38	1995		35	227	39	0.172
39	1996		30	151	0	0.000
40	1997		4	14	0	0.000
41		PLASTIC	3	14	6	0.429
42		STEEL	14	31	7	0.226
43		UNKNOWN	11	74	34	0.459
44	1983	COPPER	1	1	0	0.000
45	1983	PLASTIC	1	1	1	1.000
46	1983	STEEL	1	1	0	0.000
47	1983	UNKNOWN	3	45	25	0.556
48	1984	COPPER	2	9	4	0.444
49	1984	STEEL	11	37	11	0.297
50	1984	UNKNOWN	4	17	1	0.059
51	1985	COPPER	5	17	6	0.353
52	1985	STEEL	22	216	11	0.051
53	1985	UNKNOWN	14	122	4	0.033
54	1986	COPPER	8	26	11	0.423
55	1986	PLASTIC	2	16	13	0.813
56	1986	STEEL	31	222	58	0.261
57	1986	UNKNOWN	20	121	37	0.306
58	1987	COPPER	2	7	5	0.714
59	1987	PLASTIC	1	15	11	0.733
60	1987	STEEL	32	378	297	0.786
61	1987	UNKNOWN	56	556	402	0.723
62	1988	PLASTIC	4	128	68	0.531
63	1988	STEEL	26	144	62	0.431
64	1988	UNKNOWN	52	451	263	0.583

The SAS System

OBS	LEVEL	SITES	SAMPSIZE	FAILURES	P
65	1989 COPPER	1	2	1	0.500
66	1989 PLASTIC	4	100	21	0.210
67	1989 STEEL	55	392	129	0.329
68	1989 UNKNOWN	57	390	146	0.374
69	1990 COPPER	2	7	0	0.000
70	1990 PLASTIC	1	3	0	0.000
71	1990 STEEL	57	522	199	0.381
72	1990 UNKNOWN	41	267	142	0.532
73	1991 COPPER	1	1	0	0.000
74	1991 STEEL	37	262	129	0.492
75	1991 UNKNOWN	13	59	18	0.305
76	1992 COPPER	1	1	0	0.000
77	1992 PLASTIC	1	24	0	0.000
78	1992 STEEL	30	233	136	0.584
79	1992 UNKNOWN	4	19	5	0.263
80	1993 COPPER	4	31	0	0.000
81	1993 PLASTIC	1	9	0	0.000
82	1993 STEEL	36	202	41	0.203
83	1993 UNKNOWN	16	62	0	0.000
84	1994 COPPER	1	8	0	0.000
85	1994 STEEL	24	168	29	0.173
86	1994 UNKNOWN	14	55	5	0.091
87	1995 STEEL	28	178	34	0.191
88	1995 UNKNOWN	7	49	5	0.102
89	1996 PLASTIC	1	24	0	0.000
90	1996 STEEL	20	57	0	0.000
91	1996 UNKNOWN	9	70	0	0.000
92	1997 STEEL	4	14	0	0.000
93	-1990	310	4332	1975	0.456
94	1991+	138	1526	402	0.263
95	-1990 COPPER	10	69	27	0.391
96	-1990 PLASTIC	9	277	120	0.433

The SAS System

OBS	LEVEL		SITES	SAMPSIZE	FAILURES	P
97	-1990 STEEL		126	1943	774	0.398
98	-1990 UNKNOWN		165	2043	1054	0.516
99	1991+ COPPER		4	41	0	0.000
100	1991+ PLASTIC		3	57	0	0.000
101	1991+ STEEL		90	1114	369	0.331
102	1991+ UNKNOWN		41	314	33	0.105
103	AC		5	36	31	0.861
104	C-1		57	742	372	0.501
105	C-1A		171	2271	906	0.399
106	C-1A PRO		4	9	4	0.444
107	C1A/HEC12		5	73	46	0.630
108	EC-10		1	5	5	1.000
109	EC-20		28	160	53	0.331
110	EC-20A		46	604	225	0.373
111	FC		15	74	40	0.541
112	HEC-12		96	660	204	0.309
113	HEC-20		15	85	12	0.141
114	M		3	8	6	0.750
115	PRO-M		11	58	57	0.983
116	R-1		12	110	10	0.091
117	R-1/HEC-12		1	22	1	0.045
118	R-1M		3	23	0	0.000
119		UNKNOWN	67	918	405	0.441
120	AC	STEEL	4	24	19	0.792
121	AC	UNKNOWN	1	12	12	1.000
122	C-1	COPPER	3	11	6	0.545
123	C-1	PLASTIC	2	13	8	0.615
124	C-1	STEEL	35	565	296	0.524
125	C-1	UNKNOWN	17	153	62	0.405
126	C-1A	COPPER	5	24	0	0.000
127	C-1A	PLASTIC	3	65	24	0.369
128	C-1A	STEEL	94	1539	560	0.364

The SAS System

OBS	LEVEL		SITES	SAMPSIZE	FAILURES	P
129	C-1A	UNKNOWN	69	643	322	0.501
130	C-1A PRO	STEEL	2	5	4	0.800
131	C-1A PRO	UNKNOWN	2	4	0	0.000
132	C1A/HEC12	UNKNOWN	5	73	46	0.630
133	EC-10	COPPER	1	5	5	1.000
134	EC-20	COPPER	4	15	7	0.467
135	EC-20	PLASTIC	1	2	1	0.500
136	EC-20	STEEL	13	100	24	0.240
137	EC-20	UNKNOWN	10	43	21	0.488
138	EC-20A	COPPER	1	3	0	0.000
139	EC-20A	PLASTIC	4	190	71	0.374
140	EC-20A	STEEL	32	335	93	0.278
141	EC-20A	UNKNOWN	9	76	61	0.803
142	FC	COPPER	1	1	1	1.000
143	FC	STEEL	14	73	39	0.534
144	HEC-12	COPPER	9	39	2	0.051
145	HEC-12	PLASTIC	5	38	4	0.105
146	HEC-12	STEEL	34	226	55	0.243
147	HEC-12	UNKNOWN	48	357	143	0.401
148	HEC-20	COPPER	3	9	4	0.444
149	HEC-20	PLASTIC	1	2	0	0.000
150	HEC-20	STEEL	9	55	7	0.127
151	HEC-20	UNKNOWN	2	19	1	0.053
152	M	STEEL	3	8	6	0.750
153	PRO-M	COPPER	1	3	2	0.667
154	PRO-M	PLASTIC	1	12	12	1.000
155	PRO-M	STEEL	5	30	30	1.000
156	PRO-M	UNKNOWN	4	13	13	1.000
157	R-1	STEEL	9	87	10	0.115
158	R-1	UNKNOWN	3	23	0	0.000
159	R-1/HEC-12	UNKNOWN	1	22	1	0.045
160	R-1M	PLASTIC	1	12	0	0.000
161	R-1M	STEEL	1	10	0	0.000
162	R-1M	UNKNOWN	1	1	0	0.000

CENTRAL SPRINKLER FAILURE RATES
AT 7 PSI OF PRESSURE

OBS	LEVEL	SITES	SAMPSIZE	FAILURES	P
1	OVERALL(7)	376	5858	2377	0.406
2	COPPER	12	110	27	0.245
3	PLASTIC	11	334	120	0.359
4	STEEL	170	3057	1143	0.374
5	UNKNOWN	183	2357	1087	0.461
6	-1990	310	4332	1975	0.456
7	1991+	138	1526	402	0.263
8	-1990 COPPER	10	69	27	0.391
9	-1990 PLASTIC	9	277	120	0.433
10	-1990 STEEL	126	1943	774	0.398
11	-1990 UNKNOWN	165	2043	1054	0.516
12	1991+ COPPER	4	41	0	0.000
13	1991+ PLASTIC	3	57	0	0.000
14	1991+ STEEL	90	1114	369	0.331
15	1991+ UNKNOWN	41	314	33	0.105

CENTRAL SPRINKLER FAILURE RATES
AT 20 PSI OF PRESSURE

OBS	LEVEL	SITES	SAMPSIZE	FAILURES	P
1	OVERALL(20)	376	5858	2128	0.363
2	COPPER	12	110	24	0.218
3	PLASTIC	11	334	83	0.249
4	STEEL	170	3057	1058	0.346
5	UNKNOWN	183	2357	963	0.409
6	-1990	310	4332	1760	0.406
7	1991+	138	1526	368	0.241
8	-1990 COPPER	10	69	24	0.348
9	-1990 PLASTIC	9	277	83	0.300
10	-1990 STEEL	126	1943	715	0.368
11	-1990 UNKNOWN	165	2043	938	0.459
12	1991+ COPPER	4	41	0	0.000
13	1991+ PLASTIC	3	57	0	0.000
14	1991+ STEEL	90	1114	343	0.308
15	1991+ UNKNOWN	41	314	25	0.080

CENTRAL SPRINKLER FAILURE RATES
AT 40 PSI OF PRESSURE

OBS	LEVEL	SITES	SAMPSIZE	FAILURES	P
1	OVERALL(40)	376	5858	1767	0.302
2	COPPER	12	110	20	0.182
3	PLASTIC	11	334	51	0.153
4	STEEL	170	3057	879	0.288
5	UNKNOWN	183	2357	817	0.347
6	-1990	310	4332	1454	0.336
7	1991+	138	1526	313	0.205
8	-1990 COPPER	10	69	20	0.290
9	-1990 PLASTIC	9	277	51	0.184
10	-1990 STEEL	126	1943	586	0.302
11	-1990 UNKNOWN	165	2043	797	0.390
12	1991+ COPPER	4	41	0	0.000
13	1991+ PLASTIC	3	57	0	0.000
14	1991+ STEEL	90	1114	293	0.263
15	1991+ UNKNOWN	41	314	20	0.064

CENTRAL SPRINKLER FAILURE RATES
AT 60 PSI OF PRESSURE

OBS	LEVEL	SITES	SAMPSIZE	FAILURES	P
1	OVERALL(60)	376	5858	1454	0.248
2	COPPER	12	110	17	0.155
3	PLASTIC	11	334	37	0.111
4	STEEL	170	3057	710	0.232
5	UNKNOWN	183	2357	690	0.293
6	-1990	310	4332	1190	0.275
7	1991+	138	1526	264	0.173
8	-1990 COPPER	10	69	17	0.246
9	-1990 PLASTIC	9	277	37	0.134
10	-1990 STEEL	126	1943	459	0.236
11	-1990 UNKNOWN	165	2043	677	0.331
12	1991+ COPPER	4	41	0	0.000
13	1991+ PLASTIC	3	57	0	0.000
14	1991+ STEEL	90	1114	251	0.225
15	1991+ UNKNOWN	41	314	13	0.041

CENTRAL SPRINKLER FAILURE RATES
AT 80 PSI OF PRESSURE

OBS	LEVEL	SITES	SAMPSIZE	FAILURES	P
1	OVERALL(80)	376	5858	1220	0.208
2	COPPER	12	110	9	0.082
3	PLASTIC	11	334	31	0.093
4	STEEL	170	3057	577	0.189
5	UNKNOWN	183	2357	603	0.256
6	-1990	310	4332	998	0.230
7	1991+	138	1526	222	0.145
8	-1990 COPPER	10	69	9	0.130
9	-1990 PLASTIC	9	277	31	0.112
10	-1990 STEEL	126	1943	367	0.189
11	-1990 UNKNOWN	165	2043	591	0.289
12	1991+ COPPER	4	41	0	0.000
13	1991+ PLASTIC	3	57	0	0.000
14	1991+ STEEL	90	1114	210	0.189
15	1991+ UNKNOWN	41	314	12	0.038

CENTRAL SPRINKLER FAILURE RATES
AT 100 PSI OF PRESSURE

OBS	LEVEL	SITES	SAMPSIZE	FAILURES	P
1	OVERALL(100)	376	5858	1009	0.172
2	COPPER	12	110	9	0.082
3	PLASTIC	11	334	27	0.081
4	STEEL	170	3057	449	0.147
5	UNKNOWN	183	2357	524	0.222
6	-1990	310	4332	832	0.192
7	1991+	138	1526	177	0.116
8	-1990 COPPER	10	69	9	0.130
9	-1990 PLASTIC	9	277	27	0.097
10	-1990 STEEL	126	1943	284	0.146
11	-1990 UNKNOWN	165	2043	512	0.251
12	1991+ COPPER	4	41	0	0.000
13	1991+ PLASTIC	3	57	0	0.000
14	1991+ STEEL	90	1114	165	0.148
15	1991+ UNKNOWN	41	314	12	0.038

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MAY 15 1998

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
	)	
CENTRAL SPRINKLER CORP.,	)	
	)	
and	)	**CPSC DOCKET NO. 98-2**
	)	
CENTRAL SPRINKLER CO.,	)	
	)	
Respondents	)	
	)	

ORDER ON MOTION TO DISMISS COMPLAINT FOR LACK OF JURISDICTION AND FOR INSUFFICIENT PLEADINGS

Respondents Central Sprinkler Corporation and Central Sprinkler Company (collectively, "Central") filed, on March 26, 1998, a Motion to Dismiss the Administrative Complaint in this matter on the basis that the Consumer Product Safety Commission ("CPSC") lacks jurisdiction over Central's Omega-brand fire sprinkler heads. Respondents also assert that the Complaint fails to comport with the requirements of 16 C.F.R. § 1025.11(b)(3) by failing to sufficiently inform Central with reasonable definiteness of the factual basis of the allegations of violation or hazard, an omission also requiring dismissal or at least amendment of the Complaint. Complaint Counsel for CPSC filed a response to Central's Motion on April 13, 1998. Thereafter, Central filed a Motion for Leave to Submit Reply Brief in Support of the Motion to Dismiss. On April 21, 1998, I granted this Motion, pursuant to the discretion afforded at 16 C.F.R. § 1025.23 (c) and additionally permitted CPSC the opportunity to respond to Central's Reply Brief. Complaint

Counsel's response was filed on May 4, 1998.

Central maintains that sprinkler heads are not consumer products. Rather, along with fire sprinkler systems, they are an integral part of the buildings in which they are installed. In its view, the aim of the Consumer Product Safety Act ("CPSA" or "Act") is limited to regulating those common household products which present a danger in the consumers' homes. Noting that sprinkler systems are not customarily marketed, sold, distributed or used by consumers, it is Central's position that it was not Congress's intent for the Consumer Product Safety Act to reach such products, as they are extensively regulated by state and local authorities. Motion at 1-2.

Central argues that as its various models of its Omega-brand sprinkler heads "are designed to be incorporated in integrated fire-suppression systems built into a wide range of *residential*, commercial and industrial structures" (emphasis added), the entire fire suppression system effectively becomes merged with the structure, in a manner similar to framing, ventilation, or wiring. Id. at 3. Central also believes that its method of selling its sprinkler heads is a relevant consideration, as its marketing approach is selective, being aimed at the affected industry or trade, and to the professional contractors within that field, and because it is devoid of "customary consumer marketing" techniques such as jingles and celebrity spokespersons. Id. at 5.

Turning to the Act's statutory definition of "consumer product," including its specific listed exceptions, Central notes that, under the first listed exception, a product must be customarily produced or distributed for consumer sale or use. Taking the position that the product in question must be "available for separate acquisition by consumers," Central observes that its sprinkler heads are not available in retail outlets and are only sold to professional

contractors. From this, Central deduces that there must be significant marketing of the product to consumers as a distinct article of commerce. Id. at 8-9. Continuing with its argument in this regard, Central notes that its sprinklers are designed for use in commercial or industrial settings, and that there is only occasional crossover of its industrial products into consumer use.

Central also argues that consumers do not *use* its sprinkler heads, in the sense of "enjoying, holding, occupying, or actively availing oneself of a product," and infers that a product must be available for purchase and use by the general public "off the shelf" at a retail store outlet. Id. While conceding that the term "use" is not defined, Central looks to the legislative history for assistance, noting that the Senate version of the Act included "exposure" to the product but that the "exposure" language was not included in the final conference version. "Use," in its view, requires some sort of active consumer interaction with the product. As an example, it points with approval to State Fair of Texas v. United States Consumer Product Safety Commission, 650 F.2d 1324, 1329 (5th Cir. 1981) ("State Fair II"), a case in which consumers "used" the gondola skyride by taking a ride on the amusement. With sprinkler heads, by contrast, Consumers do not "interact with, enjoy, hold, occupy or actively avail themselves of the sprinkler system or sprinkler heads." Motion at 11.

In addition to the proper "use" of the product at issue, Central maintains that another relevant consideration is *where* the product is used. Noting that the statutory definition refers to use "in or around a household, residence or school, in recreation or otherwise," Id. at 12. Central, citing to Consumer Product Safety Commission v. Anaconda Company, 593 F.2d 1314 (D.C.

Cir. 1979)[1] ("Anaconda"), asserts that the definition does not encompass the house or building itself nor products which lose their identity by virtue of their incorporation into such structures and that, accordingly, the D.C. Circuit thereby rejected arguments that the Act's jurisdiction extends to every such incorporated component part of a dwelling.

Central also refers to state and local building and fire codes, professional organizations that have developed model building codes for fire safety and a decision of the U.S. Tax Court, as additional authorities for the proposition that sprinkler systems are an integral part of the buildings in which they are installed.

Observing that the Commission's authority to seek adjudicated relief is less broad than its authority to engage in investigation and rulemaking, Central argues that if it is determined that fire sprinkler heads are within its adjudicative authority, such a conclusion would infer that the Commission's authority in the investigative and rulemaking realms extends to sprinkler systems, a conclusion contrary to the intent of Congress that the Commission, with its limited resources, focus only on those areas clearly intended for its oversight, and not intrude into areas already well regulated on the state and local level.

Alternatively, Central argues that, at a minimum, those Omega-brand sprinkler heads installed into commercial and industrial buildings are beyond the CPSC's jurisdiction. Conceding that some of its "residential" sprinkler heads may also be installed in commercial and

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[1]Noting that the Third Circuit in Kaiser Alum. and Chem. Co. v. Consumer Product Safety Comm'n, 574 F. 2d 178 (3rd Cir. 1978), reached a contrary result holding that branch circuit wiring was a consumer product, Central argues that the Third Circuit wrongly construed the statutory provision and that, in any event, the case is distinguishable as consumers there "used" the wiring systems in order to enjoy appliances that consume electricity. Motion at 14.

industrial facilities, Central takes the position that their location matters because the Act was intended to focus on dangerous *household* products. In support of this position, Central refers to the Act's proscription over risks of injury associated with a consumer product where OSHA actions could eliminate or reduce the hazards. Central maintains that OSHA has indeed promulgated standards specifically addressing automatic sprinkler systems.

As a separate basis for dismissal of the Complaint, Central asserts that it has not been informed of the factual basis of the alleged defect and that the Complaint also fails to include a list of supporting documentary evidence, in contravention of 16 C.F.R. § 1025.11(b)(3). While made aware that the Complaint alleges that the sprinkler heads fail to operate in a significant number of instances, Central protests that the Complaint fails to inform *how* the sprinklers fail to operate. Central also asserts that the Complaint's "List and Summary of Documentary Evidence" is inadequate because the list was inadequately descriptive and no "comprehensive summary" of the documents on the list was provided.

In response, the CPSC asserts that fire sprinklers are "consumer products" within its jurisdiction, relying upon the definition of that term under Section 3 of the Act (15 U.S.C. § 2052) and in particular under subsection (a)(1)(ii). CPSC also notes that this is remedial legislation and consequently is to be liberally construed in a manner consistent with its intended purpose of protecting consumers from unsafe products. In this respect, CPSC points to expansive constructions by the Commission with their inclusion of fire extinguishers, elevators, portable gas heaters, and fire alarm equipment as consumer products and by the courts, with their inclusion of glazing materials and aluminum wiring within the term. In its view, the key requirement is that the product be a distinct and final article of commerce, not an article that

exists only at an intermediate stage of production.

CPSC also maintains that Central blurs that distinction between sprinkler *systems* and the *sprinklers themselves.* In this regard, CPSC disavows jurisdiction over sprinkler *systems* but maintains jurisdiction exists over the sprinklers, a distinction "crucial to the jurisdictional inquiry." Complaint Counsel's Opposition ("Opposition") at 7. CPSC further notes that courts have drawn similar distinctions between a system and its components as, for example, between aluminum wiring and wiring *systems.*

CPSC further asserts that sprinklers qualify as "consumer products" because they are produced or distributed for the personal use, consumption, or enjoyment of consumers. Thus, it argues, while the Act clearly contemplates coverage of an article that is produced or distributed for sale to consumers, *use, consumption or enjoyment by consumers* is also sufficient. For this reason marketing, availability in retail sales, or actual sale to the general public are not prerequisites to jurisdiction. Rather, CPSC maintains, the "true test [is] . . . whether consumers are exposed to the hazards associated with them." Id. at 11. (Emphasis in Opposition.) As the sprinklers at issue have been installed in homes, apartments, nursing homes, hospitals, schools, and recreational facilities, consumers have been exposed to the significant hazard of uncontained fire.

As to Central's assertion that consumers "use" contemplates that they "actively interact" or "manipulate" the product, CPSC notes that other similar products such as smoke detectors require no more interaction or manipulation than sprinklers, and they also only activate in an emergency. From CPSC's perspective, the consumers "use or enjoyment" is their reliance on the devices functioning during a fire. Id. at 13.

Referring to the statutory language that the consumer product be "in or around a permanent or temporary household or residence, a school, in recreation, or otherwise", CPSC asserts that this language is to be construed as an "assurance of comprehensiveness rather than a limitation on jurisdiction."[2] Id. at 13, quoting from ASG Industries, Inc. v. Consumer Product Safety Comm'n, 593 F. 2d 1323, 1328 (D.C. Cir. 1979).

Addressing Central's argument that the sprinklers become merged with the structure in which they are installed and thus become part of the housing itself and thereby excluded from coverage, CPSC refers to the Third Circuit's rejection of that argument on the basis that such an approach would result in the exclusion of many common consumer products, such as dishwashers, furnaces, or lighting fixtures.

As to Central's "partial" jurisdiction argument, CPSC asserts that, factually, the assertion that some of Central's sprinkler models are installed in commercial and industrial settings is inaccurate and that hospitals, schools, shelters and libraries are "commercial" facilities and covered by the statutory language which includes "residence(s), schools, recreational facilities and other places . . . ." Id. at 15.

Responding to Central's assertion that OSHA has supplanted its jurisdiction, CPSC maintains that the mere potential for authority, unexercised, is insufficient for Section 31(a) of the Act to be triggered, that OSHA applies only to the workplace, whereas the sprinklers here are found in a broader range of locations, and that, in any event, current OSHA regulations only apply to sprinkler *systems* and do not address the problem of defective sprinklers. Similarly,

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[2]While substantively unaffected, the quoted language actually provides, "is not a limitation on jurisdiction, but rather an assurance of comprehensiveness."

addressing Central's assertion that the CPSC is precluded from asserting jurisdiction because state and local jurisdictions already regulate the subject, CPSC asserts that these entities again only regulate sprinkler *systems*, not defective *sprinklers*, and that in any event it was Congress' intention, where the CPSC develops safety standards, that those standards preempt state and local laws.

Discussion

I. Whether Central's Sprinklers are "Consumer Products" within the Consumer Product Safety Act

The definition of "consumer product" has been described as "complex"[3] and ambiguous.[4] Added to this, the resolution of jurisdictional questions as to whether an item is a "consumer product" is made more difficult by the fact that the term "consumer" is not defined in the Act. Nevertheless, the resolution of each particular question must begin with the statutory language, which provides:

> Sec. 3 [15 U.S.C. 2052]
>
> (a) For purposes of this chapter:
>
> (1) The term "consumer product" means any article, or component part thereof, produced or distributed (i) for sale to a consumer for use in or around a permanent or temporary household or residence, a school, in recreation, or otherwise, or (ii) for the personal use, consumption or enjoyment of a consumer in or around a permanent or temporary household or residence, a school, in recreation, or otherwise; but such term does not include (Emphasis added.)
>
> (A) any article which is not customarily produced or distributed for sale to, or use or consumption by, or enjoyment of, a consumer,

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[3]ASG at 1327.

[4]Consumer Product Safety Commission v. Chance, 441 F.Supp. 228, 231 (D.D.C. 1977).

(B) tobacco and tobacco products,

(C) motor vehicles or motor vehicle equipment (as defined by sections 102(3) and (4) of the National Traffic and Motor Vehicle Safety Act of 1966 (15 U.S.C. @ 1391(3) and (4))),

(D) pesticides (as defined by the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. @ 136 et seq.)),

(E) any article which, if sold by the manufacturer, producer, or importer, would be subject to the tax imposed by section 4181 of the Internal Revenue Code of 1954 (26 U.S.C. @ 4181) (determined without regard to any exemptions from such tax provided by section 4182 or 4221, or any other provision of such Code), or any component of any such article,

(F) aircraft, aircraft engines, propellers, or appliances (as defined in section 101 of the Federal Aviation Act of 1958 (49 U.S.C. @ 1301)),

(G) boats which could be subjected to safety regulation under the Federal Boat Safety Act of 1971 (46 U.S.C. @ 1451 et seq.); vessels and appurtenances to vessels (other than such boats), which could be subjected to safety regulation under title 52 of the Revised Statutes or other marine safety statutes administered by the department in which the Coast Guard is operating; and equipment (including associated equipment, as defined in section 3(8) of the Federal Boat Safety Act of 1971 (46 U.S.C. @ 1452(8)) to the extent that a risk of injury associated with the use of such equipment on boats or vessels could be eliminated or reduced by actions taken under any statute referred to in this subparagraph,

(H) drugs, devices or cosmetics (as such terms are defined in sections 201(g), (h) and (i) of the Federal Food, Drug and Cosmetic Act (21 U.S.C. @ 321(g), (h) and (i))), or

(I) food. The term "food," as used in this subparagraph means all "food", as defined in section 201(f) of the Federal Food, Drug and Cosmetic Act (21 U.S.C. @ 321(f)), including poultry and poultry products (as defined in sections 4(e) and (f) of the Poultry Products Inspection Act (21 U.S.C. @ 453(e) and (f)), meat, meat food products (as defined in section 1(j) of the Federal Meat Inspection Act (21 U.S.D. @ 601(j))), and eggs and egg products (as defined in section 4 of the Egg Products Inspection Act (21 U.S.C. @ 1033)).

Except for the regulation under this chapter or the Federal Hazardous Substances Act (15 U.S.C. @ 1261 et seq.) of fireworks devices or any substances

> intended for use as a component of any such device, the Commission shall have no authority under the functions transferred pursuant to section 2079 of this title to regulate any product or article described in subparagraph (E) of this paragraph or described, without regard to quantity, in section 845(a)(5) of title 18. See sections 2079(d) and 2080 of this title, for other limitations on Commission's authority to regulate certain consumer products.

As the text reflects, Congress chose to define the term "consumer product" generally, followed by the enumeration of specific exceptions to the term. It is plain that none of the specific exceptions, (although particular enough to exclude motor vehicles, tobacco, aircraft, and boats, among others), expressly address sprinklers, nor has Central contended otherwise. Thus present, is the issue of whether the general, albeit ambiguous, language defining "consumer product" applies to the sprinklers in question. As the statute does not provide an explicit answer, this question must be resolved in the context of a remedial statute intended to be broadly construed to effect its overarching purpose of protecting consumers from hazardous products. Reliance upon the remedial nature of the Consumer Product Safety Act is appropriate, especially where, as the Fifth Circuit aptly pointed out, the statute need not be read "as if it were a wonderfully constructed jig-saw puzzle, with each word having only one precise place, yielding, when assembled, an unambiguous picture." State Fair II at 1331. For the reasons which follow, I find that the sprinklers are "consumer products."

Central argues that, once installed, sprinkler heads become an integral part of the building and that, so merged, they are indistinguishable from the structure itself, just as framing, ventilation, and wiring become incorporated into the structure.[5] While it is accurate that *housing*

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[5]Central also expresses concern that if jurisdiction is found in this litigation over its *sprinklers*, given that the CPSC's authority to conduct investigations and engage in rulemaking is broader than its authority to seek adjudicated relief, the Commission would then have the

itself is not a consumer product and that the Act does not extend to every component part of a structure, particular components may be covered. In Anaconda, the D.C. Circuit explained that for a component to qualify as a consumer product it must be produced or distributed as a distinct article of commerce or at least as a component part of such a distinct article. Id. at 1319-1320. Excluded from coverage as component parts are those parts of a product that are not distinct, existing only at an intermediate stage of production. Id. at 1319. Although the Court was only facing whether *aluminum wiring systems as a whole* were "consumer products," it acknowledged that such systems are made up of a number of products, "some or all of which may qualify as 'consumer products' within the applicable definition." Id. at 1317.

In Kaiser Aluminum and Chemical Corp. v. The United States Consumer Product Safety Commission, 574 F.2d 178 (3rd Cir. 1978), ("Kaiser"), the Third Circuit, addressing arguments similar to those advanced here by Central, rejected the idea that the CPSA incorporates "all the arcane knowledge" as to when personal property becomes part of a building, as such an interpretation would exclude many common products such as furnaces, dishwashers and lighting fixtures. Instead, the Court focused upon the exposure of consumers to hazards created by a product, noting that even an undisputed industrial product " may lose its claim for exclusion if a significant number of consumers are thereby exposed to hazards associated with the product." Id. at 181.

There is no contention by Central that its sprinklers are not produced and sold as distinct articles of commerce. While Anaconda and Kaiser potentially arrived at different results on the

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implicit authority to regulate sprinkler *systems* themselves. It is sufficient to note that this specter is not in issue here.

issue of whether aluminum wiring *systems*[6] were consumer products, both rejected the idea that jurisdiction turns on whether a particular fixture becomes part of the house and therefore excludable from the Act's coverage. These Courts concluded that component parts may be "consumer products," and focused on the issue of whether consumers were exposed to hazards associated with the products.

Central also takes the position that the Act is limited to regulating hazardous products found in consumers' homes. Consistent with this assertion, Central maintains that the product must be available "off the shelf" at the retail level. In this regard Central notes that its product advertising is directed only to the relevant industrial trade and to the professional contractors within it.

Several federal courts have addressed the general definition of the term "consumer product." While the decisions have reflected some differences[7] among the courts in their

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[6]The Anaconda Court remanded the matter for further proceedings.

[7]In Walt Disney Productions v. U.S. CPSC, No. 79-0170-Lew-(Px), 1979 U.S. Dist. LEXIS 12996, (C.D. Cal 1979), the District Court, influenced by the fact that riders on an aerial tram attraction were only passive participants, concluded that the ride was not, as a whole, for the personal use, consumption, or enjoyment of consumers. The Court took the view that the Act only contemplated coverage over products for which it was practicable to obtain a sample and that it was concerned that an overly expansive reading would put the Commission at risk of spreading its limited resources too thin. Id. at ¶ 20-22. As noted, other courts have concluded that occupancy of such a ride and exposure to the hazards they present are sufficient to satisfy the "personal use, consumption or enjoyment" clause in the definition of "consumer product." State Fair of Texas, 481 F. Supp. 1070,1077 (N.D.Tx. 1979). The Fifth Circuit in State Fair II at 1334, also rejected the view set forth in Walt Disney and in Bell Enterprises, Inc. v. Consumer Product Safety Commission 645 F.2d 26 (10th Cir. 1981) that consumers need to "control" a product in order to satisfy the "consumer use" provision, noting that no legislative history supported this view and that consumers inability to control products in an institutional setting exposes them to the potential for greater risk of injury. Accepting, for the moment, the other concerns expressed by the California District Court in Walt Disney, it is noted that in this instance it would be

construction of the term, most have spoken about the broad purposes behind clauses (i) and (ii). In Anaconda the Court stated that, taken together, the clauses were designed to include the various ways "through which consumers acquire products and *are exposed to the risks of injury associated with those products*." Id. at 1320. (emphasis added). In Consumer Product Safety Commission v. Chance, 441 F. Supp. 228 (D.D.C. 1977) ("Chance") the Court held that the definition's phrase "in recreation or otherwise" is an independent basis of jurisdiction and accordingly rejected the argument that the definition is limited to household and school products holding that jurisdiction depends upon the extent to which consumers were exposed to the risks associated with the product. Id. at 231, 233. So too, the Court in ASG, in discussing the definitional phrase that a consumer product must be used or intended for use "in or around a permanent or temporary household or residence, a school or otherwise," held that the enumeration of locations and activities is *not* a limitation on jurisdiction, but rather an assurance of comprehensiveness. Id. at 1328. The Fifth Circuit, relying upon the language employed in the Act, the broad remedial policy underlying it and the legislative history, has reached the same conclusion. The Fifth Circuit rejects the argument that the phrase "in recreation" is tied to activity at a household, residence or school, by holding that each part identified in the definition is an independent basis for jurisdiction and, accordingly, that a consumer product is not necessarily a household product. Thus, the Court stated that the Act is broader than the sale of merchandise to consumers, that use of articles is sufficient and that a critical factor is the

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practicable to obtain a sample of the sprinklers in issue, and that with regard to the concern over limited resources, the Fifth Circuit has observed that it is not the courts' prerogative to second-guess agency decisions properly within their discretion and that the Commission is in the best position to decide what to accomplish within its budget. Id. at 1334.

consumer's exposure to a product, not the legal relation to it. State Fair II at 1328.

Quoting from the legislative history, the Anaconda Court also explained that the scope of the term "individual" within the phrase that the article in question must be one "capable of production for sale to an individual," by noting that "products which are primarily or exclusively sold to industrial or institutional buyers would be included within the definition of consumer product so long as they were produced or distributed for the ***use*** of consumers." Id. (emphasis added). The Court, aware of some indicators of a legislative intent to exclude "industrial products" from the Act's coverage, pointedly noted that subsection 3(a)(1)(A) does *not* accomplish this, concluding that even where a large portion of a product is distributed for industrial purposes, the product remains a "consumer product" as long as the sale *or* use is customary and more than occasional. Id. 1322. Thus, the Court cited with approval to Chance, which upheld CPSC jurisdiction over an amusement ride even though the ride was sold to an institutional buyer and not to consumers directly.

I concur with the weight of judicial opinion rejecting the narrow interpretation, urged here by Central, that the Act is limited to hazardous products found in residences. As these courts have concluded, the focus of the Act is directed towards consumers' exposure to hazards associated with products[8]. Thus, several courts have found that the Act applies to hazardous products completely unassociated with residences, such as the amusement park rides in Chance

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[8]For this reason the Court in U.S. v. One Hazardous Product Consisting of a Refuse Bin, 487 F. Supp 581 (D.N.J. 1980) also concluded that refuse bins found in apartment complexes, supermarkets, motels, retail businesses and other locations, were found to be "consumer products." The Court found that the term encompasses products whose distribution results in a significant number of **consumers being exposed to the hazard** associated with the product. Id. at 584. (emphasis added).

and State Fair II.[9]

I also note that it would be incongruous with the overall intent of this remedial legislation to conclude that a product whose entire function is safety related, and not specifically excepted from the definition's scope, is outside of the Consumer Product Safety Act's coverage. Further, even if for arguments sake it were momentarily accepted that, under Central's interpretation, the Act is limited to products found in residences, it would be untenable to conclude that Congress would have intended that protection from a hazardous product would be so incomplete, being limited to homes, when an identical or related model of the product, presenting the same hazard, would not be subject to the Act's reach merely because it was located in a hotel or other building. Thus, in the alternative, I conclude that at a minimum, once a product is found in a home, the ability to regulate it under the Act applies to all other locations where it is found, as Congress could not have intended such incomplete and irrational coverage of hazardous products.

Last, Central's arguments that OSHA and state and local regulation operate to preempt the CPSC are also rejected. As the D.C. Circuit observed in ASG, there must be actual, not potential, regulation of the product. The Court went on to note that OSHA's focus is providing a safe workplace and that this may be apart from producing articles that are themselves hazardous to consumers. Id. at 1328-1329. Further, as noted by the Third Circuit in Kaiser in addressing the role of local building codes in regulating consumer products, the "design and performance standards for components are now a matter of national concern." Id. at 181. So too, the Fifth

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[9]Central appears to want it both ways, by citing State Fair II with approval in part for its position that consumer "use" of a product requires interaction with it, accepting that the consumers' riding on amusements constitutes such interaction, while maintaining that such amusements are still outside of the Act's coverage as they are not part of consumers' homes.

Circuit observed that the Act intended a broad remedial purpose and that Congress determined that local government regulation of hazards posed by consumer products is inadequate. State Fair II at 1333.

II. Whether the Complaint Satisfies the Procedural Rules by Providing Reasonable Definiteness of the Charges

Central's arguments in this regard may be summarily resolved. The purpose of the complaint is to notify the respondent in a general way of the violation charged. Certainly the complaint accomplishes this. Central has been made aware that the Consumer Product Safety Commission asserts that its Omega brand sprinklers are hazardous in the sense that they have been alleged to malfunction in significant numbers. While the requirement that a "list and summary of documentary evidence supporting the charges" be provided, raises legitimate concerns, the rule does not call for a "comprehensive" summary and, in any event, this issue is moot as the documents themselves are being provided during discovery, a process that has already begun with intensity.

Central's suggestion that CPSC has some duty to explain the particular reason for the alleged failures is rejected. Even at hearing, Complaint Counsel has no duty to provide an explanation of how it is that the sprinklers malfunction. It is sufficient only to demonstrate that they *do* have a significant failure rate. Assuming that Complaint Counsel can demonstrate this, it would be Central's responsibility to figure out why it is happening, not that of the CPSC.

Accordingly, Central Sprinkler Corporation's and Central Sprinkler Company's Motion

to Dismiss the Administrative Complaint of the Consumer Product Safety Commission is DENIED.

So Ordered.

William B. Moran
William B. Moran
United States Administrative Law Judge

Dated: May 15, 1998
Washington, D.C.

20.

MAY 15 1998

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
	)	
CENTRAL SPRINKLER CORP.,	)	
	)	
and	)	**CPSC DOCKET NO. 98-2**
	)	
CENTRAL SPRINKLER CO.,	)	
	)	
Respondents	)	
	)	

ORDER ON MOTION TO DISMISS COMPLAINT FOR LACK OF JURISDICTION AND FOR INSUFFICIENT PLEADINGS

Respondents Central Sprinkler Corporation and Central Sprinkler Company (collectively, "Central") filed, on March 26, 1998, a Motion to Dismiss the Administrative Complaint in this matter on the basis that the Consumer Product Safety Commission ("CPSC") lacks jurisdiction over Central's Omega-brand fire sprinkler heads. Respondents also assert that the Complaint fails to comport with the requirements of 16 C.F.R. § 1025.11(b)(3) by failing to sufficiently inform Central with reasonable definiteness of the factual basis of the allegations of violation or hazard, an omission also requiring dismissal or at least amendment of the Complaint. Complaint Counsel for CPSC filed a response to Central's Motion on April 13, 1998. Thereafter, Central filed a Motion for Leave to Submit Reply Brief in Support of the Motion to Dismiss. On April 21, 1998, I granted this Motion, pursuant to the discretion afforded at 16 C.F.R. § 1025.23 (c) and additionally permitted CPSC the opportunity to respond to Central's Reply Brief. Complaint

Counsel's response was filed on May 4, 1998.

Central maintains that sprinkler heads are not consumer products. Rather, along with fire sprinkler systems, they are an integral part of the buildings in which they are installed. In its view, the aim of the Consumer Product Safety Act ("CPSA" or "Act") is limited to regulating those common household products which present a danger in the consumers' homes. Noting that sprinkler systems are not customarily marketed, sold, distributed or used by consumers, it is Central's position that it was not Congress's intent for the Consumer Product Safety Act to reach such products, as they are extensively regulated by state and local authorities. Motion at 1-2.

Central argues that as its various models of its Omega-brand sprinkler heads "are designed to be incorporated in integrated fire-suppression systems built into a wide range of *residential*, commercial and industrial structures" (emphasis added), the entire fire suppression system effectively becomes merged with the structure, in a manner similar to framing, ventilation, or wiring. Id. at 3. Central also believes that its method of selling its sprinkler heads is a relevant consideration, as its marketing approach is selective, being aimed at the affected industry or trade, and to the professional contractors within that field, and because it is devoid of "customary consumer marketing" techniques such as jingles and celebrity spokespersons. Id. at 5.

Turning to the Act's statutory definition of "consumer product," including its specific listed exceptions, Central notes that, under the first listed exception, a product must be customarily produced or distributed for consumer sale or use. Taking the position that the product in question must be "available for separate acquisition by consumers," Central observes that its sprinkler heads are not available in retail outlets and are only sold to professional

contractors. From this, Central deduces that there must be significant marketing of the product to consumers as a distinct article of commerce. Id. at 8-9. Continuing with its argument in this regard, Central notes that its sprinklers are designed for use in commercial or industrial settings, and that there is only occasional crossover of its industrial products into consumer use.

Central also argues that consumers do not *use* its sprinkler heads, in the sense of "enjoying, holding, occupying, or actively availing oneself of a product," and infers that a product must be available for purchase and use by the general public "off the shelf" at a retail store outlet. Id. While conceding that the term "use" is not defined, Central looks to the legislative history for assistance, noting that the Senate version of the Act included "exposure" to the product but that the "exposure" language was not included in the final conference version. "Use," in its view, requires some sort of active consumer interaction with the product. As an example, it points with approval to State Fair of Texas v. United States Consumer Product Safety Commission, 650 F.2d 1324, 1329 (5th Cir. 1981) ("State Fair II"), a case in which consumers "used" the gondola skyride by taking a ride on the amusement. With sprinkler heads, by contrast, Consumers do not "interact with, enjoy, hold, occupy or actively avail themselves of the sprinkler system or sprinkler heads." Motion at 11.

In addition to the proper "use" of the product at issue, Central maintains that another relevant consideration is *where* the product is used. Noting that the statutory definition refers to use "in or around a household, residence or school, in recreation or otherwise," Id. at 12. Central, citing to Consumer Product Safety Commission v. Anaconda Company, 593 F.2d 1314 (D.C.

Cir. 1979)[1] ("Anaconda"), asserts that the definition does not encompass the house or building itself nor products which lose their identity by virtue of their incorporation into such structures and that, accordingly, the D.C. Circuit thereby rejected arguments that the Act's jurisdiction extends to every such incorporated component part of a dwelling.

Central also refers to state and local building and fire codes, professional organizations that have developed model building codes for fire safety and a decision of the U.S. Tax Court, as additional authorities for the proposition that sprinkler systems are an integral part of the buildings in which they are installed.

Observing that the Commission's authority to seek adjudicated relief is less broad than its authority to engage in investigation and rulemaking, Central argues that if it is determined that fire sprinkler heads are within its adjudicative authority, such a conclusion would infer that the Commission's authority in the investigative and rulemaking realms extends to sprinkler systems, a conclusion contrary to the intent of Congress that the Commission, with its limited resources, focus only on those areas clearly intended for its oversight, and not intrude into areas already well regulated on the state and local level.

Alternatively, Central argues that, at a minimum, those Omega-brand sprinkler heads installed into commercial and industrial buildings are beyond the CPSC's jurisdiction. Conceding that some of its "residential" sprinkler heads may also be installed in commercial and

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[1]Noting that the Third Circuit in Kaiser Alum. and Chem. Co. v. Consumer Product Safety Comm'n, 574 F. 2d 178 (3rd Cir. 1978), reached a contrary result holding that branch circuit wiring was a consumer product, Central argues that the Third Circuit wrongly construed the statutory provision and that, in any event, the case is distinguishable as consumers there "used" the wiring systems in order to enjoy appliances that consume electricity. Motion at 14.

industrial facilities, Central takes the position that their location matters because the Act was intended to focus on dangerous *household* products. In support of this position, Central refers to the Act's proscription over risks of injury associated with a consumer product where OSHA actions could eliminate or reduce the hazards. Central maintains that OSHA has indeed promulgated standards specifically addressing automatic sprinkler systems.

As a separate basis for dismissal of the Complaint, Central asserts that it has not been informed of the factual basis of the alleged defect and that the Complaint also fails to include a list of supporting documentary evidence, in contravention of 16 C.F.R. § 1025.11(b)(3). While made aware that the Complaint alleges that the sprinkler heads fail to operate in a significant number of instances, Central protests that the Complaint fails to inform *how* the sprinklers fail to operate. Central also asserts that the Complaint's "List and Summary of Documentary Evidence" is inadequate because the list was inadequately descriptive and no "comprehensive summary" of the documents on the list was provided.

In response, the CPSC asserts that fire sprinklers are "consumer products" within its jurisdiction, relying upon the definition of that term under Section 3 of the Act (15 U.S.C. § 2052) and in particular under subsection (a)(1)(ii). CPSC also notes that this is remedial legislation and consequently is to be liberally construed in a manner consistent with its intended purpose of protecting consumers from unsafe products. In this respect, CPSC points to expansive constructions by the Commission with their inclusion of fire extinguishers, elevators, portable gas heaters, and fire alarm equipment as consumer products and by the courts, with their inclusion of glazing materials and aluminum wiring within the term. In its view, the key requirement is that the product be a distinct and final article of commerce, not an article that

exists only at an intermediate stage of production.

CPSC also maintains that Central blurs that distinction between sprinkler *systems* and the *sprinklers themselves.* In this regard, CPSC disavows jurisdiction over sprinkler *systems* but maintains jurisdiction exists over the sprinklers, a distinction "crucial to the jurisdictional inquiry." Complaint Counsel's Opposition ("Opposition") at 7. CPSC further notes that courts have drawn similar distinctions between a system and its components as, for example, between aluminum wiring and wiring *systems.*

CPSC further asserts that sprinklers qualify as "consumer products" because they are produced or distributed for the personal use, consumption, or enjoyment of consumers. Thus, it argues, while the Act clearly contemplates coverage of an article that is produced or distributed for sale to consumers, *use, consumption or enjoyment by consumers* is also sufficient. For this reason marketing, availability in retail sales, or actual sale to the general public are not prerequisites to jurisdiction. Rather, CPSC maintains, the "true test [is] . . . whether consumers are exposed to the hazards associated with them." Id. at 11. (Emphasis in Opposition.) As the sprinklers at issue have been installed in homes, apartments, nursing homes, hospitals, schools, and recreational facilities, consumers have been exposed to the significant hazard of uncontained fire.

As to Central's assertion that consumers "use" contemplates that they "actively interact" or "manipulate" the product, CPSC notes that other similar products such as smoke detectors require no more interaction or manipulation than sprinklers, and they also only activate in an emergency. From CPSC's perspective, the consumers "use or enjoyment" is their reliance on the devices functioning during a fire. Id. at 13.

Referring to the statutory language that the consumer product be "in or around a permanent or temporary household or residence, a school, in recreation, or otherwise", CPSC asserts that this language is to be construed as an "assurance of comprehensiveness rather than a limitation on jurisdiction."[2] Id. at 13, quoting from ASG Industries, Inc. v. Consumer Product Safety Comm'n, 593 F. 2d 1323, 1328 (D.C. Cir. 1979).

Addressing Central's argument that the sprinklers become merged with the structure in which they are installed and thus become part of the housing itself and thereby excluded from coverage, CPSC refers to the Third Circuit's rejection of that argument on the basis that such an approach would result in the exclusion of many common consumer products, such as dishwashers, furnaces, or lighting fixtures.

As to Central's "partial" jurisdiction argument, CPSC asserts that, factually, the assertion that some of Central's sprinkler models are installed in commercial and industrial settings is inaccurate and that hospitals, schools, shelters and libraries are "commercial" facilities and covered by the statutory language which includes "residence(s), schools, recreational facilities and other places . . . ." Id. at 15.

Responding to Central's assertion that OSHA has supplanted its jurisdiction, CPSC maintains that the mere potential for authority, unexercised, is insufficient for Section 31(a) of the Act to be triggered, that OSHA applies only to the workplace, whereas the sprinklers here are found in a broader range of locations, and that, in any event, current OSHA regulations only apply to sprinkler *systems* and do not address the problem of defective sprinklers. Similarly,

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[2]While substantively unaffected, the quoted language actually provides, "is not a limitation on jurisdiction, but rather an assurance of comprehensiveness."

addressing Central's assertion that the CPSC is precluded from asserting jurisdiction because state and local jurisdictions already regulate the subject, CPSC asserts that these entities again only regulate sprinkler *systems*, not defective *sprinklers*, and that in any event it was Congress' intention, where the CPSC develops safety standards, that those standards preempt state and local laws.

Discussion

I. Whether Central's Sprinklers are "Consumer Products" within the Consumer Product Safety Act

The definition of "consumer product" has been described as "complex"[3] and ambiguous.[4] Added to this, the resolution of jurisdictional questions as to whether an item is a "consumer product" is made more difficult by the fact that the term "consumer" is not defined in the Act. Nevertheless, the resolution of each particular question must begin with the statutory language, which provides:

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> (A) any article which is not customarily produced or distributed for sale to, or use or consumption by, or enjoyment of, a consumer,

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(B) tobacco and tobacco products,

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(D) pesticides (as defined by the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. @ 136 et seq.)),

(E) any article which, if sold by the manufacturer, producer, or importer, would be subject to the tax imposed by section 4181 of the Internal Revenue Code of 1954 (26 U.S.C. @ 4181) (determined without regard to any exemptions from such tax provided by section 4182 or 4221, or any other provision of such Code), or any component of any such article,

(F) aircraft, aircraft engines, propellers, or appliances (as defined in section 101 of the Federal Aviation Act of 1958 (49 U.S.C. @ 1301)),

(G) boats which could be subjected to safety regulation under the Federal Boat Safety Act of 1971 (46 U.S.C. @ 1451 et seq.); vessels and appurtenances to vessels (other than such boats), which could be subjected to safety regulation under title 52 of the Revised Statutes or other marine safety statutes administered by the department in which the Coast Guard is operating; and equipment (including associated equipment, as defined in section 3(8) of the Federal Boat Safety Act of 1971 (46 U.S.C. @ 1452(8)) to the extent that a risk of injury associated with the use of such equipment on boats or vessels could be eliminated or reduced by actions taken under any statute referred to in this subparagraph,

(H) drugs, devices or cosmetics (as such terms are defined in sections 201(g), (h) and (i) of the Federal Food, Drug and Cosmetic Act (21 U.S.C. @ 321(g), (h) and (i))), or

(I) food. The term "food," as used in this subparagraph means all "food", as defined in section 201(f) of the Federal Food, Drug and Cosmetic Act (21 U.S.C. @ 321(f)), including poultry and poultry products (as defined in sections 4(e) and (f) of the Poultry Products Inspection Act (21 U.S.C. @ 453(e) and (f)), meat, meat food products (as defined in section 1(j) of the Federal Meat Inspection Act (21 U.S.D. @ 601(j))), and eggs and egg products (as defined in section 4 of the Egg Products Inspection Act (21 U.S.C. @ 1033)).

Except for the regulation under this chapter or the Federal Hazardous Substances Act (15 U.S.C. @ 1261 et seq.) of fireworks devices or any substances

> intended for use as a component of any such device, the Commission shall have no authority under the functions transferred pursuant to section 2079 of this title to regulate any product or article described in subparagraph (E) of this paragraph or described, without regard to quantity, in section 845(a)(5) of title 18. See sections 2079(d) and 2080 of this title, for other limitations on Commission's authority to regulate certain consumer products.

As the text reflects, Congress chose to define the term "consumer product" generally, followed by the enumeration of specific exceptions to the term. It is plain that none of the specific exceptions, (although particular enough to exclude motor vehicles, tobacco, aircraft, and boats, among others), expressly address sprinklers, nor has Central contended otherwise. Thus present, is the issue of whether the general, albeit ambiguous, language defining "consumer product" applies to the sprinklers in question. As the statute does not provide an explicit answer, this question must be resolved in the context of a remedial statute intended to be broadly construed to effect its overarching purpose of protecting consumers from hazardous products. Reliance upon the remedial nature of the Consumer Product Safety Act is appropriate, especially where, as the Fifth Circuit aptly pointed out, the statute need not be read "as if it were a wonderfully constructed jig-saw puzzle, with each word having only one precise place, yielding, when assembled, an unambiguous picture." State Fair II at 1331. For the reasons which follow, I find that the sprinklers are "consumer products."

Central argues that, once installed, sprinkler heads become an integral part of the building and that, so merged, they are indistinguishable from the structure itself, just as framing, ventilation, and wiring become incorporated into the structure.[5] While it is accurate that *housing*

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[5]Central also expresses concern that if jurisdiction is found in this litigation over its *sprinklers*, given that the CPSC's authority to conduct investigations and engage in rulemaking is broader than its authority to seek adjudicated relief, the Commission would then have the

itself is not a consumer product and that the Act does not extend to every component part of a structure, particular components may be covered. In Anaconda, the D.C. Circuit explained that for a component to qualify as a consumer product it must be produced or distributed as a distinct article of commerce or at least as a component part of such a distinct article. Id. at 1319-1320. Excluded from coverage as component parts are those parts of a product that are not distinct, existing only at an intermediate stage of production. Id. at 1319. Although the Court was only facing whether *aluminum wiring systems as a whole* were "consumer products," it acknowledged that such systems are made up of a number of products, "some or all of which may qualify as 'consumer products' within the applicable definition." Id. at 1317.

In Kaiser Aluminum and Chemical Corp. v. The United States Consumer Product Safety Commission, 574 F.2d 178 (3rd Cir. 1978), ("Kaiser"), the Third Circuit, addressing arguments similar to those advanced here by Central, rejected the idea that the CPSA incorporates "all the arcane knowledge" as to when personal property becomes part of a building, as such an interpretation would exclude many common products such as furnaces, dishwashers and lighting fixtures. Instead, the Court focused upon the exposure of consumers to hazards created by a product, noting that even an undisputed industrial product " may lose its claim for exclusion if a significant number of consumers are thereby exposed to hazards associated with the product." Id. at 181.

There is no contention by Central that its sprinklers are not produced and sold as distinct articles of commerce. While Anaconda and Kaiser potentially arrived at different results on the

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implicit authority to regulate sprinkler *systems* themselves. It is sufficient to note that this specter is not in issue here.

issue of whether aluminum wiring *systems*[6] were consumer products, both rejected the idea that jurisdiction turns on whether a particular fixture becomes part of the house and therefore excludable from the Act's coverage. These Courts concluded that component parts may be "consumer products," and focused on the issue of whether consumers were exposed to hazards associated with the products.

Central also takes the position that the Act is limited to regulating hazardous products found in consumers' homes. Consistent with this assertion, Central maintains that the product must be available "off the shelf" at the retail level. In this regard Central notes that its product advertising is directed only to the relevant industrial trade and to the professional contractors within it.

Several federal courts have addressed the general definition of the term "consumer product." While the decisions have reflected some differences[7] among the courts in their

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[6]The Anaconda Court remanded the matter for further proceedings.

[7]In Walt Disney Productions v. U.S. CPSC, No. 79-0170-Lew-(Px), 1979 U.S. Dist. LEXIS 12996, (C.D. Cal 1979), the District Court, influenced by the fact that riders on an aerial tram attraction were only passive participants, concluded that the ride was not, as a whole, for the personal use, consumption, or enjoyment of consumers. The Court took the view that the Act only contemplated coverage over products for which it was practicable to obtain a sample and that it was concerned that an overly expansive reading would put the Commission at risk of spreading its limited resources too thin. Id. at ¶ 20-22. As noted, other courts have concluded that occupancy of such a ride and exposure to the hazards they present are sufficient to satisfy the "personal use, consumption or enjoyment" clause in the definition of "consumer product." State Fair of Texas, 481 F. Supp. 1070,1077 (N.D.Tx. 1979). The Fifth Circuit in State Fair II at 1334, also rejected the view set forth in Walt Disney and in Bell Enterprises, Inc. v. Consumer Product Safety Commission 645 F.2d 26 (10th Cir. 1981) that consumers need to "control" a product in order to satisfy the "consumer use" provision, noting that no legislative history supported this view and that consumers inability to control products in an institutional setting exposes them to the potential for greater risk of injury. Accepting, for the moment, the other concerns expressed by the California District Court in Walt Disney, it is noted that in this instance it would be

construction of the term, most have spoken about the broad purposes behind clauses (i) and (ii). In Anaconda the Court stated that, taken together, the clauses were designed to include the various ways "through which consumers acquire products and *are exposed to the risks of injury associated with those products*." Id. at 1320. (emphasis added). In Consumer Product Safety Commission v. Chance, 441 F. Supp. 228 (D.D.C. 1977) ("Chance") the Court held that the definition's phrase "in recreation or otherwise" is an independent basis of jurisdiction and accordingly rejected the argument that the definition is limited to household and school products holding that jurisdiction depends upon the extent to which consumers were exposed to the risks associated with the product. Id. at 231, 233. So too, the Court in ASG, in discussing the definitional phrase that a consumer product must be used or intended for use "in or around a permanent or temporary household or residence, a school or otherwise," held that the enumeration of locations and activities is *not* a limitation on jurisdiction, but rather an assurance of comprehensiveness. Id. at 1328. The Fifth Circuit, relying upon the language employed in the Act, the broad remedial policy underlying it and the legislative history, has reached the same conclusion. The Fifth Circuit rejects the argument that the phrase "in recreation" is tied to activity at a household, residence or school, by holding that each part identified in the definition is an independent basis for jurisdiction and, accordingly, that a consumer product is not necessarily a household product. Thus, the Court stated that the Act is broader than the sale of merchandise to consumers, that use of articles is sufficient and that a critical factor is the

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practicable to obtain a sample of the sprinklers in issue, and that with regard to the concern over limited resources, the Fifth Circuit has observed that it is not the courts' prerogative to second-guess agency decisions properly within their discretion and that the Commission is in the best position to decide what to accomplish within its budget. Id. at 1334.

consumer's exposure to a product, not the legal relation to it. State Fair II at 1328.

Quoting from the legislative history, the Anaconda Court also explained that the scope of the term "individual" within the phrase that the article in question must be one "capable of production for sale to an individual," by noting that "products which are primarily or exclusively sold to industrial or institutional buyers would be included within the definition of consumer product so long as they were produced or distributed for the ***use*** of consumers." Id. (emphasis added). The Court, aware of some indicators of a legislative intent to exclude "industrial products" from the Act's coverage, pointedly noted that subsection 3(a)(1)(A) does *not* accomplish this, concluding that even where a large portion of a product is distributed for industrial purposes, the product remains a "consumer product" as long as the sale *or* use is customary and more than occasional. Id. 1322. Thus, the Court cited with approval to Chance, which upheld CPSC jurisdiction over an amusement ride even though the ride was sold to an institutional buyer and not to consumers directly.

I concur with the weight of judicial opinion rejecting the narrow interpretation, urged here by Central, that the Act is limited to hazardous products found in residences. As these courts have concluded, the focus of the Act is directed towards consumers' exposure to hazards associated with products[8]. Thus, several courts have found that the Act applies to hazardous products completely unassociated with residences, such as the amusement park rides in Chance

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[8]For this reason the Court in U.S. v. One Hazardous Product Consisting of a Refuse Bin, 487 F. Supp 581 (D.N.J. 1980) also concluded that refuse bins found in apartment complexes, supermarkets, motels, retail businesses and other locations, were found to be "consumer products." The Court found that the term encompasses products whose distribution results in a significant number of **consumers being exposed to the hazard** associated with the product. Id. at 584. (emphasis added).

and State Fair II.[9]

I also note that it would be incongruous with the overall intent of this remedial legislation to conclude that a product whose entire function is safety related, and not specifically excepted from the definition's scope, is outside of the Consumer Product Safety Act's coverage. Further, even if for arguments sake it were momentarily accepted that, under Central's interpretation, the Act is limited to products found in residences, it would be untenable to conclude that Congress would have intended that protection from a hazardous product would be so incomplete, being limited to homes, when an identical or related model of the product, presenting the same hazard, would not be subject to the Act's reach merely because it was located in a hotel or other building. Thus, in the alternative, I conclude that at a minimum, once a product is found in a home, the ability to regulate it under the Act applies to all other locations where it is found, as Congress could not have intended such incomplete and irrational coverage of hazardous products.

Last, Central's arguments that OSHA and state and local regulation operate to preempt the CPSC are also rejected. As the D.C. Circuit observed in ASG, there must be actual, not potential, regulation of the product. The Court went on to note that OSHA's focus is providing a safe workplace and that this may be apart from producing articles that are themselves hazardous to consumers. Id. at 1328-1329. Further, as noted by the Third Circuit in Kaiser in addressing the role of local building codes in regulating consumer products, the "design and performance standards for components are now a matter of national concern." Id. at 181. So too, the Fifth

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[9]Central appears to want it both ways, by citing State Fair II with approval in part for its position that consumer "use" of a product requires interaction with it, accepting that the consumers' riding on amusements constitutes such interaction, while maintaining that such amusements are still outside of the Act's coverage as they are not part of consumers' homes.

Circuit observed that the Act intended a broad remedial purpose and that Congress determined that local government regulation of hazards posed by consumer products is inadequate. State Fair II at 1333.

II. Whether the Complaint Satisfies the Procedural Rules by Providing Reasonable Definiteness of the Charges

Central's arguments in this regard may be summarily resolved. The purpose of the complaint is to notify the respondent in a general way of the violation charged. Certainly the complaint accomplishes this. Central has been made aware that the Consumer Product Safety Commission asserts that its Omega brand sprinklers are hazardous in the sense that they have been alleged to malfunction in significant numbers. While the requirement that a "list and summary of documentary evidence supporting the charges" be provided, raises legitimate concerns, the rule does not call for a "comprehensive" summary and, in any event, this issue is moot as the documents themselves are being provided during discovery, a process that has already begun with intensity.

Central's suggestion that CPSC has some duty to explain the particular reason for the alleged failures is rejected. Even at hearing, Complaint Counsel has no duty to provide an explanation of how it is that the sprinklers malfunction. It is sufficient only to demonstrate that they *do* have a significant failure rate. Assuming that Complaint Counsel can demonstrate this, it would be Central's responsibility to figure out why it is happening, not that of the CPSC.

Accordingly, Central Sprinkler Corporation's and Central Sprinkler Company's Motion

to Dismiss the Administrative Complaint of the Consumer Product Safety Commission is DENIED.

So Ordered.

William B. Moran
William B. Moran
United States Administrative Law Judge

Dated: May 15, 1998
Washington, D.C.

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6/02/98

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp.	:	
	:	**CPSC Docket No. 98-2**
and	:	
	:	
Central Sprinkler Co.,	:	
	:	
Respondents.	:	
	:	

RESPONDENTS' OPPOSITION TO COMPLAINT COUNSEL'S MOTION FOR PROTECTIVE ORDER REGARDING ANONYMOUS LETTER

I. INTRODUCTION

Complaint Counsel asserts that they are in possession of an anonymous letter from an employee of Respondents. Complaint Counsel acknowledges that this letter contains information that is both relevant to this case and responsive to Respondents' discovery requests. Nevertheless, Complaint Counsel has refused to produce the letter to Respondents, claiming that is subject to the so-called "informant's privilege."[1/]

Pursuant to 16 C.F.R. § 1045(c)(2), Respondents Central Sprinkler Company and Central Sprinkler Corporation hereby request that the Court order Complaint Counsel to produce this anonymous letter to Respondents. It is obviously discoverable under the CPSC rules of practice. Moreover, because the "informant's privilege" only protects the identity of an informant, not the information provided, an anonymous letter is not covered by the privilege. In any event, the alleged facts described in the letter are not privileged. In addition, because Complaint Counsel

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1/ See Complaint Counsel's Motion For Protective Order And In Camera Submission ("Complaint Counsel's Motion"), filed May 15, 1998.

admits that it is using the information in the letter to build its own case, the letter constitutes critical information necessary to Respondents for their defense in this case, and thus the "informant's privilege" is overcome. Finally, to the extent the letter suggests facts that defense counsel and the Respondents should evaluate, public safety warrants that the letter be disclosed to Respondents. Therefore, the Court should order Complaint Counsel to produce the letter to Respondents.[2/]

II. ARGUMENT

A. The Anonymous Letter Is Discoverable Material.

The CPSC rules of practice provide: "Parties may obtain discovery regarding any matter, not privileged, which is within the Commission's statutory authority and is relevant to the subject matter invoked in the proceedings." 16 C.F.R. § 1025.31(c)(1). Permissible discovery includes information that "appears reasonably calculated to lead to the discovery of admissible evidence." Id.

There should be little dispute that the anonymous letter constitutes discoverable material under these definitions. Complaint Counsel states that the letter "contains information and suggestions regarding Omega sprinkler failures." Complaint Counsel's Motion, p. 1. The operation of Omega sprinkler heads is a central issue in this case. Thus, the anonymous letter

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2/ Respondents are only requesting that the letter be turned over to them, not placed in the public record. Pursuant to 16 C.F.R. § 1045(c)(2), the Court has the authority to "enter a protective order prohibiting unnecessary disclosure." As discussed infra, Respondents have the right and need to see the letter. However, there is no reason to make an anonymous letter publicly available.

falls squarely within the definition of relevant material under the CPSC rules of practice. See 16 C.F.R. § 1025.31(c)(1).

Moreover, Complaint Counsel admits that the anonymous letter is responsive to a multitude of Respondents' discovery requests. See Complaint Counsel's Motion, pp. 1-2. Complaint Counsel also states that they are "using the information contained in the document to further its investigation . . . and to channel its discovery in this matter." Id., pp. 2-3. Thus, according to Complaint Counsel's own evaluation of the anonymous letter, it is both responsive and highly relevant to the instant proceedings. Therefore, pursuant to 16 C.F.R. § 1025.31(c)(1), the anonymous letter is discoverable material which should be produced to Respondents.

B. The "Informant's Privilege" Does Not Apply To The Contents Of An Anonymous Letter.

While conceding that the anonymous letter contains responsive and relevant materials, Complaint Counsel has refused to produce it. Instead, Complaint Counsel relies on the so-called "informant's privilege" in requesting that the letter be shielded from normal discovery. See Complaint Counsel's Motion, p. 3.

However, the "informant's privilege" by its very nature does not apply to the contents of an anonymous letter. This privilege protects only the identity of an informant, not the information provided by the informant. See Rovario v. United States, 353 U.S. 56, 60 (1957); see also Wright & Graham, Federal Practice and Procedure: Evidence § 5704 (The privilege does not protect "information provided by the informer . . . . Communications of an informant are not privileged . . . .").

The document at issue is an anonymous letter. Complaint Counsel states that the letter itself purposely does not reveal the identity of the author. See Complaint Counsel's Motion, p. 2 ("The author of the letter purposely did not reveal his or her identity . . . ."). Thus, because the "informant's privilege" only protects the identity of an informant, not the information provided, and the anonymous letter does not reveal the identity of the author, the "informant's privilege" simply does not apply in this situation. Accordingly, the letter, admittedly relevant and responsive, should be produced by Complaint Counsel to Respondents.

C. The "Informant's Privilege" Is Easily Overcome In This Case.

Even if the anonymous letter at issue had been signed, the so-called "informant's privilege" would be superseded in this case based on the admitted importance of the information provided in the letter.

The "informant's privilege" at one time was proposed as a formal rule of evidence, but was rejected. See Wright & Graham, §§ 5701-17. The privilege thus is a common law creation. Id. However, the privilege is not absolute -- it is, at best, a qualified privilege. The Supreme Court has clearly stated: "Where the disclosure of an informant's identity, or the contents of his communication, is relevant and helpful to the defense of an accused, or is essential to a fair determination of a cause, the privilege must give way. In these situations the trial court may require disclosure and, if the government withholds the information, dismiss the action." Rovario, 353 U.S. at 60-61.

As admitted by Complaint Counsel, the contents of the anonymous letter fall squarely within the circumstances where "the privilege must give way." Complaint Counsel concedes that they are "using the information contained in the document to further its investigation . . . and to

channel its discovery in this matter." Complaint Counsel's Motion, pp. 2-3. Thus, Complaint Counsel is treating the contents of the anonymous letter as extremely important information for purposes of this case. There should be little doubt that knowledge of this information would be "relevant and helpful" in the defense of this case for Respondents, and that giving Respondents equal access to this important information would be "essential to a fair determination" of this case. Rovario, 353 U.S. at 60-61.

Complaint Counsel makes two arguments in an attempt to justify its claim of privilege. First, Complaint Counsel asserts that it does not intend to use the document itself at trial. See Complaint Counsel's Motion, p. 2. This argument simply misses the point. The proper issue is whether Complaint Counsel intends to use the information contained in the letter and the investigatory fruits of that information in the trial of this case. The answer to that question clearly is "Yes," as Complaint Counsel had stated that it is using the information for investigatory and discovery purposes. Id. at pp. 2-3. Therefore, Respondents should have equal access to this document, to be given an equal opportunity to use it to "further [Respondents'] investigation" and "channel [Respondents'] discovery," in order to prepare for trial. Id.

Furthermore, public safety dictates that Respondents and their counsel be advised of the contents of this anonymous letter. Central Sprinkler Company manufactures the Omega sprinkler heads in question. To the extent that the letter reveals or explains any potential problems with the Omegas, Central, its Board of Directors, and its counsel affirmatively want to receive such information to address any potential problems appropriately. Central, its Board of Directors, and its counsel are committed to addressing properly any problems with the Omegas. If there are any identifiable problems with the Omegas, nobody has a greater interest in or right

to address those problems than Respondents. Complaint Counsel's decision to deny Respondents access to the contents of the letter is thus both procedurally unsound and contrary to Complaint Counsel's statutory mandate.[3/]

Complaint Counsel's second argument is that the document should be withheld to prevent any retaliation against the letter's author. Respondents assure the Court that they will not "retaliate" against any person for providing information to CPSC. Moreover, Complaint Counsel has not produced any evidence that Respondents would retaliate in any way. Thus, there is no reason to withhold the letter.

When viewed from an objective perspective, the course of action requested by Complaint Counsel here should not be followed. Complaint Counsel requests that a document that Complaint Counsel has possession of, admits is important, plans to use to prepare for trial, and has provided to this Court, not be given to Respondents. Thus, everyone involved in the trial of this matter with the exception of Respondents, who are defending their product, will have access to this document.[4/] Such a situation would be highly prejudicial to Respondents, a basic denial of due process rights, and fundamentally unfair.

3/ The Court should not assume that Respondents are unwilling to take corrective action. To the contrary, Respondents have proposed to Complaint Counsel several alternative corrective action proposals, the future cost of which has been estimated to exceed $13.2 million. Complaint Counsel has rejected these proposals. Nor should the Court assume that Central, its counsel, or its Board of Directors are aware of each alleged fact claimed to be known by a third party. To the extent a third party has provided important information to Complaint Counsel, Respondents should be given the opportunity to address that information and take it into account in resolving this matter.

4/ The fact that the Court is the trier-of-fact in this matter makes the instant situation much more problematical than in a jury trial, where a court can make in camera determinations without exposing the trier-of-fact (the jury) to potentially prejudicial materials.

Thus, in the instant case, the qualified "informant's privilege" is easily overcome. The contents of the anonymous letter, as conceded by Complaint Counsel, are important enough to Respondents' defense in this matter and a fair determination of this case that "the privilege must give way." Rovario, 353 U.S. at 60-61. Therefore, the Court should order Complaint Counsel to produce the letter to Respondents. At a minimum, Complaint Counsel should disclose the underlying facts or contentions set forth in the letter.

III. CONCLUSION

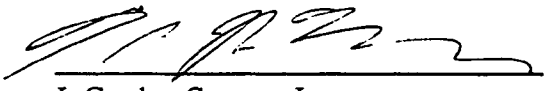
Given the fact that there appears to be little basis for Complaint Counsel's Motion, it would appear that Complaint Counsel's true goal is to prejudice the Court against Central by forcing the Court to focus on an admittedly inadmissible and perhaps unreliable and inaccurate letter, while depriving Central the opportunity even to know of the letter's contents. Complaint Counsel's attempt to sway the Court in this manner is particularly unfortunate because Respondents' counsel repeatedly warned Complaint Counsel that such a course of conduct was inappropriate. See Correspondence from Respondents' Counsel to Complaint Counsel, attached hereto as Exhibits "A" and "B".

Resolving the motion on the merits should be straightforward, however. The letter clearly is discoverable material under 16 C.F.R. § 1025.31(c)(1). Because it is an anonymous letter, with the identity of the author already hidden by the author himself or herself, the "informant's privilege" -- which only protects the identity of an informant -- simply does not apply. Moreover, even if the letter had been signed, the "informant's privilege" is overcome in this case by the admittedly important nature of the contents of the letter.

Based on all of the foregoing, pursuant to 16 C.F.R. § 1045(c)(2), Respondents respectfully request that the Court deny Complaint Counsel's Motion and order Complaint Counsel to produce the anonymous letter to Respondents. At a minimum, Respondents request that the Court direct Complaint Counsel to state with specificity the factual or other information provided in the letter so that Respondents may prepare for trial and address any public safety issues raised in the letter.

Respectfully submitted,

Dated: May 19, 1998



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Attorneys for Respondents
CENTRAL SPRINKLER CORP. and
CENTRAL SPRINKLER COMPANY

EXHIBIT A

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Fax: 215-963-5299

Morgan, Lewis
& Bockius LLP
COUNSELORS AT LAW
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1873 1998

Thomas P. Hogan, Jr.
215-963-5253

May 1, 1998

VIA TELECOPIER

Deborah S. Orlove
Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4430 East West Highway
Bethesda, MD 20814

Re: In the Matter of Central Sprinkler Corp., et al. (CPSC Docket No. 98-2)

Dear Ms. Orlove:

On Wednesday, April 29, 1998, we received Complaint Counsel's written discovery responses. However, to date, we still have not received any documents. Please immediately address this matter. In addition, in the future, please arrange for prompt and reliable service of any documents and/or pleadings.

Regarding your discovery responses, a quick reading reveals that these responses are highly deficient. In essence, the Staff has failed to provide any evidence or requested information supporting the Complaint in this matter. We will provide a detailed analysis of the deficiencies in the Staff's discovery responses once we receive the documents you are producing, and hope that you will make a good faith attempt to provide meaningful supplemental responses. In the absence of such supplemental responses, we will be forced to file a motion to compel.

There are several preliminary matters regarding the Staff's discovery responses which must be addressed immediately. First, regarding all claims of documents or information allegedly protected by the attorney-client privilege or work product doctrine, please immediately produce a privilege log as required by the discovery requests and applicable practice and procedure. Given the expedited nature of these proceedings, we will expect to receive such a log no later than May 8, 1998.

Second, the Staff has delayed providing certain documents pending the entry of a Confidentiality Agreement. Unfortunately, you did not choose to raise this issue with us prior to raising such an objection, nor have you suggested any agreement. To remedy this problem, attached is a draft Confidentially Agreement. Please provide me with any comments by the end of the day on May 5, 1998. In the absence of any comments, given the expedited nature of these proceedings, we will submit the Confidentiality Agreement for Court approval.

Third, your discovery responses reveal that the CPSC has been in contact with not only former Central employees, but also current Central employees. Such ex parte contacts are a clear breach of ethical obligations and are contrary to the Staff's prior written representations that no such contacts had occurred. Please immediately produce all evidence related to such contacts, which clearly cannot be considered privileged in any manner. Under no circumstances should the Staff engage in ex parte contacts with the Court regarding these contacts, which appears to be the course of action you suggest in your discovery responses. In this regard, please immediately confirm that you will not make any ex parte submissions to Judge Moran without substantial prior notice that would give us an opportunity to object to any such one-sided factual submissions to the Court.

Regards,

Thomas P. Hogan, Jr.

TPH/lgh

Enclosure

EXHIBIT B

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Fax: 215-963-5299

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& Bockius LLP
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1873 1998

Thomas P. Hogan, Jr.
215-963-5253

May 7, 1998

VIA TELECOPIER & REGULAR MAIL

Deborah S. Orlove
Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4430 East West Highway
Bethesda, MD 20814

Re: In the Matter of Central Sprinkler Corp., et al. (CPSC Docket No. 98-2)

Dear Ms. Orlove:

This letter responds to your letter of May 6, 1998.

First, regarding the scope of discovery provided by the Staff, your letter fails to address the multiple deficiencies with the Staff's discovery responses raised in my letter of May 4. For example, you still refuse or fail to identify persons with knowledge regarding the key allegations in the Complaint. By failing to provide such information, you completely block Central's ability to take depositions of your witnesses and effectively shut down discovery. Moreover, you fail to address the large number of interrogatories and document requests for which the Staff has provided no response whatsoever. These are only two examples of your letter's failure to address the many deficiencies described in my letter of May 4. It would thus appear that the Staff is refusing to engage in any good faith attempt to resolve this discovery dispute. Therefore, in the absence of full and complete supplemental responses from the Staff as discussed in my letter of May 4, we will be forced to file a motion to compel.

Second, in your letter, you represented that the Staff will provide us with a privilege log. You have not indicated when you will provide it, however. Given the pervasive nature of your privilege objections, the timing requirements established for motions to compel by the CPSC rules of practice, and the fact that such a log already is tardy, we will expect to receive the Staff's privilege log no later than May 8, 1998, as we requested in my letter of May 4.

Your letter also represents that you will begin to provide the Staff's initial test results, but again you do not provide a set date for production. As indicated to you in my letter of May 4, we will expect to receive a full supplemental production by no later than May 8, 1998.

In addition, your letter reiterates a refusal to produce purportedly confidential documents from third parties absent a confidentiality agreement. In my letter to you of May 1, we provided you with a draft Confidentiality Agreement. Despite your stated willingness to produce the referenced documents pursuant to such an agreement, your letter does not comment on or otherwise address the proposed Confidentiality Agreement. In the absence of your comments, we will submit the Confidentiality Agreement for Court approval contemporaneously with any necessary motion to compel. Moreover, please be advised that if you refuse to produce any document for any reason, Central will oppose the admission of that document or class of documents into evidence at the trial of this matter.

Finally, we hereby reiterate our request that the Staff not attempt to engage in any ex parte contacts with the Court.

To date, the Staff has not provided any meaningful discovery to Respondents. Of the 2000 pages of documents produced, approximately 1500 consist of test results provided to you by Central, and many of the remaining 500 consist of publicly available documents. Your discovery provides no meaningful information to Central regarding the bases of your claims and substantially impairs Central's ability to prepare for trial. The Staff cannot and should not be permitted to file a public Complaint, but then refuse to provide the evidence purportedly supporting such claims. We hope that the Staff will choose to take a more reasonable and forthcoming approach going forward in this litigation.

Regards,

Thomas P. Hogan, Jr.

TPH/lgh

CERTIFICATE OF SERVICE

I, Thomas P. Hogan, Jr., hereby certify that on this date a true and correct copy of the foregoing Respondents' Opposition To Complaint Counsel's Motion For Protective Order Regarding Anonymous Letter was served via telecopier and regular mail upon the following:

Eric L. Stone
Director
Division of Administrative Litigation
U.S. Consumer Product Safety Commission
4430 East West Highway
Bethesda, MD 20814

Alan H. Schoem
Assistant Executive Director
Office of Compliance
U.S. Consumer Product Safety Commission
4430 East West Highway
Bethesda, MD 20814

The Honorable William B. Moran
Offices of the Administrative Law Judges
Environmental Protection Ageycy
401 M Street, S.W.
Mail Code 1900 L
Washington, DC 20460

Dated: May 19, 1998

Thomas P. Hogan, Jr.

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6/02/98

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp.	:	
	:	**CPSC Docket No. 98-2**
and	:	
	:	
Central Sprinkler Co.,	:	
	:	
Respondents.	:	
	:	

RESPONDENTS' OPPOSITION TO COMPLAINT COUNSEL'S MOTION FOR PROTECTIVE ORDER REGARDING ANONYMOUS LETTER

I. INTRODUCTION

Complaint Counsel asserts that they are in possession of an anonymous letter from an employee of Respondents. Complaint Counsel acknowledges that this letter contains information that is both relevant to this case and responsive to Respondents' discovery requests. Nevertheless, Complaint Counsel has refused to produce the letter to Respondents, claiming that is subject to the so-called "informant's privilege."[1/]

Pursuant to 16 C.F.R. § 1045(c)(2), Respondents Central Sprinkler Company and Central Sprinkler Corporation hereby request that the Court order Complaint Counsel to produce this anonymous letter to Respondents. It is obviously discoverable under the CPSC rules of practice. Moreover, because the "informant's privilege" only protects the identity of an informant, not the information provided, an anonymous letter is not covered by the privilege. In any event, the alleged facts described in the letter are not privileged. In addition, because Complaint Counsel

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1/ See Complaint Counsel's Motion For Protective Order And In Camera Submission ("Complaint Counsel's Motion"), filed May 15, 1998.

admits that it is using the information in the letter to build its own case, the letter constitutes critical information necessary to Respondents for their defense in this case, and thus the "informant's privilege" is overcome. Finally, to the extent the letter suggests facts that defense counsel and the Respondents should evaluate, public safety warrants that the letter be disclosed to Respondents. Therefore, the Court should order Complaint Counsel to produce the letter to Respondents.[2/]

II. ARGUMENT

A. The Anonymous Letter Is Discoverable Material.

The CPSC rules of practice provide: "Parties may obtain discovery regarding any matter, not privileged, which is within the Commission's statutory authority and is relevant to the subject matter invoked in the proceedings." 16 C.F.R. § 1025.31(c)(1). Permissible discovery includes information that "appears reasonably calculated to lead to the discovery of admissible evidence." Id.

There should be little dispute that the anonymous letter constitutes discoverable material under these definitions. Complaint Counsel states that the letter "contains information and suggestions regarding Omega sprinkler failures." Complaint Counsel's Motion, p. 1. The operation of Omega sprinkler heads is a central issue in this case. Thus, the anonymous letter

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2/ Respondents are only requesting that the letter be turned over to them, not placed in the public record. Pursuant to 16 C.F.R. § 1045(c)(2), the Court has the authority to "enter a protective order prohibiting unnecessary disclosure." As discussed infra, Respondents have the right and need to see the letter. However, there is no reason to make an anonymous letter publicly available.

falls squarely within the definition of relevant material under the CPSC rules of practice. See 16 C.F.R. § 1025.31(c)(1).

Moreover, Complaint Counsel admits that the anonymous letter is responsive to a multitude of Respondents' discovery requests. See Complaint Counsel's Motion, pp. 1-2. Complaint Counsel also states that they are "using the information contained in the document to further its investigation . . . and to channel its discovery in this matter." Id., pp. 2-3. Thus, according to Complaint Counsel's own evaluation of the anonymous letter, it is both responsive and highly relevant to the instant proceedings. Therefore, pursuant to 16 C.F.R. § 1025.31(c)(1), the anonymous letter is discoverable material which should be produced to Respondents.

B. The "Informant's Privilege" Does Not Apply To The Contents Of An Anonymous Letter.

While conceding that the anonymous letter contains responsive and relevant materials, Complaint Counsel has refused to produce it. Instead, Complaint Counsel relies on the so-called "informant's privilege" in requesting that the letter be shielded from normal discovery. See Complaint Counsel's Motion, p. 3.

However, the "informant's privilege" by its very nature does not apply to the contents of an anonymous letter. This privilege protects only the identity of an informant, not the information provided by the informant. See Rovario v. United States, 353 U.S. 56, 60 (1957); see also Wright & Graham, Federal Practice and Procedure: Evidence § 5704 (The privilege does not protect "information provided by the informer . . . . Communications of an informant are not privileged . . . .").

The document at issue is an anonymous letter. Complaint Counsel states that the letter itself purposely does not reveal the identity of the author. See Complaint Counsel's Motion, p. 2 ("The author of the letter purposely did not reveal his or her identity . . . ."). Thus, because the "informant's privilege" only protects the identity of an informant, not the information provided, and the anonymous letter does not reveal the identity of the author, the "informant's privilege" simply does not apply in this situation. Accordingly, the letter, admittedly relevant and responsive, should be produced by Complaint Counsel to Respondents.

C. The "Informant's Privilege" Is Easily Overcome In This Case.

Even if the anonymous letter at issue had been signed, the so-called "informant's privilege" would be superseded in this case based on the admitted importance of the information provided in the letter.

The "informant's privilege" at one time was proposed as a formal rule of evidence, but was rejected. See Wright & Graham, §§ 5701-17. The privilege thus is a common law creation. Id. However, the privilege is not absolute -- it is, at best, a qualified privilege. The Supreme Court has clearly stated: "Where the disclosure of an informant's identity, or the contents of his communication, is relevant and helpful to the defense of an accused, or is essential to a fair determination of a cause, the privilege must give way. In these situations the trial court may require disclosure and, if the government withholds the information, dismiss the action." Rovario, 353 U.S. at 60-61.

As admitted by Complaint Counsel, the contents of the anonymous letter fall squarely within the circumstances where "the privilege must give way." Complaint Counsel concedes that they are "using the information contained in the document to further its investigation . . . and to

channel its discovery in this matter." Complaint Counsel's Motion, pp. 2-3. Thus, Complaint Counsel is treating the contents of the anonymous letter as extremely important information for purposes of this case. There should be little doubt that knowledge of this information would be "relevant and helpful" in the defense of this case for Respondents, and that giving Respondents equal access to this important information would be "essential to a fair determination" of this case. Rovario, 353 U.S. at 60-61.

Complaint Counsel makes two arguments in an attempt to justify its claim of privilege. First, Complaint Counsel asserts that it does not intend to use the document itself at trial. See Complaint Counsel's Motion, p. 2. This argument simply misses the point. The proper issue is whether Complaint Counsel intends to use the information contained in the letter and the investigatory fruits of that information in the trial of this case. The answer to that question clearly is "Yes," as Complaint Counsel had stated that it is using the information for investigatory and discovery purposes. Id. at pp. 2-3. Therefore, Respondents should have equal access to this document, to be given an equal opportunity to use it to "further [Respondents'] investigation" and "channel [Respondents'] discovery," in order to prepare for trial. Id.

Furthermore, public safety dictates that Respondents and their counsel be advised of the contents of this anonymous letter. Central Sprinkler Company manufactures the Omega sprinkler heads in question. To the extent that the letter reveals or explains any potential problems with the Omegas, Central, its Board of Directors, and its counsel affirmatively want to receive such information to address any potential problems appropriately. Central, its Board of Directors, and its counsel are committed to addressing properly any problems with the Omegas. If there are any identifiable problems with the Omegas, nobody has a greater interest in or right

to address those problems than Respondents. Complaint Counsel's decision to deny Respondents access to the contents of the letter is thus both procedurally unsound and contrary to Complaint Counsel's statutory mandate.[3/]

Complaint Counsel's second argument is that the document should be withheld to prevent any retaliation against the letter's author. Respondents assure the Court that they will not "retaliate" against any person for providing information to CPSC. Moreover, Complaint Counsel has not produced any evidence that Respondents would retaliate in any way. Thus, there is no reason to withhold the letter.

When viewed from an objective perspective, the course of action requested by Complaint Counsel here should not be followed. Complaint Counsel requests that a document that Complaint Counsel has possession of, admits is important, plans to use to prepare for trial, and has provided to this Court, not be given to Respondents. Thus, everyone involved in the trial of this matter with the exception of Respondents, who are defending their product, will have access to this document.[4/] Such a situation would be highly prejudicial to Respondents, a basic denial of due process rights, and fundamentally unfair.

3/ The Court should not assume that Respondents are unwilling to take corrective action. To the contrary, Respondents have proposed to Complaint Counsel several alternative corrective action proposals, the future cost of which has been estimated to exceed $13.2 million. Complaint Counsel has rejected these proposals. Nor should the Court assume that Central, its counsel, or its Board of Directors are aware of each alleged fact claimed to be known by a third party. To the extent a third party has provided important information to Complaint Counsel, Respondents should be given the opportunity to address that information and take it into account in resolving this matter.

4/ The fact that the Court is the trier-of-fact in this matter makes the instant situation much more problematical than in a jury trial, where a court can make in camera determinations without exposing the trier-of-fact (the jury) to potentially prejudicial materials.

Thus, in the instant case, the qualified "informant's privilege" is easily overcome. The contents of the anonymous letter, as conceded by Complaint Counsel, are important enough to Respondents' defense in this matter and a fair determination of this case that "the privilege must give way." Rovario, 353 U.S. at 60-61. Therefore, the Court should order Complaint Counsel to produce the letter to Respondents. At a minimum, Complaint Counsel should disclose the underlying facts or contentions set forth in the letter.

III. CONCLUSION

Given the fact that there appears to be little basis for Complaint Counsel's Motion, it would appear that Complaint Counsel's true goal is to prejudice the Court against Central by forcing the Court to focus on an admittedly inadmissible and perhaps unreliable and inaccurate letter, while depriving Central the opportunity even to know of the letter's contents. Complaint Counsel's attempt to sway the Court in this manner is particularly unfortunate because Respondents' counsel repeatedly warned Complaint Counsel that such a course of conduct was inappropriate. See Correspondence from Respondents' Counsel to Complaint Counsel, attached hereto as Exhibits "A" and "B".

Resolving the motion on the merits should be straightforward, however. The letter clearly is discoverable material under 16 C.F.R. § 1025.31(c)(1). Because it is an anonymous letter, with the identity of the author already hidden by the author himself or herself, the "informant's privilege" -- which only protects the identity of an informant -- simply does not apply. Moreover, even if the letter had been signed, the "informant's privilege" is overcome in this case by the admittedly important nature of the contents of the letter.

Based on all of the foregoing, pursuant to 16 C.F.R. § 1045(c)(2), Respondents respectfully request that the Court deny Complaint Counsel's Motion and order Complaint Counsel to produce the anonymous letter to Respondents. At a minimum, Respondents request that the Court direct Complaint Counsel to state with specificity the factual or other information provided in the letter so that Respondents may prepare for trial and address any public safety issues raised in the letter.

Respectfully submitted,

Dated: May 19, 1998

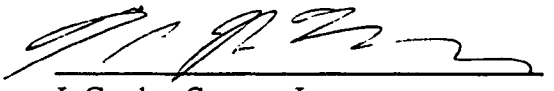

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EXHIBIT A

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May 1, 1998

VIA TELECOPIER

Deborah S. Orlove
Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4430 East West Highway
Bethesda, MD 20814

Re: In the Matter of Central Sprinkler Corp., et al. (CPSC Docket No. 98-2)

Dear Ms. Orlove:

On Wednesday, April 29, 1998, we received Complaint Counsel's written discovery responses. However, to date, we still have not received any documents. Please immediately address this matter. In addition, in the future, please arrange for prompt and reliable service of any documents and/or pleadings.

Regarding your discovery responses, a quick reading reveals that these responses are highly deficient. In essence, the Staff has failed to provide any evidence or requested information supporting the Complaint in this matter. We will provide a detailed analysis of the deficiencies in the Staff's discovery responses once we receive the documents you are producing, and hope that you will make a good faith attempt to provide meaningful supplemental responses. In the absence of such supplemental responses, we will be forced to file a motion to compel.

There are several preliminary matters regarding the Staff's discovery responses which must be addressed immediately. First, regarding all claims of documents or information allegedly protected by the attorney-client privilege or work product doctrine, please immediately produce a privilege log as required by the discovery requests and applicable practice and procedure. Given the expedited nature of these proceedings, we will expect to receive such a log no later than May 8, 1998.

Second, the Staff has delayed providing certain documents pending the entry of a Confidentiality Agreement. Unfortunately, you did not choose to raise this issue with us prior to raising such an objection, nor have you suggested any agreement. To remedy this problem, attached is a draft Confidentially Agreement. Please provide me with any comments by the end of the day on May 5, 1998. In the absence of any comments, given the expedited nature of these proceedings, we will submit the Confidentiality Agreement for Court approval.

Third, your discovery responses reveal that the CPSC has been in contact with not only former Central employees, but also current Central employees. Such ex parte contacts are a clear breach of ethical obligations and are contrary to the Staff's prior written representations that no such contacts had occurred. Please immediately produce all evidence related to such contacts, which clearly cannot be considered privileged in any manner. Under no circumstances should the Staff engage in ex parte contacts with the Court regarding these contacts, which appears to be the course of action you suggest in your discovery responses. In this regard, please immediately confirm that you will not make any ex parte submissions to Judge Moran without substantial prior notice that would give us an opportunity to object to any such one-sided factual submissions to the Court.

Regards,

Thomas P. Hogan, Jr.

TPH/lgh

Enclosure

EXHIBIT B

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Thomas P. Hogan, Jr.
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May 7, 1998

VIA TELECOPIER & REGULAR MAIL

Deborah S. Orlove
Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4430 East West Highway
Bethesda, MD 20814

Re: In the Matter of Central Sprinkler Corp., et al. (CPSC Docket No. 98-2)

Dear Ms. Orlove:

This letter responds to your letter of May 6, 1998.

First, regarding the scope of discovery provided by the Staff, your letter fails to address the multiple deficiencies with the Staff's discovery responses raised in my letter of May 4. For example, you still refuse or fail to identify persons with knowledge regarding the key allegations in the Complaint. By failing to provide such information, you completely block Central's ability to take depositions of your witnesses and effectively shut down discovery. Moreover, you fail to address the large number of interrogatories and document requests for which the Staff has provided no response whatsoever. These are only two examples of your letter's failure to address the many deficiencies described in my letter of May 4. It would thus appear that the Staff is refusing to engage in any good faith attempt to resolve this discovery dispute. Therefore, in the absence of full and complete supplemental responses from the Staff as discussed in my letter of May 4, we will be forced to file a motion to compel.

Second, in your letter, you represented that the Staff will provide us with a privilege log. You have not indicated when you will provide it, however. Given the pervasive nature of your privilege objections, the timing requirements established for motions to compel by the CPSC rules of practice, and the fact that such a log already is tardy, we will expect to receive the Staff's privilege log no later than May 8, 1998, as we requested in my letter of May 4.

Your letter also represents that you will begin to provide the Staff's initial test results, but again you do not provide a set date for production. As indicated to you in my letter of May 4, we will expect to receive a full supplemental production by no later than May 8, 1998.

In addition, your letter reiterates a refusal to produce purportedly confidential documents from third parties absent a confidentiality agreement. In my letter to you of May 1, we provided you with a draft Confidentiality Agreement. Despite your stated willingness to produce the referenced documents pursuant to such an agreement, your letter does not comment on or otherwise address the proposed Confidentiality Agreement. In the absence of your comments, we will submit the Confidentiality Agreement for Court approval contemporaneously with any necessary motion to compel. Moreover, please be advised that if you refuse to produce any document for any reason, Central will oppose the admission of that document or class of documents into evidence at the trial of this matter.

Finally, we hereby reiterate our request that the Staff not attempt to engage in any ex parte contacts with the Court.

To date, the Staff has not provided any meaningful discovery to Respondents. Of the 2000 pages of documents produced, approximately 1500 consist of test results provided to you by Central, and many of the remaining 500 consist of publicly available documents. Your discovery provides no meaningful information to Central regarding the bases of your claims and substantially impairs Central's ability to prepare for trial. The Staff cannot and should not be permitted to file a public Complaint, but then refuse to provide the evidence purportedly supporting such claims. We hope that the Staff will choose to take a more reasonable and forthcoming approach going forward in this litigation.

Regards,

Thomas P. Hogan, Jr.

TPH/lgh

CERTIFICATE OF SERVICE

I, Thomas P. Hogan, Jr., hereby certify that on this date a true and correct copy of the foregoing Respondents' Opposition To Complaint Counsel's Motion For Protective Order Regarding Anonymous Letter was served via telecopier and regular mail upon the following:

Eric L. Stone
Director
Division of Administrative Litigation
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4430 East West Highway
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Alan H. Schoem
Assistant Executive Director
Office of Compliance
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The Honorable William B. Moran
Offices of the Administrative Law Judges
Environmental Protection Ageycy
401 M Street, S.W.
Mail Code 1900 L
Washington, DC 20460

Dated: May 19, 1998

Thomas P. Hogan, Jr.

RECEIVED
6/02/98

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp.	:	
	:	
and	:	**CPSC Docket No. 98-2**
	:	
Central Sprinkler Co.,	:	
	:	
Respondents.	:	
	:	

RESPONDENTS' MOTION TO COMPEL
FULL AND COMPLETE RESPONSES TO
INTERROGATORIES AND DOCUMENT REQUESTS

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I. INTRODUCTION

Pursuant to 16 C.F.R. § 1025.36, Respondents Central Sprinkler Corporation and Central Sprinkler Company (collectively, "Central") hereby move this Court to compel Complaint Counsel to provide full and complete responses to Central's interrogatories and document requests.

To date, Complaint Counsel has refused to provide virtually any discovery to Central. For instance:

- Complaint Counsel has refused to produce the documents described in the "List and Summary of Documentary Evidence" filed with the Complaint.
- Complaint Counsel has declined to identify persons with knowledge of relevant information.
- Complaint Counsel has failed to provide responses to over half of the interrogatories and document requests propounded by Central.
- Complaint Counsel has asserted that virtually all documents or information in its possession from any source are privileged, but then refused to provide a log of such privileged documents.
- Complaint Counsel has represented that certain documents provided by third parties are confidential and could only be produced subject to a confidentiality agreement, but then refused even to consider a confidentiality agreement proposed by Central.
- Complaint Counsel has refused to provide discovery regarding its potentially impermissible ex parte contacts with Central's former and current employees.

These examples represent only a few of the shortcomings evident in Complaint Counsel's discovery responses. In essence, Complaint Counsel only has produced documents and information to Central that either are publicly available or were originally produced to Complaint Counsel by Central. Therefore, Central now is forced to ask the Court to intervene, and respectfully requests that the Court order Complaint Counsel to provide full and complete responses to Central's interrogatories and document requests.

II. PROCEDURAL BACKGROUND

A. The Complaint and List of Supporting Documents

Complaint Counsel filed its Complaint in the instant case on March 3, 1998. The Complaint alleges that Central manufactures approximately 20 models of fire sprinkler heads, known as "Omegas." (Compl. ¶ 6). The Complaint asserts that the Omegas "do not and will not function in a significant percentage of instances," and thus create a "substantial risk of injury to the public." (Compl. ¶¶ 10, 15). Based on these allegations, the Complaint requests a total recall of approximately 10 million Omegas allegedly installed over the past 15-plus years. (Compl., Relief Sought, pp. 4-6).

The Complaint, however, provides little further information. It does not state which models of Omegas allegedly are defective, what percentage are defective, what constitutes a "defective" Omega for purposes of testing, whether Omegas from particular years or using particular piping systems are defective, or similar basic details. Presumably, the information supporting Complaint Counsel's claims would be provided in discovery.

In addition to the Complaint, as required by 16 C.F.R. § 1025.11(b)(3), Complaint Counsel filed a List and Summary of Documentary Evidence. In its entirety, this list consisted of two categories:

1. Data compilations depicting over 40% failure rates in testing of Central's Omega brand fire sprinklers.

2. Documents evidencing failure of Omega fire sprinklers in actual fire situations.

See List and Summary of Documentary Evidence, p. 1.

B. Central's Discovery Requests

On March 26, 1998, Central served: (1) Respondents' First Request for Documents and Things ("Central's Document Requests"), attached hereto as Exhibit "A"; and (2) Respondents' First Set of Interrogatories ("Central's Interrogatories"), attached hereto as Exhibit "B".1/

Central's Document Requests and Interrogatories requested extremely basic information from Complaint Counsel. For instance, Central requested the documents identified by Complaint Counsel in the List and Summary of Documentary Evidence. See Central's Document Requests, No. 1. Central also requested detailed information regarding the allegations of the Complaint (Interrogatory Nos. 1-99), persons with knowledge of relevant material (Interrogatory Nos. 100-105), other allegations made by Complaint Counsel regarding the Omegas (Interrogatory Nos. 106-14), the CPSC's investigation of the Omegas (Interrogatory Nos. 115-23, 130-48), and any testing and/or design analysis of the Omegas (Interrogatory Nos. 124-129).

1/ Because of their bulk, the exhibits listed herein are being provided to the Court in a separate appendix.

In total, Central propounded 71 document requests and 140 interrogatories to Complaint Counsel. The detailed nature of these discovery requests was necessitated by the lack of information in the Complaint and the technical complexity of the subject matter. By way of comparison, Complaint Counsel has propounded 101 document requests and 117 interrogatories to Central.

C. **Complaint Counsel's Discovery Responses**

On April 27, 1998, Complaint Counsel served: (1) Complaint Counsel's Responses to Respondents' First Request For Production of Documents and Things ("Complaint Counsel's Document Responses"), attached hereto as Exhibit "C"; and (2) Complaint Counsel's Responses to Respondents' First Set of Interrogatories ("Complaint Counsel's Interrogatory Responses"), attached hereto as Exhibit "D". Pursuant to the instructions included in Central's discovery requests, Complaint Counsel also produced Complaint Counsel's Index of Responsive Documents, attached hereto as Exhibit "E". Complaint Counsel actually produced approximately 2100 pages of documents.

However, Complaint Counsel's discovery responses provided virtually no information to Central. Out of the 2100 pages of documents produced, roughly 1600 were documents previously provided to Complaint Counsel by Central itself. The remaining 500 documents mainly consisted of marginally relevant, publicly available documents, such as the CPSC's newsletter to the public, pleadings from cases involving Central, CPSC news releases, and other miscellaneous material.

According to Complaint Counsel's Index of Responsive Documents, Complaint Counsel only provided responses to 12 out Central's 71 document requests. See Exhibit "E". Regarding

virtually every document request, Complaint Counsel claimed that the responsive documents were "protected from discovery by the work product privilege." See, e.g., Complaint Counsel's Document Responses, Nos. 1, 3, 4, 5, 7, 8, 10, 11, 12, 13, 15, 16, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 56, 57, 58, 59, 61, 62, 63, 68, 69, 70, 71.

Complaint Counsel's Interrogatory Responses did not provide any further information. Complaint Counsel either refused to answer or answered incompletely regarding the majority of the interrogatories. In its responses, Complaint Counsel generally raised a multitude of objections (e.g., relevance, vagueness, privilege), then provided virtually no information. Complaint Counsel also claimed that responsive information to many document requests and interrogatories would only be produced if Central agreed to a Confidentiality stipulation. See, e.g., Complaint Counsel's Document Responses, Nos. 1 and 5; Complaint Counsel's Interrogatory Responses, Nos. 107(d) and 108(d).

D. Central's Attempts To Resolve This Discovery Dispute

Rather than immediately force the Court to rule on the deficiencies with Complaint Counsel's discovery responses, Central attempted to resolve this discovery dispute amicably. Central sent letters to Complaint Counsel on May 1, 4, 7, and 13, 1998. These letters addressed the deficiencies in Complaint Counsel's responses, and requested full and complete supplemental discovery responses. See Correspondence Between Central's Counsel and Complaint Counsel (in chronological order), attached hereto as Exhibit "F". Because Complaint Counsel requested a confidentiality agreement before producing certain documents, Central also provided a draft Confidentiality Agreement. See Letter of May 1. In addition, Central requested a privilege log

from Complaint Counsel to support Complaint Counsel's repeated invocation of a "work product privilege." See Letters of May 1, 4, 7, and 13.

Complaint Counsel responded in letters of May 6 and 8, 1998. See Exhibit "F". Complaint Counsel promised to deliver a privilege log, but has not done so to date. Complaint Counsel refused to accept or even comment on Central's proposed Confidentiality Agreement. Complaint Counsel did provide a supplemental production, consisting of a summary compilation of its test results, but refused to provide the methodology and supporting data underlying those results. Finally, Complaint Counsel chose to ignore entirely the multiple deficiencies in its discovery responses raised by Central, and refused to produce any further information.

Therefore, pursuant to 16 C.F.R. § 1025.36, Central now is forced to file the instant motion to compel. Central respectfully requests that the Court compel Complaint Counsel to provide full and complete responses to Central's Documents Requests and Interrogatories. The deficiencies with Complaint Counsel's responses are described in greater length below.

III. ARGUMENT

According to the CPSC rules of practice:

> Parties may obtain discovery regarding any matter, not privileged, which is within the Commission's statutory authority and is relevant to the subject matter involved in the proceedings, whether it relates to the claim or defense of the party seeking discovery or to the claim or defense of any other party, including the existence, description, nature, custody, condition and location of any books, documents, or other tangible things and the identity and location of persons having knowledge of any discoverable matter. It is not ground for objection that the information sought will be inadmissible at the hearing if the information sought appears reasonably calculated to lead to the discovery of admissible evidence.

16 C.F.R. § 1025.31(c)(1). Discovery responses must be "responsive, unevasive and complete." Cornaglia v. Ricciardi, 63 F.R.D. 416, 149 (E.D. Pa. 1974).

It is "beyond question" that a defendant or respondent is entitled to discover the factual basis of claims asserted in a complaint. Cornaglia, 63 F.R.D. at 419; see also Scovill Manuf. Co. v. Sunbeam Corp., 61 F.R.D. 598, 601 (D. Del. 1973); Dubois Brewing Co. v. United States, 34 F.R.D. 126, 127 (W.D. Pa. 1963) (because plaintiffs brought the claim, presumably they know the factual basis for it). Moreover, a defendant or respondent is entitled to know the factual content of claim "with a reasonable degree of specificity." Martin v. Easton Publishing Co., 85 F.R.D. 312, 315 (E.D. Pa. 1980).

Complaint Counsel's Document Responses and Interrogatory Responses, however, fail to meet these fundamental rules of discovery. The specific deficiencies of Complaint Counsel's discovery responses and the individual responses where those deficiencies occur are described below. Because of the pervasiveness of such deficiencies, Central will not attempt to discuss each response separately. Instead, Central will describe the specific problem, provide several representative examples from Complaint Counsel's responses, then list all of the responses where the problem occurs.

A. Complaint Counsel Has Failed To Produce The Documents Provided In The "List And Summary Of Documentary Evidence."

The CPSC rules of practice require that Complaint Counsel provide a "list and summary of documentary evidence supporting the charges" in the Complaint. 16 C.F.R. § 1025.11(b)(3). Such documents represent the most basic and fundamental discovery to be provided by Complaint Counsel in any case. Indeed, the documents described in Complaint Counsel's List

and Summary of Documentary Evidence are the first documents requested in Central's Document Requests. See Request No. 1. Moreover, in the instant case, the Court already has stated that it presumed that "the documents themselves [from the list] are being provided during discovery, a process that has already begun with intensity." See Order On Motion To Dismiss Complaint For Lack of Jurisdiction And for Insufficient Pleadings, p. 16.

Nevertheless, Complaint Counsel has refused to produce these fundamental documents. Instead, Complaint Counsel responded as follows to Central's request that the list be produced:

> Response: Complaint Counsel objects to this Request to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore [sic] protected from discovery pursuant to the work product privilege. The data compilation of failures was prepared by or for Complaint Counsel in anticipation of litigation. Without waiving its objection, Complaint Counsel will produce the data on which the compilation is based, and the information about the fires, to the extent that the information was not provided to Complaint Counsel by a third party on a confidential basis. Without waiving its objection, to the extent that the data or information was provided on a confidential basis, Complaint Counsel will produce the data upon the execution of an appropriate confidentiality stipulation by Respondents, and the issuance of an appropriate protective order by the Presiding Officer.

See Complaint Counsel's Document Responses, No. 1.

In refusing to provide the documents described in Complaint Counsel's List and Summary of Documentary Evidence, Complaint Counsel is violating the CPSC's rules of practice and failing to engage in good faith discovery efforts. The logical purpose of 16 C.F.R. § 1025.11(b)(3), requiring Complaint Counsel to list the "documentary evidence supporting the charges" in the Complaint, is to permit respondents to discover and examine such information. Otherwise, this provision would be reduced to a nullity.

If respondents are not permitted to discover the "documentary evidence supporting the charges" in the Complaint, then Complaint Counsel has no discovery obligations whatsoever. Even a criminal proceeding, where Jencks and Brady material must be produced by the Government, would provide greater discovery opportunities to respondents. In short, if Complaint Counsel is required to produce any documents to Central, it must logically be required to produce the documents described in the List and Summary of Documentary Evidence.[2/]

Thus, Complaint Counsel has no reasonable or good faith basis to continue to withhold from Central the documents described in the List and Summary of Documentary Evidence. Therefore, pursuant to 16 C.F.R. § 1025.36, Central respectfully requests that the Court compel Complaint Counsel to produce such documents.

B. Complaint Counsel Has Refused To Identify Persons Having Knowledge Of Discoverable Material.

In Central's Interrogatories, Central requests that Complaint Counsel identify persons having knowledge relevant to the Complaint or other discoverable information. Central poses this request in both one general request, see Interrogatory No. 102, and regarding certain specific issues in more precise requests, see, e.g., Interrogatory Nos. 83 and 87.

The CPSC rules of practice explicitly permit such requests. Section 1025.31 states that "Parties may obtain discovery regarding any matter involved in the proceedings . . . including . . . the identity and location of persons having knowledge of any discoverable matter." 16 C.F.R.

2/ The individual objections raised by Complaint Counsel in Document Response No. 1 are equally lacking in validity, and are addressed in the following sections of this brief. The deficiencies with Complaint Counsel's claim to a "work product privilege" are addressed in § III.D., infra. The fact that Complaint Counsel, despite its own request, has refused to enter into a confidentiality stipulation is addressed in § III.E., infra.

§ 1025.31(c)(1) (emphasis added). In fact, under the Federal Rules of Civil Procedure, the identity of persons likely to have knowledge of discoverable material is considered so fundamental a part of discovery that it is a required disclosure for all parties, without any discovery request being served. See Fed. R. Civ. P. 26(a)(1)(A); cf. Interrogatory No. 102.

Despite the fact that discovery of such "persons with knowledge" is plainly permitted, Complaint Counsel has refused to identify such persons in response to Central's Interrogatories. Complaint Counsel's failure to identify "persons with knowledge" falls into three categories: (1) Complaint Counsel refuses to identify any persons with knowledge; (2) Complaint Counsel only identifies broad groups of people rather than individual persons; and (3) Complaint Counsel identifies only Central personnel as having knowledge, despite the fact that it is self-evident that other persons with knowledge are known to Complaint Counsel. Each one of these categories is demonstrated below.

In many instances, Complaint Counsel completely ignores the request to identify persons with knowledge:

> Interrogatory No. 83. **(a) State whether the Complainant contends that any Omegas manufactured from 1996 through the present and using silicone o-rings have ever failed to activate in any type of testing.**
> **If so:**
> **(b) identify and describe any such testing;**
> **(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;**
> **(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and**
> **(e) describe in detail the substance of each such person's knowledge and/or information.**
> Response: Complaint Counsel objects to this Interrogatory to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore [sic] protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory on the ground that the term "failed to

activate" is undefined, unclear, vague and ambiguous. Complaint Counsel is unable to formulate a response to this Interrogatory without clarification of how Respondents define a failure to activate. Without waiving its objections. Complaint Counsel will provide all non-privileged and non-confidential information it has with respect to testing of Omega sprinklers. Complaint Counsel adds that one of the three Omega sprinklers it received from Respondents in February, 1998, which had just been manufactured a few weeks earlier and had never yet been installed in a sprinkler system, did not activate (as that term is defined in Complaint Counsel's discovery requests to Respondents) when exposed to its activation/triggering temperature. The sprinkler partially deployed, releasing drips of water only, and then the fusible link cold soldered, preventing activation. Complaint Counsel has shared this knowledge with respondents, and asked for an explanation of what, why and how this occurred.

Interrogatory No. 87. **(a) State whether the Complainant contends that the performance of Omegas declines or deteriorates over time.**
If so:

(b) identify and describe any such performance decline or deterioration;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that the phrase "performance of Omegas declines or deteriorates over time" is undefined, unclear, vague and ambiguous and, without clarification of same, it is impossible to formulate a response to this Interrogatory. However, deterioration of o-ring material and corrosion, which available evidence suggest may contribute failure of Omega sprinklers, may be progressive events.

See Complaint Counsel's Interrogatory Responses, Nos. 83 and 87 (emphasis added).

For other responses, Complaint Counsel provides an inadequate identification of "persons with knowledge." Such a deficiency is exemplified where Complaint Counsel refuses to identify individual people, instead identifying vague groups of people:

Interrogatory No. 51. **With respect to the allegation of Paragraph 10 of the Complaint that the Omegas "do not and/or will not function":**

(a) separately for each Omega model listed in the Complaint, describe in detail all of the causes and/or reasons that the Omegas "do not and/or will not function";

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: [(a) and (b) omitted]

(c) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's allegation. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, and any sprinkler contractors and/or AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about the basis for this allegation. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery.

(d) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Complaint Counsel has insufficient information upon which to formulate a response to this Interrogatories.

See Complaint Counsel's Interrogatory Responses, No. 51 (emphasis added; sub-parts (a) and (b) omitted).

Finally, in some instances, Complaint Counsel fails to identify sufficiently "persons with knowledge" by only listing Central personnel as having any knowledge of a particular subject matter, despite the fact that Complaint Counsel clearly knows of other persons:

Interrogatory No. 102. Identify each and every person whom Complainant knows and/or believes to have knowledge or information concerning or related to the subject matter of the Complaint or other discoverable information. For each such person, describe:

(a) the person's name;

(b) the person's last known home and business address;

(c) the person's last known telephone number;

(d) the corporate or government affiliation of the person;

(e) whether the Complainant has contacted such person; and

(f) the specific subject matter of the person's knowledge.

Response: Complaint Counsel objects to this Interrogatory on the ground that it is overbroad and unduly burdensome -- there are thousands of people and entities who have

information concerning or related to Omega sprinklers. Complaint Counsel further objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore [sic] protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel responds that it believes that Respondents and their current and former employees have such knowledge and information.

See Complaint Counsel's Interrogatory Responses, No. 102 (emphasis added).

Thus, Complaint Counsel has effectively refused to identify "persons with knowledge" of discoverable material.[3/] Without a precise identification of specific individuals with specific knowledge of relevant issues, Central will not be able to pursue discovery via depositions. Such a failure to identify persons with knowledge is not permitted under 16 C.F.R. § 1025.31(c)(1), which expressly permits such discovery. In this situation, Complaint Counsel should be required either to identify persons with knowledge or be limited at the trial of this matter to calling as witnesses those persons actually identified by name in Complaint Counsel's Interrogatory Responses.

Central respectfully requests that the Court compel Complaint Counsel to identify persons with knowledge of discoverable information. Complaint Counsel failed to provide such information in the following discovery responses:

Interrogatory Response Nos.: 5-25, 40-42, 51-73, 76-77, 81-88, 102.

C. Complaint Counsel Has Failed To Respond Or Has Provided Incomplete Responses To A Significant Number Of Central's Discovery Requests.

The CPSC rules of practice provide for an extremely broad scope of permissible discovery. See 16 C.F.R. § 1025.31(c)(1). Despite these provisions, Complaint Counsel has

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3/ Moreover, Complaint Counsel has failed to provide Central with documents from which such information could be ascertained.

refused to respond to many of Central's Document Requests and Interrogatories, or has provided materially incomplete answers. For instance, Complaint Counsel's Index of Responsive Documents indicates that Complaint Counsel has responded to only of 12 out of Central's 71 document requests. See Exhibit "E".

Complaint Counsel also has refused to respond to many of Central's Interrogatories, even those posing extremely straightforward and fundamental questions. For instance, a plainly critical issue in the instant case is the water pressure and temperature at which Omegas should activate when tested, and the percentage of heads that should activate when tested, to be considered acceptable. However, Complaint Counsel avoids responding to discovery requests about these subjects:

> Interrogatory No. 42. **(a) State whether Complainant contends that there is a single standard of water pressure (in psi) at which previously installed sprinkler heads must activate when tested to be deemed by Complainant as not presenting any substantial risk of injury to the public and/or substantial product hazard;**
> **If so:**
>
> **(b) identify and describe any such standard;**
> **(c) identify all documents which describe, evidence, refer, support, or relate to any such standard;**
> **(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such standard; and**
> **(e) describe in detail the substance of each such person's knowledge and/or information.**
>
> Response: Complaint Counsel objects to this Interrogatory on the grounds that it is vague, ambiguous and confusing. Complaint Counsel further objects to this Interrogatory on the ground that it is overbroad, and seeks information pertaining to sprinklers other than Omegas. Without waiving its objections, Complaint Counsel responds that once an Omega is removed from service, it will not create the substantial risk of injury to the public of which Complainant complains. Omega sprinklers fail to activate as designed and, in many cases, will not activate at pressures that far exceed the water pressure that may be available in the system at the time of a fire.

Interrogatory No. 43. **(a) State whether Complainant contends that there is a single standard of temperature at which previously installed sprinkler heads must activate when tested to be deemed by the Complainant as not presenting any substantial risk of injury to the public and/or substantial product hazard;**
If so:

(b) identify and describe any such standard;
(c) identify all documents which describe, evidence, refer, support, or relate to any such standard;
(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such standard; and
(e) describe in detail the substance of each such person's knowledge and/or information.

Response: See Response to previous Interrogatory. According to Respondents, Omega sprinklers are designed to activate at particularly defined activation/triggering temperatures, based on the temperature at which the fusible link in their heat collector is intended to convert from solid to liquid form.

Interrogatory No. 44. **(a) Describe the percentage of previously installed sprinkler heads that must activate at the standards described in Interrogatory Nos. 42-43 when tested in order to be deemed by the Complainant as not presenting any substantial risk of injury to the public and/or substantial product hazard;**

(b) identify all documents which describe, evidence, refer, support, or relate to such a percentage;
(c) identify each and every person whom Complainant knows and/or believes to have knowledge of such a percentage; and
(d) describe in detail the substance of each such person's knowledge and/or information.

Response: See Response to Interrogatory Nos. 42 and 43.

See Complaint Counsel's Interrogatory Responses, Nos. 42-44.

In the foregoing responses, Complaint Counsel completely avoids providing any responsive information. Either Complaint Counsel does not know the answers to these basic questions, in which case the Complaint never should have been brought, or Complaint Counsel is simply refusing to provide the relevant information. Given the fact that Complaint Counsel has provided documents that purport to show a failure rate of 40% for tested Omegas (based on an

unspecified standard), it is apparent that Complaint Counsel has established some standards for water pressure, activation temperature, and activation percentage in testing. This information is plainly relevant and discoverable under 16 C.F.R. § 1025.31(c)(1). Therefore, Complaint Counsel should be required to provide such basic information.

Similarly, another basic issue in this case is whether Complaint Counsel has identified any particular alternative design for the Omegas. Complaint Counsel also refuses to provide this information when requested:

> Interrogatory No. 129. **To the extent that you contend, or otherwise intend to present at the hearing in this matter, the feasibility and/or propriety of any alternative design features for the Omegas, identify and describe any such proposed alternative design features. Your response should include, without limitation, a description of all data, testing, reports, or other information supporting this contention.**
> Response: Complaint Counsel objects to this Request on the ground that the terms "feasibility and/or propriety of" (in the context of "alternative design features for the Omegas"), and "any alternative design features for the Omegas" are undefined, unclear, vague and ambiguous, and that the question as a whole is unintelligible, and thus precludes Complaint Counsel from formulating a response without clarification of its meaning.

See Complaint Counsel's Interrogatory Responses, No. 129.

Once again, in response to Interrogatory No. 129, Complaint Counsel refuses to provide extremely basic and plainly relevant information. This interrogatory is not complex or difficult to understand, despite Complaint Counsel's feigned inability to comprehend it. If Complaint Counsel contends that there is an alternative design for the Omegas that presents no "substantial product hazard," they should identify such design, both as a matter of public safety and as information that is plainly discoverable. Central has a right to study and prepare comments on any such alternative design proposal before the trial of this matter. On the other hand, if

Complaint Counsel does not contend that there are feasible alternative designs for the Omegas, then Central will not be forced be to expend further discovery resources pursuing this issue. Thus, by responding to this interrogatory, Complaint Counsel would provide information necessary for trial and/or would focus the areas of dispute in this case, both of which are permissible discovery goals.

Complaint Counsel should not be permitted to refuse to provide discovery responses. Where simple questions are asked, Complaint Counsel should provide simple, responsive, unevasive responses. Respondents have a right to discover the information defined as relevant in 16 C.F.R. § 1025.31(c)(1); to date, Complaint Counsel has refused to provide such information. Therefore, Central respectfully requests that the Court compel Complaint Counsel to provide such responses.

The following responses from Complaint Counsel suffer from the above-described deficiency:

Document Response Nos.: 1-3, 5-8, 10-14, 18-21, 23-29, 31-37, 39, 41, 44-71.

Interrogatory Response Nos: 42-46, 53-76, 87, 93-99, 106-13, 119, 129, 136-38, 140-41.

D. Complaint Counsel Has Refused To Produce Documents Based On Invalid Claims To A "Work Product Privilege."

Complaint Counsel has objected to virtually all of Central's Document Requests and many of Central's Interrogatories on the ground that such discovery "seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore [is] protected from discovery by the work product privilege." See, e.g., Complaint Counsel's Document Responses, Nos. 5, 7, 8, 19-29, 34-43; Complaint Counsel's Interrogatory Responses, Nos. 120-23.

Complaint Counsel essentially claims that all documents and information that have been reviewed by Complaint Counsel are subject to a claim of "work product privilege." The only documents not covered by this "privilege," according to Complaint Counsel, are publicly available documents or documents originally produced to Complaint Counsel by Central. See, e.g., Complaint Counsel's Interrogatory Responses, Nos. 120-23 (stating that Complaint Counsel will only provide documents "that are in the public domain").

The work product doctrine was established in Hickman v. Taylor, 329 U.S. 495 (1947). This doctrine is codified in the CPSC rules of practice at 16 C.F.R. § 1025.31(c)(3). Section 1025.31(c)(3) provides that to the extent "documents and tangible things [were] . . . prepared in anticipation of litigation," such documents and tangible things are subject to discovery "only upon a showing that the party seeking discovery has substantial need of the materials in the preparation of his case and that he is unable without unique hardship to obtain the substantial equivalent of the material by other means." 16 C.F.R. § 1025.31(c)(3).

In the instant case, Complaint Counsel has invoked the work product doctrine to claim that virtually all material in its possession is protected from discovery. Such privilege claims are specious and should be ruled invalid for several reasons. First, Complaint Counsel has provided no "privilege log" to substantiate its claims to privilege. Second, documents created by independent third parties then provided to Complaint Counsel do not qualify as "prepared in anticipation of litigation," and thus are not protected by the work product doctrine. Third, to the extent any documents are considered work product material, the facts contained in such documents are not protected from discovery, and must be provided in response to Central's Interrogatories. Finally, the documents and information that constitute the underlying

methodology and rationale behind Complaint Counsel's testing of Omegas is information required by Respondents to evaluate Complaint Counsel's claims, and Complaint Counsel would be required to present such evidence at trial to prove its claims; therefore, the need for such information and documents overcome any work product protection.

Central respectfully requests that the Court compel Complaint Counsel to respond to the discovery requests where Complaint Counsel has objected invalidly based on a claim to work product protection. To the extent that Complaint Counsel refuses to produce documents or information based on a claim of "work product privilege," Complaint Counsel then should be precluded from presenting any evidence on such subjects at trial.

1. **Complaint Counsel Has Failed To Provide A Privilege Log.**

As an initial matter, Complaint Counsel's invocation of the "work product privilege" is suspect because Complaint Counsel has not provided a "privilege log." A privilege log describes certain fundamental information about the documents which assertedly are privileged, such as the type of document, the general subject matter of the document, and the author and recipient of the document.

Such a privilege log was requested in Central's Documents Requests and Interrogatories, and is required by relevant case law. See, e.g., United States v. Exxon Corp., 87 F.R.D. 624, 637 (D.D.C. 1980); Mixing Equipment Co., Inc. v. Innova-Tech, Inc., 1986 WL 9501, *4 (E.D. Pa. August 29, 1986). Moreover, Complaint Counsel did not object to providing a privilege log. In fact, Complaint Counsel affirmatively promised to provide a privilege log to Central. See May 6 Letter, Exhibit "F". However, to date, Complaint Counsel has not provided a privilege log to Central.

The absence of a privilege log calls into serious question the validity of Complaint Counsel's claim to a privilege. The Court should order Complaint Counsel either to produce a privilege log or withdraw such objections. In addition, in the absence of the basic background information provided by a privilege log, it is difficult for Central to challenge Complaint Counsel's blanket assertions of privilege.[4/] Nevertheless, there are certain areas where Complaint Counsel's assertions of the "work product privilege" are obviously unsound.

2. Documents And Information Provided To Complaint Counsel By Independent Third Parties Are Not Protected By The Work Product Doctrine.

Several of Central's Document Requests seek information provided to Complaint Counsel by independent third parties:

> **Request No. 7.: All documents provided to the CPSC by any person, organization, business, or any other entity regarding or related to the Omegas and/or Respondents.**
> **Response:** Complaint Counsel objects to this Request on the grounds that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and [sic] protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel would be pleased to produce specific documents, or specific categories of documents, that Respondents seek to discover, upon rephrasal of this Request.

See Complaint Counsel's Document Responses, No. 7 (emphasis added).

Central sought similar information in Central's Interrogatories:

> **Interrogatory No. 120.: Describe in detail any and all communications between the CPSC and any dealer, retailer, or distributor in connection with the Omegas. Your response should include, without limitation, the following:**

4/ Central expressly reserves the right to supplement this motion to compel based on any later-disclosed privilege log from Complaint Counsel.

(a) the identity of any and all persons employed or otherwise retained by the CPSC who participated in this aspect of the investigation;

(b) the identity of any and all dealers, retailers, or distributors with whom the CPSC communicated in connection with this aspect of the investigation of the Omegas;

(c) a description of the content of the CPSC's communications with each such dealer, retailer, or distributor;

(d) the identification of any questionnaires or other surveys used by the CPSC in communicating with each such dealer, retailer, or distributor; and

(e) the identification of any and all data, reports, surveys results, or other information revealing the results of this aspect of the investigation.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests information prepared by or for Complaint Counsel in preparation for litigation, and thus [sic] protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory to the extent that it seeks information provided to CPSC by third parties who claim confidentiality or trade secret. Without waiving its objection, Complaint Counsel will provide copies of all such communications that are in the public domain.

Interrogatory No. 121.: Describe in detail and all communications between the CPSC and any Authority Having Jurisdiction ("AHJ") in connection with the Omegas. Your response should include, without limitation, the following:

(a) the identity of any and all persons employed or otherwise retained by the CPSC who participated in this aspect of the investigation;

(b) the identity of any and all AHJ's with whom the CPSC communicated in connection with this aspect of the investigation;

(c) a description of the content of the CPSC's communication with each such AHJ;

(d) the identification of any questionnaires or other surveys used by the CPSC in communicating with each such AHJ; and

(e) the identification of any and all data, reports, surveys results, or other information revealing the results of this aspect of the investigation.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests information prepared by or for Complaint Counsel in preparation for litigation, and thus [sic] protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory to the extent that it seeks information provided to CPSC by third parties who claim confidentiality or trade secret. Without waiving its objection, Complaint Counsel will provide copies of all such communications that are in the public domain.

See Complaint Counsel's Interrogatory Responses, Nos. 120-21(emphasis added).

These discovery requests from Central seek information created by independent third parties, then supplied to Complaint Counsel. It is self-evident that such information and documents were not prepared "in anticipation of litigation" by or on behalf of Complaint Counsel. See 16 C.F.R. § 1025.31(c)(3). Such documents and information were prepared by the independent third parties, for their own reasons, which certainly do not include the preparation of Complaint Counsel's case. Moreover, the mere fact that Complaint Counsel has received and reviewed such documents does not convert these documents into work product material. Therefore, the Court should compel Complaint Counsel to provide to Central all documents and information in Complaint Counsel's possession that were created or provided by independent third parties.

3. **The Work Product Doctrine Only Protects Documents, Not Facts.**

Even in areas where Complaint Counsel might be in possession of some documents constituting work product material, Complaint Counsel still must produce the facts and data underlying such documents. The work product doctrine by its very terms only protects "documents and tangible things" from discovery. See 16 C.F.R. § 1025.31(c)(3). The underlying facts contained in such documents are not protected from discovery. See Wright, Miller & Marcus, Federal Practice and Procedure: Civil 2d § 2024; Resolution Trust Corp. v. Dabney, 73 F.3d 262, 266 (10th Cir. 1995).

Thus, even where Complaint Counsel objects to producing actual documents based on the work product doctrine, Complaint Counsel still must provide the information and facts contained in those documents in response to Central's Interrogatories. For instance, Complaint Counsel has raised a work product objection to Central's Document Request No. 8:

> **Request No. 8.: All documents that constitute, provide evidence of, refer, or relate to any testing of the Omegas conducted by or on behalf of the CPSC.**
> **Response:** Complaint Counsel objects to this Request on the grounds that it seeks documents prepared by or for Complaint Counsel in anticipation of litigation, and therefore [sic] protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel responds that it will share with Respondents the results of any testing it intends to introduce into evidence at the hearing in this matter, once those determinations have been made.

See Complaint Counsel's Document Responses, No. 8.

However, even if Complaint Counsel could avoid producing responsive documents to Request No. 8 based on a claim of work product protection, Complaint Counsel must supply the underlying facts and data contained in such documents in response to an interrogatory which requests such information. Central's Interrogatory No. 124 requests such information, but Complaint Counsel has refused to provide a full and complete response:

> **Interrogatory No. 124.: Identify and describe any and all testing of the Omegas conducted by or on behalf of the CPSC. Your response should include, without limitation, the following:**
>
> **(a) a description of any testing protocols used by the CPSC in testing the Omegas;**
>
> **(b) the identity of the person(s) who created or established any such testing protocols for the Omegas;**
>
> **(c) a description of the methodology employed during each and every test of the Omegas;**
>
> **(d) the date of each and every test of the Omegas;**
>
> **(e) an identification of the person(s) who conducted, participated in, or were otherwise present during each test of the Omegas;**
>
> **(f) a description of the results of each and every test of the Omegas; and**
>
> **(g) the identification of any and all documents (including videotapes and audiotapes) relating to any testing of the Omegas.**
>
> **Response:** Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and thus [sic] protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel responds that it is currently in the process of testing Omega sprinklers, and will produce all non-privileged documents relating thereto as soon as they are available.

See Complaint Counsel's Interrogatory Responses, No. 124.

Thus, Complaint Counsel may not totally block discovery by asserting the "work product privilege." If Complaint Counsel does not provide documents based on a claim to work product protection, it still must provide responsive information to Central in response to Central's Interrogatories. Because Complaint Counsel has refused to provide such information to date, either in the form of documents or interrogatory responses, Central respectfully requests that the Court compel Complaint Counsel to produce responsive information.

4. The Data And Methodology Underlying Complaint Counsel's Test Results Regarding The Omegas Must Be Produced Despite A Work Product Objection.

Complaint Counsel has produced a data compilation of their test results for the Omegas. See Complaint Counsel's Data Compilation, attached hereto as Exhibit "G". However, these documents only show the sample size and the purported number and percentage of failures. Id. Complaint Counsel's Data Compilation does not reveal such basic information as what is considered a "failure" (in terms of water pressure and activating temperature), the location of the building, the testing methodology, and other basic underlying data. Complaint Counsel has refused to produce such information on the ground that it is protected by the work product doctrine. See Complaint Counsel's Interrogatory Responses, Nos. 124-27; Complaint Counsel's Document Responses, Nos. 8-9.

However, the work product doctrine is not an absolute privilege. Documents that constitute work product material are discoverable where a party can demonstrate a "substantial need" for the materials, and that such documents cannot otherwise be obtained without "unique hardship." 16 C.F.R. § 1025.31(c)(3).

In the instant case, to the extent the work product doctrine applies to any documents regarding the underlying data and methodology for Complaint Counsel's Data Compilation, such documents are still discoverable based on Central's "substantial need" and "unique hardship." It is well established that, once data compilations of test results have been produced, a party seeking discovery is entitled to the underlying rationale and methodology supporting the data compilations despite a work product objection. See, e.g., Wheeling-Pittsburgh Steel Corp. v. Underwriters Laboratories, Inc., 18 F.R.D. 8, 12 (N.D. Ill. 1978) (ordering production of underlying data); Handgards, Inc. v. Johnson & Johnson, 413 F. Supp. 926, 931 (N.D. Cal. 1976) (same); see also United States v. Nobles, 422 U.S. 225, 240-41 (1975) (party must either produce underlying data or all related testimony is excluded); In Re Sealed Case, 676 F.2d 793, 824 (D.C. Cir. 1982) (documents underlying investigative report ordered produced.)

There are two rationales for this exception to the work product doctrine, both applicable in the instant case. First, without the supporting documents and information, a compilation of test results "cannot properly be analyzed" and "would prove meaningless." Wheeling-Pittsburgh, 81 F.R.D. at 12; Handgards, 413 F. Supp. at 931. In the instant case, unless Complaint Counsel supplies the methodology and support for the Data Compilation, Central will not be able to ascertain or challenge the validity of the results, which consist of naked conclusions.

The second rationale for this exception to the work product doctrine is that because the supporting data must be introduced at trial in order to prove the statistical conclusions, the opposing party is entitled to examine such information in discovery. Wheeling-Pittsburgh, 81 F.R.D. at 12. This reasoning also applies in the instant case. To delay allowing Central the

opportunity to examine the methodology and data underlying Complaint Counsel's Data Compilation until trial would be highly prejudicial to Central.[5/]

Thus, even to the extent that certain documents fall within the work product doctrine, such documents must be produced in the instant case pursuant to an exception to that doctrine. Moreover, to the extent that Complaint Counsel refuses to produce the underlying information regarding its Data Compilation, the Court should exclude from evidence the results set forth in the Data Compilation. See Nobles, 422 U.S. at 240-41. Thus, Complaint Counsel has a clear choice: produce the documents and information, or assert the work product doctrine and be barred from producing evidence regarding that subject at trial.

* * * * *

Complaint Counsel has repeatedly asserted an unfounded claim to a "work product privilege." Complaint Counsel's objections are invalid because: (1) Complaint Counsel has not produced a privilege log; (2) information and documents from independent third parties are not work product material; (3) facts, as opposed to documents, are not protected by the work product doctrine; and (4) the methodology and rationale underlying Complaint Counsel's Data Compilation are subject to an exception to the work product doctrine. Therefore, the Court should compel Complaint Counsel to produce full and complete responses to the discovery

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5/ This rationale, however, does not mean that Complaint Counsel can selectively produce only the underlying information that is favorable to Complaint Counsel. Complaint Counsel must produce full and complete responses, including all of the required background information, good or bad. Permitting Complaint Counsel to produce only the information it plans to introduce at trial would violate the broad scope of permissible discovery provided for under 16 C.F.R. § 1025.31, and would render the adversary process meaningless.

requests, where Complaint Counsel previously asserted a specious claim to work product protection. Those responses are as follows:

Document Request Nos.: 4-5, 7-8, 10-13, 15-16, 19-29, 34-53, 56-59, 61-63, 68-71.

Interrogatory Nos.: 78-85, 100-02, 106-13, 117, 119-24, 126-27, 147.

E. Complaint Counsel Has Refused To Produce Documents Pending Entry Of A Confidentiality Agreement, But Has Refused To Enter Into A Confidentiality Agreement.

Regarding a number of Central's Document Requests and Interrogatories, Complaint Counsel has refused to produce responsive information until "the execution of an appropriate confidentiality stipulation by Respondents." For instance:

> **Request No 1.: All documents identified in the "List and Summary of Documentary Evidence" attached to the Complaint.**
> **Response:** Complaint Counsel objects to this Request to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore [sic] protected from discovery pursuant to the work product privilege. The data compilation of failures was prepared by or for Complaint Counsel in anticipation of litigation. Without waiving its objection, Complaint Counsel will produce the data on which the compilation is based, and the information about the fires, to the extent that the information was not provided to Complaint Counsel by a third party on a confidential basis. Without waiving its objection, to the extent that the data or information was provided on a confidential basis, Complaint Counsel will produce the data upon the execution of an appropriate confidentiality stipulation by Respondents, and the issuance of an appropriate protective order by the Presiding Officer.
>
> **Request No. 5.: All documents provided to the CPSC in response to subpoenas from the CPSC or other requests for documents to any person, organization, business, or any other entity regarding or related to the Omegas.**
> **Response:** Complaint Counsel objects to this Request to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore [sic] protected from discovery by the work product privilege. Complaint Counsel also objects to this Interrogatory to the extent that it seeks documents prohibited from disclosure pursuant to 15 U.S.C. § 2055. Without waiving its objections, Complaint Counsel will produce all nonconfidential documents provided to Complaint Counsel by third parties in response to subpoenas issued by CPSC in this matter upon the receipt of permission from the third parties, and upon execution of an appropriate confidentiality

stipulation by Respondents, and the issuance of any necessary protective orders by the Presiding Officer.

See Complaint Counsel's Document Responses, Nos. 1 and 5 (emphasis added).

As a matter of law, the purportedly confidential documents are subject to discovery by Central in this administrative proceeding. Title 15 U.S.C. § 2055(a)(8) provides that restrictions on disclosure of material provided to the CPSC by third parties "shall not prohibit the disclosure of information . . . when relevant in any administrative proceeding under this Act." Nevertheless, in the interests of protecting the concerns of third parties who provided documents to the CPSC and in order to permit discovery to go forward, Central was and is willing to enter into a confidentiality stipulation.

However, it has become apparent that Complaint Counsel's stated desire for a confidentiality agreement is merely an excuse not to produce discovery responses. On May 1, 1998, in response to Complaint Counsel's request for a confidentiality agreement in its discovery responses, Respondents provided a draft Confidentiality Agreement to Complaint Counsel. See Letter of May 1, 1988 with attached Confidentiality Agreement, Exhibit "F". This Confidentiality Agreement provided a large degree of protection from public disclosure for confidential documents produced to the CPSC by third parties, while permitting discovery in this case to proceed.

Complaint Counsel did not comment on or respond to this proposed Confidentiality Agreement. Respondents sent follow-up letters on May 7 and 13, requesting comments or agreement from Complaint Counsel regarding the Confidentiality Agreement. See Letters of May 7 and 13, 1998, Exhibit "F". Complaint Counsel still provided no response. Instead, with

no prior notice, Complaint Counsel unilaterally began to submit documents for in camera review by the Court.

As a result, Central has been forced to file a motion requesting that the Court enter the proposed Confidentiality Agreement as a protective order. See Proposed Protective Order and Opposition of Respondents To Complaint Counsel's Submission of Documents Filed In Camera, filed May 19, 1998. If the Court enters the Protective Order Regarding Confidentiality presented by that motion, Complaint Counsel will no longer have an excuse not to produce these purportedly confidential documents.

The following discovery responses from Complaint Counsel withhold documents and/or information based upon this apparently contrived claim to confidentiality:

Document Response Nos.: 1, 5 , 9, 39-41, 61-62.

Interrogatory Response Nos.: 107-08, 119-23, 131.

F. Complaint Counsel May Not Refer To Its Own Self-Serving Pleadings And Other Non-Responsive Discovery Answers Rather Than Providing Full And Complete Responses.

In many of Complaint Counsel's responses to Central's discovery requests, rather than provide full and complete responses, Complaint Counsel merely refers Central to Complaint Counsel's own self-serving pleadings. See, e.g., Complaint Counsel's Interrogatory Responses, Nos. 85-86 (referring Central to the Complaint as substantive evidence). Complaint Counsel avoids responding to other discovery requests by cross-referencing Central to other, equally unresponsive discovery answers from Complaint Counsel. See, e.g., Complaint Counsel's Document Responses, Nos. 21-29 (referring Central to interrogatory responses).

Courts are in agreement that incorporation by reference to a party's own self-serving testimony and pleadings is not a sufficient and responsive answer to a discovery request. See Martin v. Easton Publishing Co., 85 F.R.D. 312, 315 (E.D. Pa. 1980); Scovill Manuf. Co. v. Sunbeam Corp., 61 F.R.D. 598, 601 (D. Del. 1973); Atlanta Coca- Cola Bottling Co. v. Transamerica Insurance Co., 61 F.R.D. 115, 120 (N.D. Ga. 1972); J.J. Delaney Carpet Co. v. Forrest Mills, Inc., 34 F.R.D. 152, 153 (S.D.N.Y. 1963). Instead, a defendant is entitled to know the factual content of plaintiff's claims "with a reasonable degree of specificity." Martin, 85 F.R.D. at 315. "Plaintiff cannot simply rely on [an] amalgamation of material to meet . . . discovery obligations." Id. at 315.

Thus, Complaint Counsel should not be permitted to respond to Central's discovery requests by reference to Complaint Counsel's own pleadings and other non-responsive discovery answers. The Court should compel Complaint Counsel to provide full, complete, and precise responses. The following responses encompass areas where Complaint Counsel has responded improperly by reference, in whole or in part, to its own pleadings and other discovery responses:

Document Response Nos.: 12-13, 21-29, 44-53, 63, 70.

Interrogatory Response Nos.: 4-37, 43-44, 51, 76-77, 81-86, 88.

G. Complaint Counsel Has Delayed Producing Information And Documents For No Apparent Reason.

In Complaint Counsel's discovery responses, Complaint Counsel repeatedly represents that it "will produce" responsive information or documents at some unspecified future time. However, Complaint Counsel has not yet provided this promised information.

For instance:

Request No. 61.: **All documents that constitute, provide evidence of, refer, or relate to any and all incidents known to the CPSC in which a consumer or other person has reported any form of property damage in connection with the Omegas.**
Response: Complaint Counsel objects to this Request on the ground that the term "consumer complaints" is undefined, unclear, vague and ambiguous. Complaint Counsel objects to this Request on the ground that it requests information pertaining to the identity of consumers in prohibition of 15 U.S.C. § 2074(c). Complaint Counsel further objects to this Request on the ground that it requests information prepared by or for Complaint Counsel in anticipation of litigation, and therefore [sic] protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel responds that it is currently investigating whether reports that it has received regarding sprinklers are "in connection with the Omegas," and whether they report property damage and/or personal injury in connection therewith. Complaint Counsel will produce all non-privileged and non-confidential reports of fires in which Omegas have reportedly failed to activate. Complaint Counsel will supplement its response to this Request as additional information becomes available.

See Complaint Counsel's Document Responses, No. 61 (emphasis added).

Interrogatory No. 124.: **Identify and describe any and all testing of the Omegas conducted by or on behalf of the CPSC. Your response should include, without limitation, the following:**

(a) a description of any testing protocols used by the CPSC in testing the Omegas;
(b) the identity of the person(s) who created or established any such testing protocols for the Omegas;
(c) a description of the methodology employed during each and every test of the Omegas;
(d) the date of each and every test of the Omegas;
(e) an identification of the person(s) who conducted, participated in, or were otherwise present during each test of the Omegas;
(f) a description of the results of each and every test of the Omegas; and
(g) the identification of any and all documents (including videotapes and audiotapes) relating to any testing of the Omegas.

Response: Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and thus [sic] protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel responds that it is currently in the process of testing Omega sprinklers, and will produce all non-privileged documents relating thereto as soon as they are available.

See Complaint Counsel's Interrogatory Responses, No. 124 (emphasis added).

Complaint Counsel has represented that it "will produce" the requested information and documents. In letters of May 4, 7, and 13, Central reminded Complaint Counsel of these unanswered discovery requests, but received no response. See Exhibit "F". Central delayed filing the instant motion to compel to the statutory limit of time in the hope of receiving this promised discovery. However, despite the fact that almost three weeks have elapsed since Complaint Counsel served its responses, it has not produced the promised information, nor has it provided any explanation.

This failure to produce promised discovery responses is particularly disturbing in the instant case because the CPSC rules of practice provide a limited time for discovery and preparation for trial. See 16 C.F.R. § 1025.3(g) (discovery to be completed within 150 days of the filing of the Complaint). According to 16 C.F.R. § 1025.31(g), discovery in the instant case should be completed by approximately August 1. Thus, the discovery period is more that half over, and Complaint Counsel still has not provided any meaningful discovery to Central. By delaying its production of discovery responses, Complaint Counsel is greatly prejudicing Central's ability to prepare for trial and defend itself in this matter.

Complaint Counsel has promised that it "will produce" the requested information and documents. Because Complaint Counsel has failed to do so, Central now requests that the Court compel Complaint Counsel to produce these discovery responses.

The following discovery responses demonstrate the above-referenced problem:

Document Response Nos.: 8, 17, 61-63.

Interrogatory Response Nos.: 74-77, 81, 86 , 88, 117, 119, 124, 126-27, 135-38.

H. Complaint Counsel Has Raised Groundless Objections Based On Relevance And Vagueness.

Complaint Counsel objects to many of Central's Document Requests and Interrogatories on the grounds that the information requested is not relevant or that the question is vague. A quick review of a few of these responses reveals that these objections lack merit. For instance:

> **Request No. 57.: All documents that constitute, provide evidence of, refer, or relate to the use of silicone o-rings in sprinkler heads.**
> **Response:** Complaint Counsel objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request to the extent that it seeks irrelevant information not likely to lead to the discovery of admissible evidence. Complaint Counsel further objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore [sic] protected from discovery by the work product privilege.

See Complaint Counsel's Document Responses, No. 57.

Despite Complaint Counsel's relevance objection, the information requested in Document Request No. 57 is plainly relevant. The Omegas currently use silicone o-rings, and most models have used such o-rings since 1996. Complaint Counsel's Data Compilation does not reveal any problems with any Omegas using silicone o-rings. If there are no alleged problems with Omegas using silicone o-rings, then a major issue is removed from this case. Thus, Request No. 57 is not merely relevant, it is of extreme importance to the instant proceedings. Therefore, Complaint Counsel's relevance objection is not well-founded, and Complaint Counsel should respond to this request.

Another tactic used by Complaint Counsel to avoid responding to Central's discovery requests is to object that a request is "vague, ambiguous and confusing," then provide no answer or an incomplete answer. For instance:

Interrogatory No. 42.: **(a) State whether Complainant contends that there is a single standard of water pressure (in psi) at which previously installed sprinkler heads must activate when tested to be deemed by the Complainant as not presenting any substantial risk of injury to the public and/or substantial product hazard; If so:**

(b) identify and describe any such standard;

(c) identify all documents which describe, evidence, refer, support, or relate to any such standard;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such standard; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the grounds that it is vague, ambiguous and confusing. Complaint Counsel further objects to this Interrogatory on the ground that it is overbroad, and seeks irrelevant information pertaining to sprinklers other than Omegas. Without waiving its objections, Complaint Counsel responds that once an Omega is removed from service, it will not create the substantial risk of injury to the public of which Complainant complains. Omega sprinklers fail to activate as designed and, in many cases, will not activate at pressures that far exceed the water pressure that may be available in the system at the time of a fire.

See Complaint Counsel's Interrogatory Responses, No. 42 (emphasis added).

Interrogatory No. 42 asks a simple and straightforward question -- the water pressure at which Omegas must activate when tested to be deemed acceptable. By pretending not to understand this request, claiming that it is "vague, ambiguous and confusing," Complaint Counsel avoids providing a response that: (a) is simple to provide; (b) is plainly relevant to this case; and (c) would greatly focus the dispute between Complaint Counsel and Central. Complaint Counsel should not be permitted to avoid answering by raising a sham vagueness objection.

Complaint Counsel has been treating discovery to date as a game of "hide-and-seek." Such gamesmanship should not be allowed by the Court. The following discovery responses contain similar examples of invalid relevance and/or vagueness objections:

Document Response Nos.: 9-11, 15-18, 33, 35, 42-43, 57-59, 61-62, 64.

Interrogatory Response Nos.: 26-34, 42-51, 78-85, 87, 129.

I. Complaint Counsel Is Not Permitted To Object Based On Its Belief That Some Documents Are Equally Available To Central.

Complaint Counsel objects to a significant number of Central's interrogatories on the ground that responsive documents or information "are within [Central's] possession." See, e.g., Complaint Counsel's Document Responses, No. 14. There are two obvious problems with this objection. First, Complaint Counsel does not actually know whether Central is in possession of such documents -- this is an objection based on a guess. Second, Central is entitled to determine via discovery what documents and information are in Complaint Counsel's possession.

Based on this reasoning, courts have held that it is not a valid ground for objection that information or documents are equally available to the interrogator. Petruska v. Johns-Manville, 83 F.R.D. 32, 35 (E.D. Pa. 1979). As long as a document request demands relevant information, the party must respond even if the opposing party has equal access to the information. Dykes v. Morris, 85 F.R.D. 373, 375 (N.D. Ill. 1980). Thus, Complaint Counsel must identify documents in its control that are responsive to Central's discovery requests, even if Complaint Counsel believes that Central might have equal access to such information.

The following responses include Complaint Counsel's impermissible objection that responsive documents are within Central's possession:

Document Response Nos.: 3, 14, 31, 56, 68, 70.

Interrogatory Response Nos.: 1-3.

J. Complaint Counsel Is Required To Answer Interrogatories Applying The Law To The Facts Of This Case.

The CPSC rules of practice explicitly permit interrogatories to require an answer that involves the application of law to facts. Section 1025.32 provides: "An interrogatory otherwise proper is not objectionable merely because an answer to the interrogatory would involve an opinion or contention which relates to fact or to the application of law to fact . . . ." 16 C.F.R. § 1025.32(c) (emphasis added).

Despite this explicit language, each time Central poses an interrogatory requiring the application of law to fact, Complaint Counsel objects on the ground that such discovery "calls for a legal conclusion." For instance:

> Interrogatory No. 38.: **With respect to the allegation of Paragraph 8 of the Complaint that the Omegas are "designed to perform in accordance with" NFPA Standard 13:**
>
> **(a) identify which specific sub-sections of NFPA Standard 13, if any, address the operating water pressure at which previously installed sprinkler heads should activate when such heads are removed and tested;**
>
> **(b) identify which specific sub-sections of NFPA Standard 13, if any, address the operating water pressure at which installed sprinkler heads should activate when such heads are still incorporated into the sprinkler system;**
>
> **(c) identify which specific sub-sections of NFPA Standard 13, if any, address the required residual water pressure at the most remote sprinkler head in a system after the other sprinkler heads are open and flowing;**
>
> **(d) identify which specific sub-sections of NFPA Standard 13, if any, are applicable to the allegations of the Complaint; and**
>
> **(e) describe in terms of psi (pounds per square inch) the testing standard that Complainant contends is created by NFPA Standard 13 that applies to the Omegas.**
>
> Response: Complaint Counsel objects to this Interrogatory on the ground that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel responds that the Standard speaks for itself.

See Complaint Counsel's Interrogatory Responses, No. 38.

The language of the CPSC rules of practice is plain and unambiguous -- Central is permitted to pose interrogatories requiring Complaint Counsel to apply the law to the facts of this case. Accordingly, Complaint Counsel's objection that a request "calls for a legal conclusion" is invalid, and the Court should compel Complaint Counsel to provide full and complete responses to the following interrogatories:

Interrogatory Response Nos.: 5-25, 31-40.

K. Central Is Permitted To Seek Discovery Regarding Complaint Counsel's Potentially Impermissible Ex Parte Contacts With Central's Former And Current Employees.

Central has requested that Complaint Counsel provide documents and information related to potentially impermissible ex parte contacts by Complaint Counsel with Central's former and/or current employees. Central previously has been advised that Complaint Counsel was attempting to engage in such contacts. Complaint Counsel has refused to provide any responses to these discovery requests.

The discovery requests involved are as follows:

> Request No. 19.: **All documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and former employees of Respondents, including but not limited to interview notes, questions asked, answers received, documents exchanged or revealed by or between either party, and any audiotape or videotape of such communications.**
> Response: Complaint Counsel objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore [sic] protected from discovery by the work product privilege.
>
> Request No. 20: **All documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and current employees of Respondents, including but not limited to interview notes, questions asked, answers received, documents exchanged or revealed by or between either party, and any audiotape or videotape of such communications.**

Response: Complaint Counsel objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore [sic] protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel intends to submit certain information to the Presiding Officer for in camera review and determination of whether to provide the material to Respondents, and under what conditions.

Request No. 31.: All documents received by the CPSC from Respondents or any agent, employee, or representative of Respondents.
Response: Complaint Counsel objects to this Request on the grounds that it is overbroad and unduly burdensome, and on the ground that the information is already within the possession of Respondents. Without waiving its objections, Complaint Counsel intends to submit certain information to the Presiding Officer for in camera review and determination of whether to provide the material to Respondents, and under what conditions.

See Complaint Counsel's Document Responses, Nos. 19-20, 31.

Interrogatory No. 100.: Identify all former and/or current employees of Respondents with whom Complainant has had any contact regarding the Omegas. For each such person, identify and describe:

(a) the person's name;
(b) the person's last known home and business address;
(c) the person's last known telephone number;
(d) the person's last known position with Respondents;
(e) the date of any such contacts;
(f) the nature of any such contacts (e.g., letter, telephone conversation, in-person interview);
(f)[sic] a detailed description of the subject matter of such communication; and
(g) the identity of any other persons who were present during such contacts.

Response: Complaint Counsel objects to the phrase "any contact" on the ground that it is vague and ambiguous. Complaint Counsel further objects to this Interrogatory on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore [sic] protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel intends to submit certain information to the Presiding Officer for in camera review and determination of whether to provide the material to Respondents, and under what conditions.

See Complaint Counsel's Interrogatory Responses, No. 100.

As explained supra, Complaint Counsel cannot claim that such contacts are shielded by the work product doctrine. Contacts with not just independent third parties, but the former employees or current employees of the opposing party can hardly be classified as privileged. See supra § III.D.1. Moreover, even if Complaint Counsel has created working documents that might fall within the work product doctrine, the fact of the contacts and the facts regarding what occurred during such contacts are not subject to the work product doctrine; the doctrine only protects documents, not underlying facts. See supra § III.D.3. Thus, Complaint counsel's objections to Central's discovery requests on this subject are invalid.

Moreover, such discovery is directly relevant to determine whether Complaint Counsel has breached its ethical obligations and must be disqualified in the instant case. Complaint Counsel is operating out of Maryland, so the Maryland Rules of Professional Conduct should apply to Complaint Counsel. Maryland Rule of Professional Conduct 4.2 provides that: "In representing a client, a lawyer shall not communicate about the subject of the representation with a party the lawyer knows to be represented by another lawyer in the matter, unless the lawyer has the consent of the other lawyer or is authorized by law to do so."

The courts have held that this restriction extends to former employees who may have access to confidential or sensitive information. See Zachair, Ltd. v. Driggs, 965 F. Supp. 741 (D. Md. 1997); Camden v. State of Maryland, 910 F. Supp. 1115 (D. Md. 1996); see also In Re Allen, 106 F.3d 582 (4th Cir. 1997) (extending attorney-client protection to former employees). The penalty for violating this ethical obligation is the disqualification of counsel. See Zachair, 965 F. Supp. at 754 (disqualifying counsel who contacted former employees); Camden, 910 F. Supp. at 1124 (same).

Thus, Central clearly is entitled to discovery regarding which former or current employees Complaint Counsel has contacted, when such contacts occurred, and a detailed description of the ex parte communications that took place. If Complaint Counsel violated Rule 4.2 of the Maryland Rules of Professional Conduct, as interpreted by Zachair and Camden, then Complaint Counsel will be subject to disqualification and potential sanctions.[6/] Therefore, Central respectfully requests that the Court compel Complaint Counsel to provide full and complete responses to Document Requests Nos. 19-20 and 31 and Interrogatory No. 100.

IV. CONCLUSION

Complaint Counsel has done everything in its power to avoid providing meaningful discovery to Central in this case. Complaint Counsel has refused to provide basic documents supporting its charges, declined to answer simple and straightforward interrogatories, raised baseless objections, failed to provide a privilege log, and avoided entering into a confidentiality agreement simply to further delay discovery.

As a result, Central has suffered serious prejudice. A significant portion of the statutory discovery period has elapsed in this case, and Central still has not received basic information from Complaint Counsel. As a result, Central has been prevented from preparing adequately for the trial of this matter.

6/ As soon as they were informed of such contacts, Central's counsel requested that Complaint Counsel cease and desist all such potentially impermissible actions, and informed Complaint Counsel of the relevant case law regarding disqualification.

Complaint Counsel's refusal to provide meaningful discovery violates the CPSC rules of practice and all standards of fair discovery. Therefore, based on all of the foregoing, pursuant to 16 C.F.R. § 1025.36, Central respectfully requests that the Court compel Complaint Counsel to provide full and complete responses to Central's Document Requests and Interrogatories.

Respectfully submitted,

Dated: May 20, 1998

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Attorneys for Respondents
CENTRAL SPRINKLER CORP. and
CENTRAL SPRINKLER COMPANY

CERTIFICATE OF SERVICE

I, Thomas P. Hogan, Jr., hereby certify that on this date a true and correct copy of the foregoing Respondents' Motion To Compel Full And Complete Responses To Interrogatories And Document Request was served via telecopier and regular mail upon the following:

Eric H. Singer
Howard Tarnoff
Deborah S. Orlove
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Bethesda, MD 20814

Alan H. Schoem
Assistant Executive Director
Office of Compliance
U.S. Consumer Product Safety Commission
4430 East West Highway
Bethesda, MD 20814

The Honorable William B. Moran
Offices of the Administrative Law Judges
Environmental Protection Agency
401 M Street, S.W.
Mail Code 1900 L
Washington, DC 20460

Dated: May 20, 1998

Thomas P. Hogan, Jr.

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp.	:	
	:	
and	:	**CPSC Docket No. 98-2**
	:	
Central Sprinkler Co.,	:	
	:	
Respondents.	:	
	:	

ORDER

AND NOW, this __ day of _____, 1998, upon consideration of Respondents' Motion To Compel Full And Complete Responses To Interrogatories And Document Requests, Complaint Counsel's response thereto, and all other evidence before the Court, it is hereby ORDERED that Respondents' Motion is GRANTED.

Pursuant to 16 C.F.R. § 1025.36, Complaint Counsel is hereby ordered to provide full and complete responses to Respondents within ten (10) days of the date of this Order regarding the following Respondents' discovery requests:

Document Request Nos.: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71.

Interrogatory Nos.: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73,

74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 106, 107,108, 109, 110, 111, 112, 113, 117, 119, 120, 121, 122, 123, 124, 126, 127,129, 135, 136, 137, 138, 140, 141,147.

BY THE COURT:

The Hon. William B. Moran
United States Administrative Law Judge

26

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6/02/98

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp.	:	
	:	
and	:	**CPSC Docket No. 98-2**
	:	
Central Sprinkler Co.,	:	
	:	
Respondents.	:	
	:	

APPENDIX TO
RESPONDENTS' MOTION TO COMPEL
FULL AND COMPLETE RESPONSES TO
INTERROGATORIES AND DOCUMENT REQUESTS

Exhibit	Document
A	Respondents' First Request for Documents and Things
B	Respondents' First Set of Interrogatories
C	Complaint Counsel's Responses to Respondents' First Request For Production of Documents and Things
D	Complaint Counsel's Responses to Respondents' First Set of Interrogatories
E	Complaint Counsel's Index of Responsive Documents
F	Correspondence between Central's counsel and Complaint Counsel (in chronological order)
G	Complaint Counsel's Data Compilation

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UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

IN THE MATTER OF CENTRAL SPRINKLER CORP. and CENTRAL SPRINKLER CO., Respondents	CPSC DOCKET NO. 98-2

RESPONDENTS' FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS

Respondents Central Sprinkler Corp. ("CSC") and Central Sprinkler Co. ("Central") (collectively, "Respondents"), through their undersigned counsel, hereby propound to the Consumer Product Safety Commission (the "CPSC" or the "Complainant") the following request for documents pursuant to 16 C.F.R. § 1025.33. Complainant is requested to produce the documents and things described herein within thirty (30) days of the service of this request. Complainant's responses should be sent to the offices of Morgan, Lewis and Bockius LLP, 2000 One Logan Square, Philadelphia, PA 19103.

For the purposes of this Request, the following instructions and definitions apply:

INSTRUCTIONS

Respondents hereby fully incorporate by reference the Instructions set forth in Respondents' First Set of Interrogatories.

DEFINITIONS

Respondents hereby fully incorporate by reference the Definitions set forth in Respondents' First Set of Interrogatories.

DOCUMENTS AND THINGS TO BE PRODUCED

1. All documents identified in the "List and Summary of Documentary Evidence" attached to the Complaint.

2. All documents identified in the CPSC's responses to Respondents' First Set of Interrogatories.

3. All documents that constitute the entirety of the CPSC administrative file regarding the Omegas.

4. All documents that constitute subpoenas from the CPSC or other requests for documents to any person, organization, business, or any other entity regarding or related to the Omegas.

5. All documents provided to the CPSC in response to subpoenas from the CPSC or other requests for documents to any person, organization, business, or any other entity regarding or related to the Omegas.

6. All documents provided to the CPSC by Respondents regarding the Omegas.

7. All documents provided to the CPSC by any person, organization, business, or any other entity regarding or related to the Omegas and/or Respondents.

8. All documents that constitute, provide evidence of, refer, or relate to any testing of the Omegas conducted by or on behalf of the CPSC.

9. All documents that constitute, provide evidence of, refer, or relate to any testing of the Omegas conducted by on or behalf of any other person, organization, business, or other entity.

10. All documents that constitute, provide evidence of, refer, or relate to any testing of non-Omega sprinkler heads conducted by on or behalf of the CPSC.

11. All documents that constitute, provide evidence of, refer, or relate to testing of non-Omega sprinkler heads conducted by on or behalf of any other person, organization, business, or other entity.

12. All documents that constitute, provide evidence of, refer, or relate to the alleged jurisdiction of the CPSC over the Omegas.

13. All documents that constitute, provide evidence of, refer, or relate to the jurisdiction of the CPSC over any product, including without limitation any memoranda or other interanal correspondence that addresses the extent of or any limitations on the jurisdiction of the CPSC.

14. All documents that constitute, provide evidence of, refer, or relate to CSC manufacturing, selling, or marketing Omegas.

15. All documents that constitute, provide evidence of, refer, or relate to any fires where Omegas allegedly failed to activate properly.

16. All documents that constitute, provide evidence of, refer, or relate to any fires where Omegas allegedly activated properly.

17. All documents that constitute, provide evidence of, refer, or relate to any fires where non-Omega sprinkler heads allegedly failed to activate properly.

18. All documents that constitute, provide evidence of, refer, or relate to any fires where non-Omega sprinkler heads allegedly activated properly.

19. All documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and former employees of Respondents, including but not

limited to interview notes, questions asked, answers received, documents exchanged or revealed by or between either party, and any audiotape or videotape of such communications.

20. All documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and current employees of Respondents, including but not limited to interview notes, questions asked, answers received, documents exchanged or revealed by or between either party, and any audiotape or videotape of such communications.

21. All documents that constitute, provide evidence of, refer, or relate to "[the] multiple random inquiries of sprinkler contractors across the nation," as referenced in a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo.

22. All documents that constitute, provide evidence of, refer, or relate to "what has been, and remains, customarily required to remove and install sprinklers," as referenced in a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo.

23. All documents that constitute, provide evidence of, refer, or relate to "the evidence we have gathered does not support the view [that] dezincification alone is the cause of the above-required operating pressures in Omegas from plastic pipes," as referenced in a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo.

24. All documents that constitute, provide evidence of, refer, or relate to "the evidence we have gathered does not support the view . . . that swollen o-rings due to cutting oil exposure are the exclusive cause of non-activation in Omegas manufactured before 1996," as referenced in a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo.

25. All documents that constitute, provide evidence of, refer, or relate to "the data [which] point to multiple failure modes rooted in the design and construction of these sprinklers," as referenced in a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo.

26. All documents that constitute, provide evidence of, refer, or relate to any testing, evaluation, consideration, or analyses done by or on behalf of the CPSC regarding the "testing based corrective action," as referenced in a February 19, 1998 letter from Eric Stone of the CPSC to Kathleen Sanzo.

27. All documents that constitute, provide evidence of, refer, or relate to any testing, evaluations, or analyses done by or on behalf of the CPSC which reflects the "serious concerns" of the CPSC regarding whether "Omega sprinklers with silicone o-rings will function in the long term," as referenced in a February 19, 1998 letter from Eric Stone of the CPSC to Kathleen Sanzo.

28. All documents that constitute, provide evidence of, refer, or relate to any testing, evaluations, consideration, or analyses done by or on behalf of the CPSC which addressed Omegas where "the internal shaft was cocked or tipped slightly and jammed in that position," as referenced in a February 24, 1998 letter from Eric Stone of the CPSC to Kathleen Sanzo.

29. All documents that constitute, provide evidence of, refer, or relate to "automatic fire sprinklers' historical rate of proving 99.5 percent effective," as referenced in a January 6, 1998 letter from Eric Singer of the CPSC to state attorneys general.

30. All documents that constitute, provide evidence of, refer, or relate to the CPSC Recall Handbook.

31. All documents received by the CPSC from Respondents or any agent, employee, or representative of Respondents.

32. All Omegas in possession of the CPSC.

33. All non-Omega sprinkler heads in the possession of the CPSC.

34. All audio and/or video tapes regarding or relating to any testing of Omegas.

35. All audio and/or video tape regarding or relating to any testing of non-Omega sprinkler heads.

36. All documents that constitute, provide evidence of, refer, or relate to any personal journals, diaries, or correspondence maintained by the CPSC Staff regarding the Omegas and/or Respondents.

37. All documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and any dealers, retailers, contractors, or any distributors regarding or related to the Omegas and/or Respondents.

38. All documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and any Authorities Having Jurisdiction regarding or related to the Omegas and/or Respondents.

39. All documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and any consumers regarding or related to the Omegas and/or Respondents.

40. All documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and any state law enforcement authorities regarding or related to the Omegas and/or Respondents.

41. All documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and any federal law enforcement authorities regarding or related to the Omegas and/or Respondents.

42. All documents that constitute, provide evidence of, refer, or relate to scripts, talking points, outlines, or any other material prepared by, for, or on behalf of the CPSC for any press conferences or news releases regarding the Omegas and/or Respondents.

43. All documents that constitute, provide evidence of, refer, or relate to any material regarding the Omegas and/or Respondents created by or on behalf of the CPSC public relations department, media department, or any other CPSC internal department charged with communicating with or providing information to the public media.

44. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 5 of the Complaint that CSC is a "manufacturer" of consumer products.

45. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 6 of the Complaint that the Omegas are "consumer products."

46. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 8 of the Complaint that the Omegas are "designed to perform in accordance with" UL Standard 199 and NFPA Standard 13.

47. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 8 of the Complaint that the Omegas are designed to perform in accordance with certain standards "when exposed to certain temperatures."

48. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 10 of the Complaint that the Omegas "do not and/or will not function in a significant percentage of instances."

49. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 10 of the Complaint that the "Omegas are defective pursuant to 15 U.S.C. § 2064(a)(2) and 16 C.F.R. § 1115.4."

50. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 13 of the Complaint that "failure of the Omegas to function exposes the public to bodily injury and/or death."

51. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 15 of the Complaint that the "defect or defects in the Omegas create a

substantial risk of injury to the public within the meaning of § 15(a)(2) of the CPSA, 15 U.S.C. § 2064(a)(2)."

52. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 16 of the Complaint that "Omegas present a substantial product hazard as described in Sections 15(a)(2), (c) and (d) of the CPSA, 15 U.S.C. §§ 2064(a) (2), (c) and (d)."

53. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 16 of the Complaint that "action under these provisions is in the public interest."

54. A current curriculum vitae or resume for each and every expert witness whom the CPSC expects to testify on its behalf at the hearing in this matter.

55. All publications of any nature authored by any expert witness whom the CPSC expects to testify on its behalf at the hearing in this matter.

56. Any and all written statements made by Respondents that the CPSC contends constitute an admission with reference to any of the issues raised in the Complaint.

57. All documents that constitute, provide evidence of, refer, or relate to the use of silicone o-rings in sprinkler heads.

58. All documents that constitute, provide evidence of, refer, or relate to the use of EPDM o-rings in sprinkler heads.

59. All documents that constitute, provide evidence of, refer, or relate to the use in sprinkler heads of o-rings comprised of any other material or compound.

60. All documents that constitute, provide evidence of, refer, or relate to the reasons giving rise to the CPSC's decision to investigate alleged risks associated with the Omegas.

61. All documents that constitute, provide evidence of, refer, or relate to any and all incidents known to the CPSC in which a consumer or other person has reported any form of property damage in connection with the Omegas.

62. All documents that constitute, provide evidence of, refer, or relate to any and all incidents known to the CPSC in which a consumer or other person has reported any form of personal injury in connection with the Omegas.

63. Any and all testing protocols used by the CPSC or by any expert or other person on behalf of the CPSC in testing the Omegas.

64. All documents that constitute, provide evidence of, refer, or relate to any alternative design features for the Omegas.

65. All documents that constitute, provide evidence of, refer, or relate to the feasibility and/or propriety of any alternative design features for the Omegas.

66. All documents that constitute, provide evidence of, refer, or relate to the CPSC's preliminary determination of the alleged risks associated with the Omegas.

67. All documents that constitute, provide evidence of, refer, or relate to any changes in the CPSC's preliminary determination and/or initial assignment of the level of hazard allegedly presented by the Omegas.

68. All documents that constitute, provide evidence of, refer, or relate to any corrective action proposal for the Omegas.

69. All documents that constitute, provide evidence of, refer, or relate to the requested recall of the Omegas.

70. All documents that constitute, provide evidence of, refer, or relate to the corrective action proposal presented by Respondents regarding the Omegas.

71. All documents that constitute, provide evidence of, refer, or relate to the CPSC's decision to initiate the instant adjudicative proceeding against the Respondents.

DATED: March 26, 1998

J. Gordon Cooney, Jr. (MHH)

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CENTRAL SPRINKLER CORP. and
CENTRAL SPRINKLER CO.

CERTIFICATE OF SERVICE

I, Michael F. Healy, hereby certify that on this date a true and correct copy of the foregoing Respondents' First Request for Production of Documents and Things was served by hand upon the following:

Eric L. Stone
Director
Division of Administrative Litigation
U. S. Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

Alan H. Schoem
Assistant Executive Director
Office of Compliance
U.S. Consumer Product Safety Commission
4430 East West Highway
Bethesda, MD 20814

Date: March 26, 1998

Michael F. Healy
Michael F. Healy

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UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

IN THE MATTER OF **CENTRAL SPRINKLER CORP.** **and** **CENTRAL SPRINKLER CO.,** **Respondents**	**CPSC DOCKET NO. 98-2**

RESPONDENTS' FIRST SET OF INTERROGATORIES

Respondents Central Sprinkler Corp. ("CSC") and Central Sprinkler Co. ("Central") (collectively, "Respondents"), through their undersigned counsel, hereby propound the following interrogatories to the Consumer Product Safety Commission (the "CPSC" or the "Complainant") pursuant to 16 C.F.R. § 1025.32. Complainant is requested to respond within thirty (30) days of the service of these interrogatories. Complainant's responses should be sent to the offices of Morgan, Lewis & Bockius LLP, 2000 One Logan Square, Philadelphia, PA 19103.

For the purposes of these Interrogatories, the following definitions and instructions apply:

INSTRUCTIONS

A. In answering these Interrogatories, Document Requests, and/or Requests for Admissions (collectively, the "Discovery Requests"), furnish all information available to you, including any such information in possession of your attorneys or anyone acting on your behalf, and not merely such information known of your own personal knowledge. If you cannot answer the Discovery Requests in full after exercising due diligence to secure the information to do so, so state and answer to the extent possible.

B. If the answer to any of the Discovery Requests is that you lack knowledge of some or all of the requested information, describe all efforts made by you to obtain the information necessary to answer that Discovery Request.

C. If any matter responsive to any of the Discovery Requests is withheld based on any claim of privilege, describe generally the matter withheld, state the privilege being relied upon, and identify all persons or entities who have or have had access to said matters. If you refuse to describe and/or produce any document on the basis of a claim of privilege or protection from discovery of any kind, with respect to each such document, set forth the following information:

(i) the date of the document;

(ii) its authors;

(iii) all recipients of the document;

(iv) the present location and custodian of the document; and

(v) the basis of the claim of privilege or protection from discovery.

D. Each lettered sub-part of a numbered Discovery Request is to be considered a separate Discovery Request for the purpose of Complainant's answers and objections. You must object separately to each sub-part and must answer any other sub-parts.

E. These Discovery Requests are to be deemed continuing in nature, and you shall promptly supply, by way of supplemental response, any additional responsive information that may become known to you or anyone acting on your behalf after your answers have been prepared or served.

F. For all documents produced by Complainant, identify by Bates number which document or documents are responsive to each separate Interrogatory and/or each separate Request for Documents.

DEFINITIONS

A. The "Complaint" means whichever version of the Complaint was last filed and in effect at the time of service of the relevant Discovery Request.

B. "Complainant" and/or the "CPSC" refers to the Consumer Product Safety Commission, the Legal Division of the Office of Compliance of the CPSC, and any employees or agents thereof.

C. "Respondents" refers to Central Sprinkler Corp. and Central Sprinkler Co., all corporate affiliates thereof, and all current or former employees of Central and corporate affiliates

thereof.

D. "CSC" refers to Central Sprinkler Corporation.

E. "Central" refers to Central Sprinkler Company.

F. "Omega" or "Omegas" refers to the line of sprinkler heads identified in the Complaint, including the following models: C-1; C-1A; C-1A PRO; C-1A PRO ID; EC-20; EC-20A; EC-20 AID; HEC-12; HEC-12 ID; HEC-12 PRO; HEC-12A PRO; HEC-12 RES; HEC-20; HEC-20 ID; R-1; R-1A; R-1M; AC; M; and Flow Control.

G. "Person" or "persons" means all individuals and entities, including natural persons, representative persons, public or private corporations, companies, unincorporated associations, partnerships, organizations, government entities or groups, plus any divisions, departments, or units thereof.

H. "Document" or "documents" means any written, printed, typed, recorded, or graphic matter, whether produced or reproduced or stored on paper, cards, tapes, film, electronic facsimile, computer storage devices or any other devices or media, including, but not limited to papers; books; letter; photographs; objects; tangible things; correspondence; telegrams; cables; telex messages; memoranda; notes; notations; records; work papers; transcripts; minutes; reports and recordings of telephone or other conversations, or of interviews, or of conferences, or of other meetings; affidavits; statements; opinions; proposals; reports; studies; analyses; audits; evaluations; contracts; agreements; journals; statistical records; ledgers; books of account; bookkeeping entries; financial statements; tax returns; vouchers; checks; check stubs; invoices; receipts; desk calendars; appointment books; diaries; lists; tabulations; summaries; sound recordings; computer printouts; data processing input and output; microfilms; all records kept by electronic, photographic, or mechanical means; and things similar to any of the foregoing, however denominated. When one or more of the following documents is requested or referred to, the request or reference shall include, but is not limited to, the original and each and every copy and draft thereof having writings, notations, corrections, or markings unique to such copy or draft.

I. "Oral communication" means any and all non-written forms of expression or communication, whether face-to-face or by telephone, in a conference or otherwise.

J. "Identify" or "identification", when used in reference to a document, means to:

1. state the type of document (e.g., letter, log, report, etc.);

2. state its date;

3. state its title, heading or other designation and any other information (e.g., index or file number) which would facilitate the identification thereof;

4. identify the person(s) who prepared and/or signed the document;

5. identify the persons (or if widely distributed, the organization or classes of persons) to whom it was sent;

6. identify the last known location of the document and of each copy thereof having notations or markings unique to such copy;

7. if the document was, but no longer is, in your possession or subject to your control, identify its last know custodian, describe the circumstances under which it passed from your control to that person, and identify each person having knowledge of such circumstances;

8. describe its general subject matter and contents; and

9. if the document exceeds one page in length, or is contained in a series of documents or a larger portion, identify the specific document by appropriate identifying name or symbol, the number of the particular page or pages (or other descriptive aid) and of the line or lines thereof upon which the information referred to in the Discovery Request or your response appears.

K. "Identify" or "identification", when used in reference to a natural person, means to provide the following information:

1. his or her full name;

2. his or her business affiliation(s), position(s), title(s), and job description(s) during the period delineated in the Discovery Request (and the dates during which each affiliation, position, title, and job description applied to him or her);

3. his or her present or last known business address (and the date of that last knowledge); and

4. his or her present or last known residence address (and the date of that last knowledge).

L. "Identify" or "identification", when used in reference to an oral communication or statement, means to:

1. state the date of the oral communication or statement;

2. state the place where it occurred;

3. identify the persons(s) making and listening to the oral communication or statement;

4. identify all other persons present at the time it was made;

5. if by telephone, identify the persons participating in the conversation and where each was located at the time of the call; and

6. describe the substance of the oral communication or statement.

M. "Date" means the exact day, month, and year if ascertainable, or, if not, the best approximation thereof or best approximation in relation to other events.

N. "Describe" means to set forth fully and clearly every relevant fact and/or event, including particulars of time, place and manner.

O. Where the context so requires:

1. the terms "and" and "or" mean "and/or";

2. the plural of a word includes the singular, and the singular includes the plural;

3. the past tense of verb includes the present, and the present tense includes the past;

4. the masculine gender includes feminine and neuter genders, and the neuter gender include the masculine and feminine.

P. All other words are to be given their ordinary and usual meanings, according to a current edition of Webster's Dictionary.

INTERROGATORIES

A. Allegations of the Complaint

1. (a) State whether CSC manufactures Omegas.

If so:

(b) identify and describe any such manufacturing;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such manufacturing;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such manufacturing; and

(e) describe in detail the substance of each such person's knowledge and/or information.

2. (a) State whether CSC sells Omegas.

If so:

(b) identify and describe any such sales;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such sales;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such sales; and

(e) describe in detail the substance of each such person's knowledge and/or information.

3. (a) State whether CSC markets Omegas.

If so:

(b) identify and describe any such marketing;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such marketing;

(d) identify each and every person whom Complainant knows and/or believes

have knowledge of such marketing; and

(e) describe in detail the substance of each such person's knowledge and/or information.

4. With respect to the allegation of Paragraph 5 of the Complaint that CSC is a "manufacturer" of consumer products:

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

5. (a) State whether the C-1 model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

6. (a) State whether the C-1A model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

7. (a) State whether the C-1A PRO model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

8. (a) State whether the C-1A PRO ID model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or

information.

9. (a) State whether the EC-20 model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

10. (a) State whether the EC-20A model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

11. (a) State whether the EC-20 AID model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

12. (a) State whether the HEC-12 model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

13. (a) State whether the HEC-12 ID model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

14. (a) State whether the HEC-12 PRO model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

15. (a) State whether the HEC-12A PRO model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

16. (a) State whether the HEC-12 RES model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

17. (a) State whether the HEC-20 model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

18. (a) State whether the HEC-20 ID model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

19. (a) State whether the R-1 model of the Omegas constitutes a "consumer product"

pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

20. (a) State whether the R-1A model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

21. (a) State whether the R-1M model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to

have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

22. (a) State whether the AC model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

23. (a) State whether the M model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

24. (a) State whether the Flow Control model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

25. With respect to the allegation of Paragraph 6 of the Complaint that the Omegas are "consumer products":

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

26. (a) Separately for each model of the Omegas listed in the Complaint, state whether such model is sold by Respondents directly to consumers.

If so:

(b) identify all documents which describe, evidence, refer, or relate to any such sales;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such sales; and

(d) describe in detail the substance of each such person's knowledge and/or information.

27. (a) Separately for each model of the Omegas listed in the Complaint, state whether Respondents market such a model to consumers.

If so:

(b) identify all documents which describe, evidence, refer, or relate to any such marketing;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such marketing; and

(d) describe in detail the substance of each such person's knowledge and/or information.

28. (a) Separately for each model of the Omegas listed in the Complaint, state whether such a model is installed by consumers themselves (as opposed to professional contractors).

If so:

(b) identify all documents which describe, evidence, refer, or relate to any such installation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such installation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

29. (a) Separately for each model of the Omegas listed in the Complaint, state whether such a model is serviced by consumers themselves (as opposed to professional contractors).

If so:

(b) identify all documents which describe, evidence, refer, or relate to any such servicing;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such servicing; and

(d) describe in detail the substance of each such person's knowledge and/or

information.

30. (a) Separately for each model of the Omegas listed in the Complaint, state whether such a model is repaired by consumers themselves (as opposed to professional contractors). If so:

(b) identify all documents which describe, evidence, refer, or relate to any such repairs;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such repairs; and

(d) describe in detail the substance of each such person's knowledge and/or information.

31. State whether Omegas installed in buildings used only as storage facilities constitute "consumer products" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

32. State whether Omegas installed in warehouses constitute "consumer products" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates

in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

33. State whether Omegas installed in factories constitute "consumer products" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

34. State whether Omegas installed in computer facilities constitute "consumer products" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

35. State whether there are any factual circumstances under which any Omegas would not constitute a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) identify and describe any such circumstances;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such circumstances;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such circumstances; and

(e) describe in detail the substance of each such person's knowledge and/or information.

36. (a) State whether there are any factual circumstances under which any non-Omega sprinkler heads would not constitute a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) identify and describe any such circumstances;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such circumstances;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such circumstances; and

(e) describe in detail the substance of each such person's knowledge and/or information.

37. (a) Separately for each model of the Omegas listed in the Complaint, describe any and all ways in which consumers use, consume, and/or enjoy such a model.

(b) identify all documents which describe, evidence, refer, or relate to any such use, consumption, or enjoyment;

(c) identify each and every person whom Complainant knows and/or believes to

have knowledge of any such use, consumption, or enjoyment; and

(d) describe in detail the substance of each such person's knowledge and/or information.

38. With respect to the allegation of Paragraph 8 of the Complaint that the Omegas are "designed to perform in accordance with" NFPA Standard 13:

(a) identify which specific sub-sections of NFPA Standard 13, if any, address the operating water pressure at which previously installed sprinkler heads should activate when such heads are removed and tested;

(b) identify which specific sub-sections of NFPA Standard 13, if any, address the operating water pressure at which installed sprinkler heads should activate when such heads are still incorporated into the sprinkler system;

(c) identify which specific sub-sections of NFPA Standard 13, if any, address the required residual water pressure at the most remote sprinkler head in a system after the other sprinkler heads are open and flowing;

(d) identify which specific sub-sections of NFPA Standard 13, if any, are applicable to the allegations of the Complaint; and

(e) describe in terms of psi (pounds per square inch) the testing standard that Complainant contends is created by NFPA Standard 13 that applies to the Omegas.

39. With respect to the allegation of Paragraph 8 of the Complaint that the Omegas are "designed to perform in accordance with" UL Standard 199:

(a) identify which specific sub-sections of UL Standard 199, if any, address the operating water pressure at which previously installed sprinkler heads should activate when such heads are removed and tested;

(b) identify which specific sub-sections of UL Standard 199, if any, address the operating water pressure at which installed sprinkler heads should activate when such heads are still incorporated into the sprinkler system;

(c) identify which specific sub-sections of UL Standard 199, if any, address the required residual water pressure at the most remote sprinkler head in a system after the other sprinkler heads are open and flowing;

(d) identify which specific sub-sections of UL Standard 199, if any, are applicable to the allegations of the Complaint; and

(e) describe in terms of psi the testing standard that Complainant contends is created by UL Standard 199 that applies to the Omegas.

40. With respect to the allegation of Paragraph 8 of the Complaint that the Omegas are "designed to perform in accordance with" UL Standard 199 and NFPA Standard 13:

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

41. With respect to the allegation of Paragraph 8 of the Complaint that the Omegas are designed to perform in accordance with certain standards "when exposed to certain temperatures":

(a) describe in terms of both degrees Fahrenheit and Celsius what temperatures are meant by the phrase "certain temperatures";

(b) set forth the factual basis for this allegation;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(e) describe in detail the substance of each such person's knowledge and/or

information.

42. (a) State whether Complainant contends that there is a single standard of water pressure (in psi) at which previously installed sprinkler heads must activate when tested to be deemed by the Complainant as not presenting any substantial risk of injury to the public and/or substantial product hazard;

If so:

(b) identify and describe any such standard;

(c) identify all documents which describe, evidence, refer, support, or relate to any such a standard;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such standard; and

(e) describe in detail the substance of each such person's knowledge and/or information.

43. (a) State whether Complainant contends that there is a single standard of temperature at which previously installed sprinkler heads must activate when tested to be deemed by the Complainant as not presenting any substantial risk of injury to the public and/or substantial product hazard;

If so:

(b) identify and describe any such standard;

(c) identify all documents which describe, evidence, refer, support, or relate to any such standard;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such standard; and

(e) describe in detail the substance of each such person's knowledge and/or information.

44. (a) Describe the percentage of previously installed sprinkler heads that must activate at the standards described in Interrogatory Nos. 42-43 when tested in order to be deemed by the Complainant as not presenting any substantial risk of injury to public and/or substantial product hazard;

(b) identify all documents which describe, evidence, refer, support, or relate to such a percentage;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of such a percentage; and

(d) describe in detail the substance of each such person's knowledge and/or information.

45. (a) State whether Complainant contends that there is a standard of "failure" that will accurately predict whether a particular Omega will fail to activate in a fire when used in a particular building without regard to the actual hydraulic pressure that exists in the building. If so:

(b) identify and describe any such standard;

(c) identify all documents which describe, evidence, refer, support, or relate to any such standard;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such standard; and

(e) describe in detail the substance of each such person's knowledge and/or information.

46. (a) State whether Complainant contends that if a particular Omega does not activate at a minimum of 7 psi when tested, such an Omega would not activate if a fire occurred in a building where such Omega was installed.

(b) set forth the factual basis for any such contention;

(c) identify all documents which describe, evidence, refer, support, or relate to

any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

47. Describe the average static water pressure (in psi) present in the sprinkler systems of most residential buildings.

48. Describe the average residual water pressure (in psi) present at the most remote sprinkler head in the sprinkler systems of most residential buildings, after the system has been activated.

49. Describe the average static water pressure (in psi) present in the sprinkler systems of most commercial buildings.

50. Describe the average residual water pressure (in psi) present at the most remote sprinkler head in the sprinkler systems of most commercial buildings, after the system has been activated.

51. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas "do not and/or will not function":

(a) separately for each Omega model listed in the Complaint, describe in detail all of the causes and/or reasons that the Omegas "do not and/or will not function";

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

52. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas do not and/or will not function in a "significant percentage" of instances:

(a) expressed in terms of a specific percentage, describe what constitutes "a significant percentage" regarding this allegation;

(b) set forth the factual basis for this allegation;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(e) describe in detail the substance of each such person's knowledge and/or information.

53. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the C-1 model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

54. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the C-1A model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

55. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the C-1A PRO model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

56. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the C-1A PRO ID model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

57. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the EC-20 model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

58. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the EC-20A model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

59. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the EC-20 AID model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

60. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC-12 model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

61. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC-12 ID model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

62. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC-12 PRO model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

63. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC-12A PRO model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

64. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC-12 RES model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

65. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC-20 model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

66. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC-20 ID model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

67. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the R-1 model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

68. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the R-1A model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

69. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the R-1M model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

70. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the AC model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

71. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the M model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

72. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the Flow Control model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

73. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to

have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

74. State whether the failure of any Omega to function has resulted in any bodily injury or injuries.

75. State whether the failure of any Omega to function has resulted in any death or deaths.

76. With respect to the allegation of Paragraph 13 of the Complaint that "failure of the Omegas to function exposes the public to bodily injury and/or death":

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

77. With respect to the allegation of Paragraph 15 of the Complaint that the defect or the defects in the Omegas create a "substantial risk of injury to the public":

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or

information.

78. (a) State whether the Complainant contends that any Omegas used with plastic piping systems installed after 1990 have ever failed to activate in a fire.

If so:

(b) identify and describe any such failures;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

79. (a) State whether the Complainant contends that any Omegas used with plastic piping systems installed after 1990 have ever failed to activate under any type of testing.

If so:

(b) identify and describe any such a contention;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

80. (a) State whether the Complainant contends that any Omegas used with copper piping systems installed after 1990 have ever failed to activate in a fire.

If so:

(b) identify and describe any such failures;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

81. (a) State whether the Complainant contends that any Omegas used with copper piping systems installed after 1990 have ever failed to activate under any type of testing.
If so:

(b) identify and describe any such testing;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

82. (a) State whether the Complainant contends that any Omegas manufactured from 1996 through the present and using silicone o-rings have ever failed to activate in a fire.
If so:

(b) identify and describe any such failures;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

83. (a) State whether the Complainant contends that any Omegas manufactured from 1996 through the present and using silicone o-rings have ever failed to activate in any type of testing.

If so:

(b) identify and describe any such testing;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

84. (a) State whether the Complainant contends that any Omegas used with plastic piping systems installed after 1990 constitute a "substantial product hazard" pursuant to 15 U.S.C. § 2064(a).

If so:

(b) identify and describe any such hazards;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

85. (a) State whether the Complainant contends that any Omegas used with copper piping systems installed after 1990 constitute a "substantial product hazard" pursuant to 15 U.S.C. § 2064(a).

If so:

(b) identify and describe any such hazards;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

86. (a) State whether Complainant contends that any Omegas manufactured using silicone o-rings constitute a "substantial product hazard" pursuant to 15 U.S.C. § 2064(a).

If so:

(b) identify and describe any such hazards;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

87. (a) State whether the Complainant contends that the performance of Omegas declines or deteriorates over time.

If so:

(b) identify and describe any such performance decline or deterioration;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or

information.

88. With respect to the allegation of Paragraph 16 of the Complaint that the Omegas present a "substantial product hazard":

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

89. With respect to the allegation of Paragraph 16 of the Complaint that "action under these provisions is in the public interest":

(a) identify and describe all of the public interest factors which Complainant believes favor "action under these provisions";

(b) set forth the factual basis for such an allegation;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(e) describe in detail the substance of each such person's knowledge and/or information.

90. With respect to the allegation of Paragraph B(1) of the Complaint that Respondent give prompt "public notice of the defect in the Omegas," identify and describe the "public notice" that the Complainant seeks to impose.

91. With respect to the allegation of Paragraph C(3) of the Complaint regarding repair of all Omegas so they will "perform properly," identify and describe what would constitute "performs properly" for purposes of the Complainant.

92. With respect to the allegation of Paragraph C(3) of the Complaint regarding the replacement of all Omegas "with a like or equivalent product which performs properly":

(a) identify and describe any and all "like or equivalent product which performs properly";

(b) state whether Complainant believes that Omegas with a silicone o-ring qualify as a "like or equivalent product which performs properly"; and

(c) state whether Complainant believes that Omegas with a spring collar qualify as a "like or equivalent product which performs properly."

93. With respect to the allegation of Paragraph C(3) of the Complaint regarding a "refund to consumers [of] the purchase price of the Omegas," identify and describe how Complainant would calculate or determine a "refund to consumers [of] of the purchase price of the Omegas."

94. (a) If the Commission orders Respondents to repair some or all of the Omegas pursuant to 15 U.S.C. § 2064(d)(1), identify and describe the nature and amount of the "reasonable and foreseeable expenses" under 15 U.S.C. § 2064(e)(1) that Complainant contends should be reimbursed to persons by Respondents.

(b) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(d) describe in detail the substance of each such person's knowledge and/or information about any such contention.

95. (a) If the Commission orders Respondents to replace some or all of the Omegas pursuant to 15 U.S.C. § 2064(d)(2), identify and describe the nature and amount of the "reasonable and foreseeable expenses" under 15 U.S.C. § 2064(e)(1) that Complainant contends should be reimbursed to persons by Respondents.

(b) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(d) describe in detail the substance of each such person's knowledge and/or information about any such contention.

96. (a) If the Commission orders Respondents to refund some or all of the Omegas pursuant to 15 U.S.C. § 2064(d)(3), identify and describe the nature and amount of the "reasonable and foreseeable expenses" under 15 U.S.C. § 2064(e)(1) that Complainant contends should be reimbursed to persons by Respondents.

(b) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(d) describe in detail the substance of each such person's knowledge and/or information about any such contention.

97. (a) If the Commission orders Respondents to repair some or all of the Omegas pursuant to U.S.C. § 2064(d)(1), identify and describe the nature and amount of the reimbursement to "any other person who is a manufacturer, distributor, or retailer of such product for such other person's expenses in connection with carrying out the order" that Complainant contends should be made by Respondents.

(b) identify all documents which describe, evidence, refer, support, or relate to

any such contention;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(d) describe in detail the substance of each such person's knowledge and/or information about any such contention.

98. (a) If the Commission orders Respondents to replace some or all of the Omegas pursuant to U.S.C. § 2064(d)(2), identify and describe the nature and amount of the reimbursement to "any other person who is a manufacturer, distributor, or retailer of such product for such other person's expenses in connection with carrying out the order" that Complainant contends should be made by Respondents.

(b) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(d) describe in detail the substance of each such person's knowledge and/or information about any such contention.

99. (a) If the Commission orders Respondents to refund the purchase price to some or all of the Omegas pursuant to U.S.C. § 2064(d)(3), identify and describe the nature and amount of the reimbursement to "any other person who is a manufacturer, distributor, or retailer of such product for such other person's expenses in connection with carrying out the order" that Complainant contends should be made by Respondents.

(b) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or

information about any such contention.

B. Potential Witnesses

100. Identify all former and/or current employees of Respondents with whom Complainant has had any contact regarding the Omegas. For each such person, identify and describe:

(a) the person's name;

(b) the person's last known home and business address;

(c) the person's last known telephone number;

(d) the person's last known position with Respondents;

(e) the date of any such contacts;

(f) the nature of any such contacts (e.g., letter, telephone conversation, in-person interview);

(f) a detailed description of the subject matter of such communication; and

(g) the identity of any other persons who were present during such contacts.

101. For each and every contact describe an response to Interrogatory No. 100, identify each and every document that describes, evidences, refers, or relates to such contacts, including without limitation any notes of such contacts, documents shown during the course of such contacts, lists of questions or answers given, or any reports of such communications.

102. Identify each and every person whom Complainant knows and/or believes to have knowledge or information concerning or related to the subject matter of the Complaint or other discoverable information. For each such person, describe:

(a) the person's name;

(b) the person's last known home and business address;

(c) the person's last known telephone number;

(d) the corporate or government affiliation of the person;

(e) whether the Complainant has contacted such person; and

(e) the specific subject matter of the person's knowledge.

103. Identify each and every fact witness that Complainant expects to testify on its behalf at the hearing in this matter. For each such fact witness, identify and describe:

(a) the name, title, business address, and home address for each such witness; and

(b) the subject matter about which each witness is expected to testify.

104. Identify each and every expert witness whom the Complainant expects to testify on its behalf at the hearing in this matter. For each such expert, identify and describe:

(a) the expert's name, title, home address, business address, education, employment since graduation from high school, and all publications authored or edited by the expert;

(b) the subject matter on which each expert is expected to testify;

(c) the substance and facts upon which the expert relies in forming his or her opinion;

(d) the opinions to which the expert is expected to testify;

(e) a summary of the grounds for each such opinion; and

(f) a statement and description of all information and documents upon which the expert relies or expects to rely.

105. Identify and describe any and all oral or written statements made by Respondents that the Complainant contends constitute an admission with reference to any of the issues raised in the Complaint. For each such statement, identify and describe:

(a) the person making the alleged statement;

(b) that person's relationship to Respondents;

(c) the content of the statement;

(d) the date, time, and place of the statement;

(e) the nature of the alleged statement (e.g., written or oral); and

(f) the identity of each person who heard the statement or otherwise has personal knowledge of the statement.

C. Other Allegations Made By the CPSC

106. In a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo, Singer states, "based on multiple random inquiries of sprinkler contractors across the nation in the recent past, we believe that Central's proposed labor payment falls considerably short of what has been, and remains, customarily required to remove and install sprinklers . . . ." With respect to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to the "multiple random inquiries of sprinkler contractors";

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such "multiple random inquires of sprinkler contractors";

(e) describe in detail the substance of each such person's knowledge and/or information of such "multiple random inquiries of sprinkler contractors";

(f) identify and describe in terms of a specific monetary amount "what has been, and remains, customarily required to remove and install sprinklers";

(g) identify each and every document that constitutes, evidences, refers, or relates in any way to "what has been, and remains, customarily required to remove and install sprinklers";

(h) identify each and every person whom Complainant knows and/or believes to have knowledge of "what has been, and remains, customarily required to remove and install sprinklers"; and

(i) describe in detail the substance of each such person's knowledge and/or

information of "what has been, and remains, customarily required to remove and install sprinklers."

107. In a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo, Singer states, "the evidence we have gathered does not support the view that dezincification alone is the cause of above-required operating pressures in Omegas from plastic pipe . . . ." With regard to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify and describe all of the "evidence we have gathered";

(d) identify each and every document that constitutes, evidences, refers, or relates in any way to this statement;

(e) identify each and every person whom Complainant knows and/or believes to have knowledge of this statement; and

(f) describe in detail the substance of each such person's knowledge and/or information.

108. In a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo, Singer states, "the evidence we have gathered does not support the view . . . that swollen o-rings due to cutting oil exposure are the exclusive cause of non-activation in Omegas manufactured before 1996." With regard to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify and describe all of the "evidence we have gathered";

(d) identify each and every document that constitutes, evidences, refers, or relates in any way to this statement;

(e) identify each and every person whom Complainant knows and/or believes to

have knowledge of this statement; and

(f) describe in detail the substance of each such person's knowledge and/or information.

109. In a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo, Singer states, "rather, primarily, the data points to multiple failure modes rooted in the design and construction of these sprinklers." With regard to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify and describe the "multiple failure modes rooted in the design and construction of these sprinklers";

(d) identify and describe "the data" referenced in the statement;

(e) identify and describe each and every document that constitutes, evidences, refers, or relates in any way to this statement;

(f) identify each and every person whom Complainant knows and/or believes to have knowledge of this statement; and

(g) describe in detail the substance of each such person's knowledge and/or information.

110. In a February 19, 1998 letter from Eric Stone of the CPSC to Kathleen Sanzo, the CPSC refuses to accept a "testing based corrective action proposal" from Respondents. With regard to this rejection:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for rejecting a "testing based corrective action proposal";

(c) identify and describe any and all reasons that the CPSC believes are correct in

rejecting such a proposal;

(d) identify each and every document that constitutes, evidences, refers, or relates in any way to the rejection of this proposal;

(e) identify each and every person whom Complainant knows and/or believes to have knowledge of the rejection of this proposal; and

(f) describe in detail the substance of each such person's knowledge and/or information.

111. In a February 19, 1998 letter from Eric Stone of the CPSC to Kathleen Sanzo, the CPSC states that "Central continues to insist on selling Omega sprinklers with silicone o-rings despite serious concerns about whether they will function in the long term." With regard to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify and describe all "serious concerns" that the CPSC has regarding the functioning of Omega sprinklers with silicone o-rings;

(d) identify each and every document that constitutes, evidences, refers, or relates in any way to such "serious concerns"; and

(e) identify each and every person whom Complainant knows and/or believes to have knowledge of such "serious concerns."

112. In a February 24, 1998 letter from Eric Stone of the CPSC to Kathleen Sanzo, Stone states, "x-ray examination of the unit showed that the internal shaft was cocked or tipped slightly and jammed in that position" and that the CPSC "plans to conduct non-destructive analysis of the unit . . . ." With regard to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify and describe any evidence that Omegas may be "cocked or tipped slightly and jammed in that position";

(d) identify each and every document that constitutes, evidences, refers, or relates in any way to the statement that Omegas are "cocked or tipped slightly and jammed in that position";

(e) identify each and every person whom Complainant knows and/or believes to have knowledge of any such problems;

(f) describe in detail the substance of each such person's knowledge and/or information; and

(g) describe any "non-destructive analysis of the unit" performed by or on behalf of the CPSC.

113. In a January 6, 1998 letter from Eric Singer of the CPSC to the state attorneys general, Singer states, "this contrasts with automatic fire sprinklers' historical rate of proving 99.5 percent effective." With regard to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify and describe all evidence that automatic fire sprinklers have an "historical rate of proving 99.5 percent effective";

(d) identify each and every document that constitutes, evidences, refers, or relates in any way to such historical rate of effectiveness;

(e) identify each and every person whom Complainant knows and/or believes to have knowledge of such historical rate of effectiveness; and

(f) describe in detail the substance of each such person's knowledge and/or information.

114. (a) State whether Complainant deems any corrective action proposal to be acceptable that is based in part on testing of a sample of sprinkler heads from a building and comparing the results of the sample to the hydraulically calculated operating pressure of that building.

If so:

(b) identify and describe such an acceptable corrective action proposal;

If not:

(c) identify and describe all reasons for such unacceptability;

(e) identify each and every document that constitutes, evidences, refers, or relates in any way to such unacceptability;

(f) identify each and every person whom Complainant knows and/or believes to have knowledge of such unacceptability; and

(g) describe in detail the substance of each such person's knowledge and/or information.

D. CPSC Investigation

115. Identify all persons employed or otherwise retained by the CPSC who in any way participated in the CPSC's investigation of the Omegas. For each person identified, describe his or her role in the investigation.

116. Describe the circumstances surrounding, and the reasons giving rise to the CPSC's decision to investigate alleged risks associated with the Omegas. Your response should include, without limitation, the following:

(a) the date that the CPSC decided to investigate the Omegas;

(b) the identity of all persons at the CPSC involved in the decision to investigate the Omegas; and

(c) the identity of all information (including, but not limited to, any consumer complaints) available to or otherwise relied upon by the CPSC in deciding to initiate an

investigation of the Omegas.

117. Describe in detail any investigation by the CPSC relating to consumer complaints and/or consumer reports of personal injury, property damage, non-activation, or any other problems allegedly associated with the Omegas. Your response should include, without limitation, the following:

(a) the identity of any and all persons employed or otherwise retained by the CPSC who participated in this aspect of the investigation;

(b) the identity of all consumers with whom the CPSC communicated in connection with this aspect of the investigation;

(c) the identity of all consumers who complained of or reported an incident relating to the Omegas;

(d) the identification of any consumer questionnaires or other surveys used by the CPSC in conducting this aspect of the investigation; and

(e) the identification of any and all data, reports, survey results, or other information revealing the results of this aspect of the investigation.

118. Identify and describe any and all incidents known to the CPSC in which a consumer or other person has reported a fire in connection with use of the Omegas. For each such incident, state the following:

(a) the name and address of the consumer;

(b) the date of the incident involving the fire;

(c) a description of any and all property damage, if any, caused by or associated with the fire; and

(d) a description of any and all personal injuries, if any, sustained as a result of or associated with the fire.

119. To the extent not already identified in response to Interrogatory Nos. 117-118,

identify and describe any and all incidents known to the CPSC in which a consumer or other person has reported any form of property damage or personal injury in connection with the Omegas. For each such incident, state the following:

(a) the name and address of the consumer;

(b) the date of the incident involving the alleged property damage and/or personal injury;

(c) a description of the type of property damage allegedly sustained; and

(d) a description of any and all personal injury allegedly sustained.

120. Describe in detail any and all communications between the CPSC and any dealer, retailer, or distributor in connection with the Omegas. Your response should include, without limitation, the following:

(a) the identity of any and all persons employed or otherwise retained by the CPSC who participated in this aspect of the investigation;

(b) the identity of any and all dealers, retailers, or distributors with whom the CPSC communicated in connection with this aspect of the investigation of the Omegas;

(c) a description of the content of the CPSC's communications with each such dealer, retailer, or distributor;

(d) the identification of any questionnaires or other surveys used by the CPSC in communicating with each such dealer, retailer, or distributor; and

(e) the identification of any and all data, reports, surveys results, or other information revealing the results of this aspect of the investigation.

121. Describe in detail any and all communications between the CPSC and any Authority Having Jurisdiction ("AHJ") in connection with the Omegas. Your response should include, without limitation, the following:

(a) the identity of any and all persons employed or otherwise retained by the CPSC who participated in this aspect of the investigation;

(b) the identity of any and all AHJ's with whom the CPSC communicated in connection with this aspect of the investigation;

(c) a description of the content of the CPSC's communication with each such AHJ;

(d) the identification of any questionnaires or other surveys used by the CPSC in communicating with each such AHJ; and

(e) the identification of any and all data, reports, surveys results, or other information revealing the results of this aspect of the investigation.

122. Describe in detail any and all communications between the CPSC and any state law enforcement authorities in connection with the Omegas. Your response should include, without limitation, the following:

(a) the identity of any and all persons employed or otherwise retained by the CPSC who participated in this aspect of the investigation;

(b) the identity of any and all state law enforcement authorities with whom the CPSC communicated in connection with this aspect of the investigation of the Omegas;

(c) a description of the content of the CPSC's communications with each such state law enforcement authority;

(d) the identification of any questionnaires or other surveys used by the CPSC in communicating with each such state law enforcement authority; and

(e) the identification of any and all data, reports, surveys results, or other information revealing the results of this aspect of the investigation.

123. Describe in detail any and all communications between the CPSC and any federal law enforcement authorities in connection with the Omegas. Your response should include, without limitation, the following:

(a) the identity of any and all persons employed or otherwise retained by the CPSC who participated in this aspect of the investigation;

(b) the identity of any and all federal law enforcement authorities with whom the CPSC communicated in connection with this aspect of the investigation of the Omegas;

(c) a description of the content of the CPSC's communications with each such federal law enforcement authority;

(d) the identification of any questionnaires or other surveys used by the CPSC in communicating with each such federal law enforcement authority; and

(e) the identification of any and all data, reports, surveys results, or other information revealing the results of this aspect of the investigation.

E. Design and Testing

124. Identify and describe any and all testing of the Omegas conducted by or on behalf of the CPSC. Your response should include, without limitation, the following:

(a) a description of any testing protocols used by the CPSC in testing the Omegas;

(b) the identity of the person(s) who created or established any such testing protocols for the Omegas;

(c) a description of the methodology employed during each and every test of the Omegas;

(d) the date of each and every test of the Omegas;

(e) an identification of the person(s) who conducted, participated in, or were otherwise present during each test of the Omegas;

(f) a description of the results of each and every test of the Omegas; and

(g) the identification of any and all documents (including videotapes and audiotapes) relating to any testing of the Omegas.

125. Identify any and all outside consultants, experts, or other persons who assisted, advised, or otherwise communicated with the CPSC with respect to any testing of the Omegas. For each such person, describe his or her role in the testing, and the communications between that

person and the CPSC.

126. For each test of the Omegas conducted by the CPSC, describe in detail the condition and age of the specific Omegas used in the test. Your response should include, without limitation, the following:

(a) an identification of each specific Omega by model number;

(b) a description of how and when the CPSC obtained each specific Omega used in the testing;

(c) a description of the condition of each specific Omega used in the testing (e.g., new, used, damaged, dented, etc. . .);

(d) a statement of the age of each specific Omega used in the testing;

(e) a statement of whether the CPSC has retained and the current location of each specific Omega used in the testing; and

(f) if the CPSC has since destroyed or discarded any Omegas used in its testing, a statement of the reasons for that action.

127. For each test of the Omegas conducted by the CPSC, describe in detail the piping used in the sprinkler system from which the Omegas were removed. Your response should include, without limitation, the following:

(a) the material constituting the piping;

(b) the presence of any treatments or substances applied to the piping;

(c) the contents of any and all materials or substances inside the piping; and

(d) a description of the overall condition of the piping.

128. For the time period 1990 through the present, identify and describe any and all testing of any non-Omega sprinkler heads conducted by or on behalf of the CPSC. Your response should include, without limitation, the following:

(a) a description of any testing protocols used by the CPSC in testing the non-

Omega sprinkler heads;

(b) the identity of the person(s) who created or established any such testing protocols for the non-Omega sprinkler heads;

(c) a description of the methodology employed during each and every test of the non-Omega sprinkler heads;

(d) the dates of each and every test of the non-Omega sprinkler heads;

(e) an identification of the person(s) who conducted, participated in, or were otherwise present during each test of the non-Omega sprinkler heads;

(f) a description of the results of each and every test of the non-Omega sprinkler heads; and

(g) the identification of any and all documents (including videotapes and audiotapes) relating to any testing of the non-Omega sprinkler heads.

129. To the extent that you contend, or otherwise intend to present at the hearing in this matter, the feasibility and/or propriety of any alternative design features for the Omegas, identify and describe any such proposed alternative design features. Your response should include, without limitation, a description of all data, testing, reports, or other information supporting this contention.

F. Risk Assessment

130. Set forth the factual basis of your contention in Paragraph 15 of the Complaint that the Omegas "create a substantial risk of injury to the public within the meaning of Section 15(a)(2) of the CPSA, 15 U.S.C. § 2064(a)(2)." Your response should include, without limitation, the following:

(a) a description of the specific risks of injury that you contend are presented by the Omegas;

(b) a description of the criteria or factors used by the CPSC in determining that each risk allegedly associated with the Omegas constitutes a "substantial risk" within the meaning of 15 U.S.C. § 2064(a)(2); and

(c) an identification of any and all data, survey information, or testing relating to the alleged risks associated with the Omegas.

131. Describe in detail any and all measures taken by the CPSC to determine the severity of the risk allegedly associated with the Omegas, including, without limitation:

(a) a description of how the CPSC measures the severity of the risk allegedly associated with the Omegas;

(b) a statement of whether the measurement employed by the CPSC incorporates, considers, or is in any way adjusted to reflect the number of products in use and the frequency of use of the Omegas;

(c) a description of all efforts taken by the CPSC to measure the severity of the risk or probability of injury allegedly associated with the Omegas; and

(d) an identification of all data, studies, and reports that quantify or otherwise provide an assessment of the risk or probability of injury allegedly associated with the Omegas.

132. Describe the CPSC's preliminary determination of the alleged risks associated with the Omegas. Your response should include, without limitation, the following:

(a) the date the CPSC Staff issued its preliminary determination of the alleged risks associated with the Omegas;

(b) the identity of all persons involved in the Staff's preliminary determination;

(c) the level of hazard assigned to the Omegas in accordance with the applicable provisions of the CPSC Recall Handbook; and

(d) an identification of all data, studies, reports, and/or testing upon which CPSC relied in making its preliminary determination.

133. Explain the factual basis underlying the level of hazard assigned to the Omegas in the CPSC Staff's preliminary determination of the alleged risks associated with the Omegas. Your response should include a statement of the specific factors considered, and the data or information

relied upon, by the CPSC Staff in determining the level of hazard assigned to the Omegas.

134. State whether CPSC's preliminary determination and/or initial assignment of the level of hazard allegedly presented by the Omegas has changed over time. If so, describe any such change and the information or testing giving rise to the change.

135. For the period from 1990 through the present, identify all consumer products classified by the CPSC as presenting a hazard level equal to, or greater than, the hazard level assigned to the Omegas. For example, if the Omegas have been classified as a "Class B" hazard, identify all other consumer products that have been classified as "Class B" hazards and all consumer products identified as "Class A" hazards. For each consumer product identified in your response, you should provide the following:

(a) the identity of the consumer product by brand name or other description;

(b) the identification of the manufacturer of each such consumer product;

(c) the date of the CPSC's classification of the consumer product as presenting a hazard;

(d) the hazard level assigned each such consumer product;

(e) a description of the hazard presented by each such consumer product;

(f) for each such consumer product, the estimated total number of units manufactured as of the date the CPSC made its determination of the hazard level;

(g) for each such consumer product, the estimated total number of units in the hands of the consumers as of the date the CPSC made its determination of the hazard level;

(h) the number and severity of any and all personal injuries associated with each such consumer product;

(i) the number of deaths associated with each such consumer product; and

(j) the nature and number of property damage reports associated with each such consumer product.

G. Sufficiency of Corrective Action

136. For each consumer product identified in your response to Interrogatory No. 135, describe any and all corrective action taken with respect to that product. Your response should include, without limitation, the following:

(a) a statement of the CPSC's role in effecting the corrective action;

(b) a statement of whether the corrective action that was taken was completely voluntary on the part of the manufacturer, retailer, or distributor, was the result of a negotiated corrective action plan with the CPSC, or otherwise was compelled by the CPSC through the initiation of an adjudicative proceeding pursuant to 15 U.S.C. § 2064; and

(c) the identification of all documents evidencing the corrective action taken with respect to each such consumer product.

137. For each consumer product identified in your response to Interrogatory No. 135, describe the nature and extent of the public notice provided as part of the corrective action taken. Your response should include, without limitation, the following:

(a) the specific nature of the notice given (e.g., written notice to consumers and retailers, press releases, bill-boards, posters, etc. . .);

(b) a description of the media coverage associated with the corrective action (e.g., newspaper ads and reports, magazine ads and reports, wire services, other print media, television coverage, radio coverage, and/or internet exposure);

(c) a description of the extent of media coverage and exposure of the corrective action (e.g., a list of all newspapers, magazines, wire services, television stations, radio stations, and internet services that provided notice or otherwise covered the corrective action);

(d) a description of the frequency and amount of media coverage associated with the corrective action (e.g., the number of days newspapers carried a written notice, or the number of days the notice appeared on television); and

(e) a description of any and all point of purchase notification to consumers associated with the corrective action (e.g., posters and notices provided to retailers to display at

stores).

138. For each consumer product identified in your response to Interrogatory No. 135, describe the nature of the recall component, if any, of the corrective action taken. Your response should include, without limitation, the following:

(a) the number of individual units recalled;

(b) the remedy options offered to consumers (e.g., replacement, refund, substitute products);

(c) an assessment of consumer participation in the recall (e.g., percentage of units in the hands of consumers that were actually received by the recall);

(d) identification of any and all documents revealing the level of consumer participation in the recall; and

(e) a description of any studies conducted by the manufacturer, distributor, or retailer of the consumer product, or by the CPSC, or by both, or by any other person or entity, assessing the effectiveness of the recall program.

139. Explain the factual basis of your contention, if any, that the corrective action proposal of Respondents in connection with the Omegas is insufficient to protect the public or otherwise fails to provide adequate remedial measures under 15 U.S.C. § 2064.

140. Describe in detail the public notice, recall, and/or other remedial measures that you contend are necessary with respect to the Omegas to constitute a sufficient remedy and/or corrective action proposal under 15 U.S.C. § 2064.

141. Identify and describe all efforts taken by the CPSC (including, without limitation, consumer surveys, press surveys, and public opinion polls) to evaluate, test, or otherwise determine the sufficiency of the corrective action proposal of Respondents with respect to the Omegas.

142. Identify and describe all criteria and factors considered by the CPSC in measuring the sufficiency of the corrective action proposal of Respondents with respect to the Omegas.

143. Identify all public statements, press releases, or other information released to the public by the CPSC that in any way relates to or otherwise refers to the Omegas and/or Respondents.

H. Initiation of Adjudicative Proceedings

144. For the time period beginning January 1, 1982 to the present, identify all incidents in which the CPSC has filed an administrative complaint pursuant to Section 15 of the Consumer Product Safety Act (CPSA), 15 U.S.C. § 2064. Your response should include, without limitation, the following:

(a) the date the administrative action was filed;

(b) the identity of the manufacturers, distributors, or retailers of the consumer product named as respondents in the administrative action;

(c) the identity of the consumer product at issue;

(d) a description of the alleged "substantial product hazard" at issue in each case; and

(e) a description of the outcome of the administrative action and the nature of the remedy awarded.

145. Identify all persons employed or otherwise retained by the CPSC who in any way participated in the CPSC's decision to initiate the instant adjudicative proceeding against the Respondents.

146. State the date on which the CPSC authorized Complaint Counsel to initiate the instant adjudicative proceeding against the Respondents.

147. Identify all communications and documents (including internal memoranda and correspondence) relating to the CPSC's decision to initiate the instant adjudicative proceeding against the Respondents.

148. State the reasons for the CPSC's authorization of, and decision to initiate, the instant adjudicative proceeding against the Respondents.

DATED: March 26, 1998

J. Gordon Cooney, Jr. (MH)

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Attorneys for Respondents
CENTRAL SPRINKLER CORP. and
CENTRAL SPRINKLER CO.

CERTIFICATE OF SERVICE

I, Michael F. Healy, hereby certify that on this date a true and correct copy of the foregoing Respondents' First Set of Interrogatories was served by hand upon the following:

Eric L. Stone
Director
Division of Administrative Litigation
U. S. Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

Alan H. Schoem
Assistant Executive Director
Office of Compliance
U.S. Consumer Product Safety Commission
4430 East West Highway
Bethesda, MD 20814

Date: March 26, 1998

Michael F. Healy

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents	)	

COMPLAINT COUNSEL'S RESPONSES TO RESPONDENTS' FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS

Complaint Counsel hereby responds to Respondents' First Request for Production of Documents and Things.

1. All documents identified in the "List and Summary of Documentary Evidence" attached to the Complaint.

Response: Complaint Counsel objects to this Request to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery pursuant to the work product privilege. The data compilation of failures was prepared by or for Complaint Counsel in anticipation of litigation. Without waiving its objection, Complaint Counsel will produce the data on which the compilation is based, and the information about the fires, to the extent that the information was not provided to Complaint Counsel by a third party on a confidential basis. Without waiving its objection, to the extent that the data or information was provided on a confidential basis, Complaint

Counsel will produce the data upon the execution of an appropriate confidentiality stipulation by Respondents, and the issuance of an appropriate protective order by the Presiding Officer.

2. **All documents identified in the CPSC's responses to Respondents' First Set of Interrogatories.**

Response: Complaint Counsel objects to this Request on the grounds that it is overbroad and unduly burdensome. However, without waiving its objection, Complaint Counsel will produce non-privileged and non-confidential documents referenced in its responses to Respondents' Interrogatories.

3. **All documents that constitute the entirety of the CPSC administrative file regarding the Omegas.**

Response: Complaint Counsel objects to this Request on the ground that the term "administrative file" is undefined, unclear, vague and ambiguous. Complaint Counsel further objects to this Request on the ground that it is overbroad and unduly burdensome. To the extent that 'administrative file' encompasses documents prepared by or for Complaint Counsel in anticipation of litigation, Complaint Counsel objects to this Request on the ground that it seeks documents protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel will produce all non-confidential and non-privileged documents referenced in its responses to Respondents' Interrogatories, and/or requested in these Requests for Production that are not already in Respondents' possession.

4. **All documents that constitute subpoenas from the CPSC or other requests for documents to any person, organization, business, or any other entity regarding or related to the Omegas.**

Response: Complaint Counsel objects to this Request to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel will produce subpoenas it served in this matter upon UL, FM and others.

5. All documents provided to the CPSC in response to subpoenas from the CPSC or other requests for documents to any person, organization, business, or any other entity regarding or related to the Omegas.

Response: Complaint Counsel objects to this Request to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel also objects to this Interrogatory to the extent that it seeks documents prohibited from disclosure pursuant to 15 U.S.C. § 2055. Without waiving its objections, Complaint Counsel will produce all non-confidential documents provided to Complaint Counsel by third parties in response to subpoenas issued by CPSC in this matter upon the receipt of permission from the third parties and upon execution of an appropriate confidentiality stipulation by Respondents, and the issuance of any necessary protective orders by the Presiding Officer.

6. All documents provided to the CPSC by Respondents regarding the Omegas.

Response: Complaint Counsel objects to this Request on the grounds that it is overbroad and unduly burdensome, and on the ground that the information is already within the possession of Respondents (who continue to be represented by the same counsel who provided the information in the first place).

7. **All documents provided to the CPSC by any person, organization, business, or any other entity regarding or related to the Omegas and/or Respondents.**

Response: Complaint Counsel objects to this Request on the grounds that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel would be pleased to produce specific documents, or specific categories of documents, that Respondents seek to discover, upon rephrasal of this Request.

8. **All documents that constitute, provide evidence of, refer, or relate to any testing of the Omegas conducted by or on behalf of the CPSC.**

Response: Complaint Counsel objects to this Request on the grounds that it seeks documents prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel responds that it will share with Respondents the results of any testing it intends to introduce into evidence at the hearing in this matter, once those determinations have been made.

9. **All documents that constitute, provide evidence of, refer, or relate to any testing of the Omegas conducted by on or behalf of any other person, organization, business, or other entity.**

Response: Complaint Counsel objects to this Request on the grounds that the terms "other person, organization, business or other entity" are unclear, undefined, vague and ambiguous. Assuming that the terms "other person, organization, business or other entity" refer to

persons, organizations, businesses or entities other than CPSC and its staff, Complaint Counsel objects to this Request on the grounds that it is overbroad and unduly burdensome, and includes information not within the knowledge or control of Complaint Counsel. Complaint Counsel further objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel also objects to this Interrogatory to the extent that it seeks documents prohibited from disclosure pursuant to 15 U.S.C. § 2055. Without waiving its objections, Complaint Counsel will produce responsive documents provided to Complaint Counsel by third parties regarding testing of Omega sprinklers upon the receipt of permission from the third parties, and upon execution of an appropriate confidentiality stipulation by Respondents, and the issuance of any necessary protective orders by the Presiding Officer.

10. All documents that constitute, provide evidence of, refer, or relate to any testing of non-Omega sprinkler heads conducted by on or behalf of the CPSC.

Response: Complaint Counsel objects to this Request to the extent that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel further objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request on the ground that to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint counsel further objects to Respondents' Request on the ground that the terms "provide evidence of" call for a legal conclusion. Without waiving its objections, Complaint Counsel

responds that it currently has no documents regarding testing of non-Omega sprinklers.

11. All documents that constitute, provide evidence of, refer, or relate to testing of non-Omega sprinkler heads conducted by on or behalf of any other person, organization, business, or other entity.

Response: Complaint Counsel objects to this Request on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel further objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request on the ground that to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint counsel further objects to Respondents' Request on the ground that the terms "provide evidence of" call for a legal conclusion. Without waiving its objections, Complaint Counsel responds that it currently has no documents regarding testing of non-Omega sprinklers.

12. All documents that constitute, provide evidence of, refer, or relate to the alleged jurisdiction of the CPSC over the Omegas.

Response: Complaint Counsel objects to this Request on the grounds that it is unclear, vague and ambiguous. Complaint Counsel further objects to this Request on the ground that it seeks documents prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Request on the ground that it calls for a legal conclusion. Without waiving its objections, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss, the case law and statutes cited therein, and the affidavit and exhibit submitted

therewith.

13. All documents that constitute, provide evidence of, refer, or relate to the jurisdiction of the CPSC over any product, including without limitation any memoranda or other internal correspondence that addresses the extent of or any limitations on the jurisdiction of the CPSC.

Response: Complaint Counsel objects to this Request on the grounds that it is unclear, vague and ambiguous. Complaint Counsel further objects to this Request on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence herein. Complaint Counsel further objects to this Request on the ground that it is overbroad and unduly burdensome, as CPSC exercises jurisdiction over tens of thousands of products, and every document in every CPSC file is arguably responsive to this Request. Complaint Counsel further objects to this Request on the ground that it seeks documents prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Request on the ground that it calls for a legal conclusion. Without waiving its objections, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this case, the case law and statutes cited therein, and the affidavit and exhibit submitted therewith, as well as the records of sprinkler testing provided in response to Request #1.

14. All documents that constitute, provide evidence of, refer, or relate to CSC manufacturing, selling, or marketing Omegas.

Response: Complaint Counsel objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request on the ground

that all documents that "constitute, provide evidence of, refer, or relate to CSC manufacturing, selling, or marketing Omegas" are within CSC's possession, and have themselves been Requested by Complaint Counsel in discovery in this case. Without waiving its objections, Complaint Counsel refers Respondents to the documents provided in response to Request No. 1.

15. All documents that constitute, provide evidence of, refer, or relate to any fires where Omegas allegedly failed to activate properly.

Response: Complaint Counsel objects to this Request on the grounds that the terms "failed to activate properly" are undefined, unclear, vague and ambiguous. Complaint Counsel further objects to this Request to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel refers Respondents to the documents provided in response to Respondents' Request No. 1.

16. All documents that constitute, provide evidence of, refer, or relate to any fires where Omegas allegedly activated properly.

Response: Complaint Counsel objects to this Request on the grounds that the terms "allegedly activated properly" are undefined, unclear, vague and ambiguous, and on the ground that the question as a whole is unclear, vague and ambiguous, as it does not indicate whether Respondents seek documents regarding only fires in which all Omegas "activated properly," or in which some Omegas "activated properly," though others did not. Complaint Counsel further objects to this Request to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by

the work product privilege. Without waiving its objections, Complaint Counsel refers Respondents to its response to Respondents' Request No. 1.

17. All documents that constitute, provide evidence of, refer, or relate to any fires where non-Omega sprinkler heads allegedly failed to activate properly.

Response: Complaint Counsel objects to this Request on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel also objects to this Request on the grounds that the terms "failed to activate properly" are undefined, unclear, vague and ambiguous. Complaint Counsel further objects to this Request on the ground that it is overbroad and unduly burdensome. Without waiving its objections, Complaint Counsel will provide documents relating to reports of fires in which sprinklers that are or possibly are non-Omegas failed to activate. CPSC is investigating whether these fires involved non-Omegas.

18. All documents that constitute, provide evidence of, refer, or relate to any fires where non-Omega sprinkler heads allegedly activated properly.

Response: Complaint Counsel objects to this Request on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel also objects to this Request on the grounds that the terms "allegedly activated properly" are undefined, unclear, vague and ambiguous, and on the ground that the question as a whole is unclear, vague and ambiguous, as it does not indicate whether Respondents seek documents regarding only fires in which all non-Omegas "activated properly," or in which some non-Omegas "activated properly," though others did not. Complaint Counsel further objects to this Request on the ground that it is overbroad and

unduly burdensome.

19. All documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and former employees of Respondents, including but not limited to interview notes, questions asked, answers received, documents exchanged or revealed by or between either party, and any audiotape or videotape of such communications.

Complaint Counsel objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege.

20. All documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and current employees of Respondents, including but not limited to interview notes, questions asked, answers received, documents exchanged or revealed by or between either party, and any audiotape or videotape of such communications.

Response: Complaint Counsel objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel intends to submit certain information to the Presiding Officer for in camera review and determination of whether to provide the material to Respondents, and under what conditions.

21. All documents that constitute, provide evidence of, refer, or relate to "[the] multiple random inquiries of sprinkler contractors across the nation," as referenced in a

November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo.

Response: Complaint Counsel objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Request on the ground that it is overbroad and unduly burdensome. Without waiving its objection, Complaint Counsel refers Respondents to its Response to Respondents' Interrogatory No. 106.

22. **All documents that constitute, provide evidence of, refer, or relate to "what has been, and remains, customarily required to remove and install sprinklers," as referenced in a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo.**

Response: Complaint Counsel objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Request on the ground that it is overbroad and unduly burdensome. Without waiving its objection, Complaint Counsel refers Respondents to its Response to Respondents' Interrogatory No. 106.

23. **All documents that constitute, provide evidence of, refer, or relate to "the evidence we have gathered does not support the view [that] dezincification alone is the cause of the above-required operating pressures in Omegas from plastic pipes," as referenced in a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo.**

Response: Complaint Counsel objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Request on the ground that it is overbroad and unduly burdensome. Without waiving its objection, Complaint Counsel refers Respondents to its Response to Respondents' Interrogatory No. 107.

24. All documents that constitute, provide evidence of, refer, or relate to "the evidence we have gathered does not support the view . . . that swollen o-rings due to cutting oil exposure are the exclusive cause of non-activation in Omegas manufactured before 1996," as referenced in a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo.

Response: Complaint Counsel objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Request on the ground that it is overbroad and unduly burdensome. Without waiving its objection, Complaint Counsel refers Respondents to its Response to Respondents' Interrogatory No. 108.

25. All documents that constitute, provide evidence of, refer, or relate to "the data [which] point to multiple failure modes rooted in the design and construction of these sprinklers," as referenced in a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo.

Response: Complaint Counsel objects to this Request on the ground that it seeks

information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Request on the ground that it is overbroad and unduly burdensome. Without waiving its objection, Complaint Counsel refers Respondents to its Response to Respondents' Interrogatory No. 109.

26. All documents that constitute, provide evidence of, refer, or relate to any testing, evaluation, consideration, or analyses done by or on behalf of the CPSC regarding the "testing based corrective action," as referenced in a February 19, 1998 letter from Eric Stone of the CPSC to Kathleen Sanzo.

Response: Complaint Counsel objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Request on the ground that it is overbroad and unduly burdensome. Without waiving its objection, Complaint Counsel refers Respondents to its Response to Respondents' Interrogatory No. 110.

27. All documents that constitute, provide evidence of, refer, or relate to any testing, evaluations, or analyses done by or on behalf of the CPSC which reflects the "serious concerns" of the CPSC regarding whether "Omega sprinklers with silicone o-rings will function in the long term," as referenced in a February 19,1998 letter from Eric Stone of the CPSC to Kathleen Sanzo.

Response: Complaint Counsel objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore

protected from discovery by the work product privilege. Complaint Counsel further objects to this Request on the ground that it is overbroad and unduly burdensome. Without waiving its objection, Complaint Counsel refers Respondents to its Response to Respondents' Interrogatory No. 111.

28. All documents that constitute, provide evidence of, refer, or relate to any testing, evaluations, consideration, or analyses done by or on behalf of the CPSC which addressed Omegas where "the internal shaft was cocked or tipped slightly and jammed in that position," as referenced in a February 24, 1998 letter from Eric Stone of the CPSC to Kathleen Sanzo.

Response: Complaint Counsel objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Request on the ground that it is overbroad and unduly burdensome. Without waiving its objection, Complaint Counsel refers Respondents to its Response to Respondents' Interrogatory No. 112. Complaint Counsel invites Respondents to inspect the x-ray it has of the sprinkler referred to in the February 24, 1998 letter.

29. All documents that constitute, provide evidence of, refer, or relate to "automatic fire sprinklers' historical rate of proving 99.5 percent effective," as referenced in a January 6, 1998 letter from Eric Singer of the CPSC to state attorneys general.

Response: Complaint Counsel objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore

protected from discovery by the work product privilege. Complaint Counsel further objects to this Request on the ground that it is overbroad and unduly burdensome. Without waiving its objection, Complaint Counsel refers Respondents to its Response to Respondents' Interrogatory No. 113.

30. All documents that constitute, provide evidence of, refer, or relate to the CPSC Recall Handbook.

Response: Complaint Counsel objects to this Request on the grounds that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request on the grounds that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel further objects to this Request to the extent that it seeks confidential and/or trade secret information pertaining to other companies investigated by CPSC. Without waiving its objections, Complaint Counsel will produce the CPSC Recall Handbook.

31. All documents received by the CPSC from Respondents or any agent, employee, or representative of Respondents.

Response: Complaint Counsel objects to this Request on the grounds that it is overbroad and unduly burdensome, and on the ground that the information is already within the possession of Respondents. Without waiving its objections, Complaint Counsel intends to submit certain information to the Presiding Officer for in camera review and determination of whether to provide the material to Respondents, and under what conditions.

32. All Omegas in possession of the CPSC.

Response: Complaint Counsel objects to this Request on the grounds that it is overbroad

and unduly burdensome. Complaint Counsel further objects to this Request on the ground that it seeks things provided to or currently being tested by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel responds that it has offered, and still intends, to preserve the Omega sprinkler heads it currently possesses from the Fort Wayne and Kent Manor Inn fire sites for testing in conjunction with Respondents. Complaint Counsel suggests that the parties to this action discuss a procedure for examination of each other's sprinkler samples.

33. All non-Omega sprinkler heads in the possession of the CPSC.

Response: Complaint Counsel objects to this Request on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence.

34. All audio and/or video tapes regarding or relating to any testing of Omegas.

Response: Complaint Counsel objects to this Request on the ground that it seeks things prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel responds that it will share with Respondents the results and videotapes of any testing it intends to introduce into evidence at the hearing in this matter, once those determinations have been made.

35. All audio and/or video tape regarding or relating to any testing of non-Omega sprinkler heads.

Response: Complaint Counsel objects to this Request to the extent that it seeks irrelevant

information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel further objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel also objects to this Request on the ground that it seeks things prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel responds that it currently has no audio and/or video tapes regarding or relating to any testing of non-Omega sprinkler heads.

36. All documents that constitute, provide evidence of, refer, or relate to any personal journals, diaries, or correspondence maintained by the CPSC Staff regarding the Omegas and/or Respondents.

Response: Complaint Counsel objects to this Request on the grounds that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request on the ground that it seeks documents prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege.

37. All documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and any dealers, retailers, contractors, or any distributors regarding or related to the Omegas and/or Respondents.

Response: Complaint Counsel objects to this Request on the grounds that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request on the ground that it seeks documents prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel will produce all non-privileged and non-confidential documents

referenced in response to Respondents' Interrogatory No. 106.

38. All documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and any Authorities Having Jurisdiction regarding or related to the Omegas and/or Respondents.

Response: Complaint Counsel objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request on the ground that it seeks documents prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel will produce all correspondence to Fire Marshals that are in the public domain.

39. All documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and any consumers regarding or related to the Omegas and/or Respondents.

Response: Complaint Counsel objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request on the ground that it seeks documents prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel objects to this Interrogatory on the ground that it requests information pertaining to the identity of consumers in prohibition of 15 U.S.C. § 2074(c).

40. All documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and any state law enforcement authorities regarding or related to the Omegas and/or Respondents.

Response: Complaint Counsel objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request on the ground that it seeks documents prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory to the extent that it seeks information provided to CPSC by third parties who claim confidentiality or trade secret. Without waiving its objections, Complaint Counsel will produce all correspondence to State Attorney Generals that are in the public domain.

41. All documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and any federal law enforcement authorities regarding or related to the Omegas and/or Respondents.

Response: Complaint Counsel objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request on the ground that it seeks documents prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory to the extent that it seeks information provided to CPSC by third parties who claim confidentiality or trade secret.

42. All documents that constitute, provide evidence of, refer, or relate to scripts, talking points, outlines, or any other material prepared by, for, or on behalf of the CPSC for any press conferences or news releases regarding the Omegas and/or Respondents.

Response: Complaint Counsel objects to this Request on the ground that it seeks irrelevant

information not likely to lead to the discovery of admissible evidence. Complaint Counsel further objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel also objects to this Request on the ground that it seeks documents prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Request on the ground that it seeks documents protected from discovery by the attorney-client privilege. Without waiving its objections, Complaint Counsel will produce the press release and VNR that were prepared in this matter, and released to the public.

43. All documents that constitute, provide evidence of, refer, or relate to any material regarding the Omegas and/or Respondents created by or on behalf of the CPSC public relations department, media department, or any other CPSC internal department charged with communicating with or providing information to the public media.

Response: Complaint Counsel objects to this Request on the ground that it seeks irrelevant information not likely to lead to the discovery of admissible evidence. Complaint Counsel further objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel also objects to this Request on the ground that it seeks documents prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Request on the ground that it seeks documents protected from discovery by the attorney-client privilege. Without waiving its objections, Complaint Counsel will produce the press release and VNR that were prepared in this matter, and released to the public, as well as the Omega Sprinkler Questionnaire on CPSC's web site, and the Omega Sprinkler Questionnaire

available through CPSC's fax-on-demand service.

44. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 5 of the Complaint that CSC is a "manufacturer" of consumer products.

Response: See Response to Interrogatory Nos. 1 and 4.

45. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 6 of the Complaint that the Omegas are "consumer products."

Response: See Response to Interrogatory Nos. 5 through 25.

46. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 8 of the Complaint that the Omegas are "designed to perform in accordance with" UL Standard 199 and NFPA Standard 13.

Response: See Response to Interrogatory Nos. 38, 39 and 40.

47. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 8 of the Complaint that the Omegas are designed to perform in accordance with certain standards "when exposed to certain temperatures."

Response: See Response to Interrogatory No. 41.

48. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 10 of the Complaint that the Omegas "do not and/or will not function in a significant percentage of instances."

Response: See Response to Interrogatory No. 52.

49. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 10 of the Complaint that the "Omegas are defective pursuant to

15 U.S.C. § 2064(a)(2) and 16 C.F.R. § 1115.4."

Response: See Response to Interrogatory Nos. 53 through 73.

50. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 13 of the Complaint that "failure of the Omegas to function exposes the public to bodily injury and/or death."

Response: See Response to Interrogatory No. 76.

51. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 15 of the Complaint that the "defect or defects in the Omegas create a substantial risk of injury to the public within the meaning of § 1 5(a)(2) of the CPSA, 15 U.S.C. § 2064(a)(2)."

Response: See Response to Interrogatory No. 77.

52. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 16 of the Complaint that "Omegas present a substantial product hazard as described in Sections 15(a)(2), (c) and (d) of the CPSA, 15 U.S.C. §§ 2064(a)(2), (c) and (d)."

Response: See Response to Interrogatory No. 88.

53. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 16 of the Complaint that "action under these provisions is in the public interest."

Response: See Response to Interrogatory No. 89.

54. A current curriculum vitae or resume for each and every expert witness whom the CPSC expects to testify on its behalf at the hearing in this matter.

Response: Complaint Counsel has not yet determined who will testify as an expert witness on its behalf in this matter. Complaint Counsel further points out that any expert witness that it will call will testify on behalf of Complaint Counsel and the staff, and not on behalf of the Commission.

55. All publications of any nature authored by any expert witness whom the CPSC expects to testify on its behalf at the hearing in this matter.

Response: Complaint Counsel has not yet determined who will testify as an expert witness on its behalf in this matter. Complaint Counsel further points out that any expert witness that it will call will testify on behalf of Complaint Counsel and the staff, and not on behalf of the Commission.

56. Any and all written statements made by Respondents that the CPSC contends constitute an admission with reference to any of the issues raised in the Complaint.

Response: Complaint Counsel objects to this Request on the ground that it is overbroad and unduly burdensome, and requests information already in Respondents' possession. Complaint Counsel further objects to this Request to the extent that it may seek information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Request on the ground that it calls for a legal conclusion. Without waiving its objections, Complaint Counsel responds that any and all written statements made by Respondents may constitute an admission by Respondents in this matter.

57. All documents that constitute, provide evidence of, refer, or relate to the

use of silicone o-rings in sprinkler heads.

Response: Complaint Counsel objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request to the extent that it seeks irrelevant information not likely to lead to the discovery of admissible evidence. Complaint Counsel further objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege.

58. All documents that constitute, provide evidence of, refer, or relate to the use of EPDM o-rings in sprinkler heads.

Response: Complaint Counsel objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request to the extent that it seeks irrelevant information not likely to lead to the discovery of admissible evidence. Complaint Counsel further objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege.

59. All documents that constitute, provide evidence of, refer, or relate to the use in sprinkler heads of o-rings comprised of any other material or compound.

Response: Complaint Counsel objects to this Request on the ground that the terms "any other material or compound" are undefined, unclear, vague and ambiguous. Complaint Counsel also objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request to the extent that it seeks irrelevant information not likely to lead to the discovery of admissible evidence. Complaint

Counsel further objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege.

60. All documents that constitute, provide evidence of, refer, or relate to the reasons giving rise to the CPSC's decision to investigate alleged risks associated with the Omegas.

Response: Complaint Counsel objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request to the extent that it seeks irrelevant information not likely to lead to the discovery of admissible evidence, as the Agency's decision to investigate the risks associated with Omega sprinklers, and the bases therefore, are not at issue herein. Complaint Counsel further objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel refers Respondents to its response to Respondents' Request No. 1.

61. All documents that constitute, provide evidence of, refer, or relate to any and all incidents known to the CPSC in which a consumer or other person has reported any form of property damage in connection with the Omegas.

Response: Complaint Counsel objects to this Request on the ground that the term "consumer complaints" is undefined, unclear, vague and ambiguous. Complaint Counsel objects to this Request on the ground that it requests information pertaining to the identity of

consumers in prohibition of 15 U.S.C. § 2074(c). Complaint Counsel further objects to this Request on the ground that it requests information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel responds that it is currently investigating whether reports that it has received regarding sprinklers are "in connection with the Omegas," and whether they report property damage and/or personal injury in connection therewith. Complaint Counsel will produce all non-privileged and non-confidential reports of fires in which Omegas have reportedly failed to activate. Complaint Counsel will supplement its response to this Request as additional information becomes available.

62. All documents that constitute, provide evidence of, refer, or relate to any and all incidents known to the CPSC in which a consumer or other person has reported any form of personal injury in connection with the Omegas.

Response: Complaint Counsel objects to this Request on the ground that the term "consumer complaints" is undefined, unclear, vague and ambiguous. Complaint Counsel objects to this Request on the ground that it requests information pertaining to the identity of consumers in prohibition of 15 U.S.C. § 2074(c). Complaint Counsel further objects to this Request on the ground that it requests information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel responds that it is currently investigating whether reports that it has received regarding sprinklers are "in connection with the Omegas," and whether they report property damage and/or personal injury in connection therewith. Complaint Counsel will produce all non-privileged and non-confidential reports of

fires in which Omegas have reportedly failed to activate. Complaint Counsel will supplement its response to this Request as additional information becomes available.

63. Any and all testing protocols used by the CPSC or by any expert or other person on behalf of the CPSC in testing the Omegas.

Response: Complaint Counsel objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel refers Respondents to its Response to Respondents' Request Nos. 8, 9, 32 and 34.

64. All documents that constitute, provide evidence of, refer, or relate to any alternative design features for the Omegas.

Response: Complaint Counsel objects to this Request on the ground that the terms "any alternative design features for the Omegas" are undefined, unclear, vague and ambiguous, and that the question as a whole is unintelligible, and thus precludes Complaint Counsel from formulating a response without clarification of its meaning.

65. All documents that constitute, provide evidence of, refer, or relate to the feasibility and/or propriety of any alternative design features for the Omegas.

Response: Complaint Counsel objects to this Request on the ground that the terms "any alternative design features for the Omegas" are undefined, unclear, vague and ambiguous, as are the terms "feasibility and/or propriety" of same. Complaint Counsel objects to this Request on the ground that the question as a whole is unintelligible, and thus precludes

Complaint Counsel from formulating a response without clarification of its meaning.

66. All documents that constitute, provide evidence of, refer, or relate to the CPSC's preliminary determination of the alleged risks associated with the Omegas.

Response: Complaint Counsel objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request to the extent that it seeks irrelevant information not likely to lead to the discovery of admissible evidence, as the Agency's preliminary determination of the risks associated with Omega sprinklers, and the bases therefore, are not at issue herein. Complaint Counsel further objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel refers Respondents to its responses to Respondents' Requests Nos. 1 and 60.

67. All documents that constitute, provide evidence of, refer, or relate to any changes in the CPSC's preliminary determination and/or initial assignment of the level of hazard allegedly presented by the Omegas.

Response: Complaint Counsel objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request to the extent that it seeks irrelevant information not likely to lead to the discovery of admissible evidence, as the Agency's preliminary determination of the risks associated with Omega sprinklers, any changes thereto, and/or to the initial assignment of the level of hazard presented by Omegas, and the bases therefore, are not at issue herein. Complaint Counsel further objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in

anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel refers Respondents to its responses to Respondents' Requests Nos. 1 and 60.

68. All documents that constitute, provide evidence of, refer, or relate to any corrective action proposal for the Omegas.

Response: Complaint Counsel objects to this request on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Request on the ground that any such proposal was proposed by Respondents themselves, and therefore the documents that constitute or provide evidence of any such corrective action proposal by Respondents are within Respondents' own possession.

69. All documents that constitute, provide evidence of, refer, or relate to the requested recall of the Omegas.

Response: Complaint Counsel objects to this Request on the ground that it is overbroad and unduly burdensome, as all documents related to this case relate to the requested recall of the Omegas. Complaint Counsel further objects to this Request to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege.

70. All documents that constitute, provide evidence of, refer, or relate to the corrective action proposal presented by Respondents regarding the Omegas.

Response: Complaint Counsel objects to this Request on the ground that it does not specify to which proposal of Respondents it refers. Complaint Counsel objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Request on the ground that any such proposal was proposed by Respondents themselves, and therefore the documents that constitute or provide evidence of any such corrective action proposal by Respondents are within Respondents' own possession. Without waiving its objections, Complaint Counsel refers Respondents to its responses to Interrogatory Nos. 114 and 139.

71. All documents that constitute, provide evidence of, refer, or relate to the CPSC's decision to initiate the instant adjudicative proceeding against the Respondents.

Response: Complaint Counsel objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request to the extent that it seeks irrelevant information not likely to lead to the discovery of admissible evidence, as the Agency's decision to initiate this adjudicative proceeding against Central, and the bases therefore, are not at issue herein. Complaint Counsel further objects to this Request on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel refers Respondents to its responses to Respondents' Requests Nos. 1 and 60.

DATED: April 27, 1998

Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.

Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, Maryland 20814
301-504-0626

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, Complaint Counsel's **Responses to Respondents' First Request for Production of Documents** were deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

J. Gordon Cooney, Jr., Esq.
Thomas P. Hogan, Jr., Esq.
Emily J. Lawrence, Esq.
MORGAN, LEWIS & BOCKIUS LLP
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Michael F. Healy, Esq.
MORGAN, LEWIS & BOCKIUS LLP
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John C. Fenningham, Esq.
CORR, STEVENS & FENNINGHAM
Five Neshaminy Interplex, Suite 315
Trevose, PA 19053
(215) 639-4070

Attorneys for Central Sprinkler Corporation and Central Sprinkler Company

Responsive documents were copied by Complaint Counsel and provided to J. Gordon Cooney at the above address.

A copy was also served on the Presiding Officer pursuant to 16 C.F.R. § 1025.31(h) at:

The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
1099 14th St., NW, Suite 350
Washington, DC 20005

Deborah S. Mar

Dated: April 27, 1998

central.cer

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UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents	)	

COMPLAINT COUNSEL'S RESPONSES TO
RESPONDENTS' FIRST SET OF INTERROGATORIES

Complaint Counsel hereby responds to Respondents' First Set of Interrogatories.

A. Allegations of the Complaint

1. (a) State whether CSC manufactures Omegas.

If so:

(b) identify and describe any such manufacturing;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such manufacturing;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such manufacturing; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) Based on, among other things, representations made by Central's

Carmine Schiavone and George Meyer, and Central Sprinkler Corporation in its "Company Information" section on its web site (in which CSC describes itself as "a leading manufacturer or automatic fire sprinkler heads"), and based on statements made by Central's Counsel (as late as an April 7, 1998 letter from Kathleen Sanzo to Eric Stone, Director of Administrative Litigation, in which Ms. Sanzo states that "Central has reviewed its manufacturing records . . ."), Complaint Counsel responds that CSC manufactures Omegas.

(b) Complaint Counsel is in the process of requesting from Respondents a description of such manufacturing. This information is within Respondents' possession.

(c) Complaint Counsel is in the process of requesting from Respondents the identification of all documents describing, evidencing and referring to Respondents' manufacture of Omega sprinklers. This information is within Respondents' possession.

(d) Complaint Counsel is in the process of requesting from Respondents the identify of every person known or believed to have knowledge of the manufacture of Omega sprinklers. This information is within Respondents' possession.

(e) See response to (d), above.

2. (a) State whether CSC sells Omegas.

If so:

(b) **identify and describe any such sales;**

(c) **identify each and every document that describes, evidences, refers, or relates in any way to such sales;**

(d) **identify each and every person whom Complainant knows and/or believes to have knowledge of such sales; and**

(e) **describe in detail the substance of each such person's knowledge and/or information.**

Response: (a) Based on, among other things, representations made by Central's Carmine Schiavone and George Meyer, and Central Sprinkler Corporation in its "Company Information" section on its web site (in which CSC states that "approximately 56% of the Company's (defined as Central Sprinkler Corporation at the outset of the section) annual sales are derived from the manufacture and sale of fire sprinkler heads and valves . . . ," Complaint Counsel responds that CSC sells Omegas.

(b) Complaint Counsel is in the process of requesting from Respondents a description of such sales. This information is within Respondents' possession.

(c) Complaint Counsel is in the process of requesting from Respondents the identification of all documents describing, evidencing and referring to Respondents' sales of Omega sprinklers. This information is within Respondents' possession.

(d) Complaint Counsel is in the process of requesting from Respondents the

identify of every person known or believed to have knowledge of the sale of Omega sprinklers. This information is within Respondents' possession.

(e) See response to (d), above.

3. (a) State whether CSC markets Omegas.

If so:

(b) identify and describe any such marketing;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such marketing;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such marketing; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) Based on, among other things, representations made by Central Sprinkler Corporation in its "Company Information" section on its web site (in which CSC states that "approximately 56% of the Company's (defined as Central Sprinkler Corporation at the outset of the section), based on brochures depicting the Omega line of sprinklers, and based on statements of Central's counsel and corporate officers in submissions and meetings with CPSC staff, Complaint Counsel responds that CSC markets Omegas.

(b) Complaint Counsel is in the process of requesting from Respondents a

description of such marketing. This information is within Respondents' possession.

(c) Complaint Counsel is in the process of requesting from Respondents the identification of all documents describing, evidencing and referring to Respondents' marketing of Omega sprinklers. This information is within Respondents' possession.

(d) Complaint Counsel is in the process of requesting from Respondents the identify of every person known or believed to have knowledge of the marketing of Omega sprinklers. This information is within Respondents' possession.

(e) See response to (d), above.

4. With respect to the allegation of Paragraph 5 of the Complaint that CSC is a "manufacturer" of consumer products:

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: See Complaint Counsel's Response to Interrogatory No. 1, and Complaint Counsel's Opposition to Respondents' Motion to Dismiss.

5. (a) **State whether the C-1 model of the Omegas constitutes a "consumer product" pursuant to 15 U S.C. § 2052(a)(1).**

If so:

(b) **set forth the factual basis for this assertion;**

(c) **identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;**

(d) **identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;**

(e) **describe in detail the substance of each such person's knowledge and/or information.**

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

6. (a) **State whether the C-1 A model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).**

If so:

(b) **set forth the factual basis for this assertion;**

(c) **identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;**

(d) **identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;**

(e) **describe in detail the substance of each such person's knowledge and/or information.**

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

7. (a) **State whether the C-1A PRO model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).**

If so:

(b) **set forth the factual basis for this assertion;**

(c) **identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;**

(d) **identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;**

(e) **describe in detail the substance of each such person's knowledge and/or information.**

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

8. (a) **State whether the C-lA PRO ID model of the Omegas constitutes a "consumer product" pursuant to I5 U.S.C. § 2052(a)(1).**

If so:

(b) **set forth the factual basis for this assertion;**

(c) **identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;**

(d) **identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;**

(e) **describe in detail the substance of each such person's knowledge and/or information.**

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the

exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

9. (a) **State whether the EC-20 model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).**

If so:

(b) **set forth the factual basis for this assertion;**

(c) **identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;**

(d) **identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;**

(e) **describe in detail the substance of each such person's knowledge and/or information.**

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

10. (a) **State whether the EC-20A model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).**

If so:

(b) **set forth the factual basis for this assertion;**

(c) **identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;**

(d) **identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;**

(e) **describe in detail the substance of each such person's knowledge and/or information.**

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

11. (a) **State whether the EC-20 AID model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).**

If so:

(b) **set forth the factual basis for this assertion;**

(c) **identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;**

(d) **identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;**

(e) **describe in detail the substance of each such person's knowledge and/or information.**

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

12. (a) **State whether the HEC- 12 model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).**

If so:

(b) **set forth the factual basis for this assertion;**

(c) **identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;**

(d) **identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;**

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

13. (a) State whether the HEC-12 ID model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the

exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

14. (a) State whether the HEC-12 PRO model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

15. (a) State whether the HEC-12A PRO model of the Omegas

constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

16. (a) State whether the HEC-12 RES model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) **identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;**

(d) **identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;**

(e) **describe in detail the substance of each such person's knowledge and/or information.**

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

17. (a) **State whether the HEC-20 model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).**

If so:

(b) **set forth the factual basis for this assertion;**

(c) **identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;**

(d) **identify each and every person whom Complainant knows and/or**

believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

18. (a) State whether the HEC-20 ID model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for

a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

19. (a) State whether the R-1 model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine

Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

20. (a) State whether the R-1A model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

21. (a) State whether the R-1 M model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C.§ 2052(a)(1).

If so:

(b) **set forth the factual basis for this assertion;**

(c) **identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion,**

(d) **identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;**

(e) **describe in detail the substance of each such person's knowledge and/or information.**

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

22. (a) **State whether the AC model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).**

If so:

(b) **set forth the factual basis for this assertion;**

(c) **identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;**

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

23. (a) State whether the M model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

24. (a) State whether the Flow Control model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided

in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

25. With respect to the allegation of Paragraph 6 of the Complaint that the Omegas are "consumer products":

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

26. (a) Separately for each model of the Omegas listed in the Complaint, state whether such model is sold by Respondents directly to consumers. If so:

(b) identify all documents which describe, evidence, refer, or relate

to any such sales;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such sales; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, the exhibits in support thereof, and the applicable statutes and case law cited therein, which indicate that sale of an article directly to consumers is not necessary for CPSC jurisdiction.

27. (a) Separately for each model of the Omegas listed in the Complaint, state whether Respondents market such a model to consumers. If so:

(b) identify all documents which describe, evidence, refer, or relate to any such marketing;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such marketing; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, the exhibits in support thereof, and the applicable statutes and case law cited therein, which indicate that marketing of an article directly to consumers is not necessary for CPSC jurisdiction.

28. **(a) Separately for each model of the Omegas listed in the Complaint, state whether such a model is installed by consumers themselves (as opposed to professional contractors).**

If so:

(b) identify all documents which describe, evidence, refer, or relate to any such installation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such installation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, the exhibits in support thereof, and the applicable statutes and case law cited therein, which indicate that installation of an article

(and other "direct interaction or manipulation" of a product) directly by consumers is not necessary for CPSC jurisdiction.

29. (a) Separately for each model of the Omegas listed in the Complaint, state whether such a model is serviced by consumers themselves (as opposed to professional contractors).

If so:

(b) identify all documents which describe, evidence, refer, or relate to any such servicing;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such servicing; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, the exhibits in support thereof, and the applicable statutes and case law cited therein, which indicate that servicing of an article (and other forms of "direct interaction" or "active manipulation of a product) directly by consumers is not necessary for CPSC jurisdiction.

30. (a) Separately for each model of the Omegas listed in the

Complaint, state whether such a model is repaired by consumers themselves (as opposed to professional contractors).

If so:

(b) identify all documents which describe, evidence, refer, or relate to any such repairs;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such repairs; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, the exhibits in support thereof, and the applicable statutes and case law cited therein, which indicate that repair of an article (and other forms of "direct interaction" or "active manipulation of a product) directly by consumers is not necessary for CPSC jurisdiction.

31. State whether Omegas installed in buildings used only as storage facilities constitute "consumer products" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it calls for a legal conclusion. Complaint Counsel further objects to this Interrogatory on the ground that it requests irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel also objects to this Interrogatory on the ground that the term "storage facility" is undefined, unclear, vague and ambiguous. If by "storage facility," Respondents intend to refer to industrial facilities, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, the exhibits in support thereof, and the applicable statutes and case law cited therein, which indicate that the CPSC has jurisdiction even over "products which are primarily or exclusively sold to industrial or institutional buyers so long as they were produced or distributed **for use of consumers.**" As stated in Complaint Counsel's Opposition, Omega sprinklers are produced and distributed for use of and enjoyment by consumers, and therefore are consumer products subject to CPSC's jurisdiction.

32. State whether Omegas installed in warehouses constitute "consumer products" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it calls for a legal conclusion. Complaint Counsel further objects to this Interrogatory on the ground that it requests irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel also objects to this Interrogatory on the ground that the term "warehouses" is undefined, unclear, vague and ambiguous. If by "warehouses," Respondents intend to refer to industrial facilities, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, the exhibits in support thereof, and the applicable statutes and case law cited therein, which indicate that the CPSC has jurisdiction even over "products which are primarily or exclusively sold to industrial or institutional buyers so long as they were produced or distributed **for use of consumers.**" As stated in Complaint Counsel's Opposition, Omega sprinklers are produced and distributed for use of and enjoyment by consumers, and therefore are consumer products subject to CPSC's jurisdiction.

33. State whether Omegas installed in factories constitute "consumer products" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it calls for a legal conclusion. Complaint Counsel further objects to this Interrogatory on the ground that it requests irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel also objects to this Interrogatory on the ground that the term "factories" is undefined, unclear, vague and ambiguous. If by "factories," Respondents intend to refer to industrial facilities, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, the exhibits in support thereof, and the applicable statutes and case law cited therein, which indicate that the CPSC has jurisdiction even over "products which are primarily or exclusively sold to industrial or institutional buyers so long as they were produced or distributed for use of consumers." As stated in Complaint Counsel's Opposition, Omega

sprinklers are produced and distributed for use of and enjoyment by consumers, and therefore are consumer products subject to CPSC's jurisdiction.

33. **State whether Omegas installed in computer facilities constitute "consumer products" pursuant to 15 U.S.C. § 2052(a)(1).**

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it calls for a legal conclusion. Complaint Counsel further objects to this Interrogatory on the ground that it requests irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel also objects to this Interrogatory on the ground that the term "computer facilities" is undefined, unclear, vague and ambiguous. If by "computer facilities," Respondents intend to refer to industrial facilities, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, the exhibits in support thereof, and the applicable statutes and case law cited therein, which indicate that the CPSC has jurisdiction even over

"products which are primarily or exclusively sold to industrial or institutional buyers so long as they were produced or distributed **for use of consumers.**" As stated in Complaint Counsel's Opposition, Omega sprinklers are produced and distributed for use of and enjoyment by consumers, and therefore are consumer products subject to CPSC's jurisdiction.

35. State whether there are any factual circumstances under which any Omegas would <u>not</u> constitute a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) identify and describe any such circumstances;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such circumstances;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such circumstances; and

(e) describe in detail the substance of each such person's knowledge and/or information

Response: Complaint Counsel objects to this Interrogatory on the ground that it calls for speculation. Complaint Counsel further objects to this Interrogatory requests irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel further objects to this Interrogatory on the ground that it calls for a legal conclusion. Complaint Counsel points Respondents to its Opposition to

Respondents' Motion to Dismiss this action, and the exhibits in support thereof, which demonstrate that Omegas are consumer products with CPSC's jurisdiction.

36. (a) State whether there are any factual circumstances under which any non- Omega sprinkler heads would not constitute a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) identify and describe any such circumstances;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such circumstances;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such circumstances; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. The jurisdictional question that Respondents have raised in this litigation is whether Omega sprinklers are consumer products. Complaint Counsel further objects to this Interrogatory on the ground that it calls for a legal conclusion. Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof, which demonstrate that Omegas are consumer products with CPSC's jurisdiction.

37. (a) Separately for each model of the Omegas listed in the Complaint, describe any and all ways in which consumers use, consume, and/or enjoy such a model.

(b) identify all documents which describe, evidence, refer, or relate to any such use, consumption, or enjoyment;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such use, consumption, or enjoyment; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof.

38. With respect to the allegation of Paragraph 8 of the Complaint that the Omegas are "designed to perform in accordance with" NFPA Standard 13:

(a) identify which specific sub-sections of NFPA Standard 13, if any, address the operating water pressure at which previously installed sprinkler heads should activate when such heads are removed and tested;

(b) identify which specific sub-sections of NFPA Standard 13, if any, address the operating water pressure at which installed sprinkler heads should activate when such heads are still incorporated into the sprinkler system;

(c) identify which specific sub-sections of NFPA Standard 13, if any, address the required residual water pressure at the most remote sprinkler head in a system after the other sprinkler heads are open and flowing;

(d) identify which specific sub-sections of NFPA Standard 13, if any, are applicable to the allegations of the Complaint; and

(e) describe in terms of psi (pounds per square inch) the testing standard that Complainant contends is created by NFPA Standard 13 that applies to the Omegas.

Response: Complaint Counsel objects to this Interrogatory on the ground that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel responds that the Standard speaks for itself.

39. With respect to the allegation of Paragraph 8 of the Complaint that the Omegas are "designed to perform in accordance with" UL Standard 199:

(a) identify which specific sub-sections of UL Standard 199, if any, address the operating water pressure at which previously installed sprinkler heads should activate when such heads are removed and tested;

(b) identify which specific sub-sections of UL Standard 199, if any, address the operating water pressure at which installed sprinkler heads should activate when such heads are still incorporated into the sprinkler system;

(c) identify which specific sub-sections of UL Standard 199, if any, address the required residual water pressure at the most remote sprinkler head in a

system after the other sprinkler heads are open and flowing;

(d) identify which specific sub-sections of UL Standard 199, if any, are applicable to the allegations of the Complaint; and

(e) describe in terms of psi the testing standard that Complainant contends is created by UL Standard 199 that applies to the Omegas.

Response: Complaint Counsel objects to this Interrogatory on the ground that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel responds that the Standard speaks for itself.

40. With respect to the allegation of Paragraph 8 of the Complaint that the Omegas are "designed to perform in accordance with" UL Standard 199 and NFPA Standard 13:

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel responds that the Standard speaks for itself.

41. With respect to the allegation of Paragraph 8 of the Complaint that the Omegas are designed to perform in accordance with certain standards "when exposed to certain temperatures":

(a) describe in terms of both degrees Fahrenheit and Celsius what temperatures are meant by the phrase "certain temperatures";

(b) set forth the factual basis for this allegation,

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) The temperatures referred to are the activation/triggering temperatures of the Omega sprinklers.

(b) See (a), above. UL 199, and UL correspondence and listing files for Omega sprinklers, which were received by Complaint Counsel in confidence by a third party, and will be produced to Respondents upon receipt of permission from the third party for disclosure to Respondents.

(c) See response to (b), above. Complaint Counsel has requested this information from Respondents in discovery, but expects that various

Central and UL employees will be included.

(d) Complaint Counsel has requested this information from Respondents in discovery.

(e) See (d), above.

42. (a) **State whether Complainant contends that there is a single standard of water pressure (in psi) at which previously installed sprinkler heads must activate when tested to be deemed by the Complainant as not presenting any substantial risk of injury to the public and/or substantial product hazard;**

If so:

(b) identify and describe any such standard;

(c) identify all documents which describe, evidence, refer, support, or relate to any such a standard;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such standard; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the grounds that it is vague, ambiguous and confusing. Complaint Counsel further objects to this Interrogatory on the ground that it is overbroad, and seeks irrelevant information pertaining to sprinklers other than Omegas. Without waiving its objections, Complaint Counsel responds that once an Omega is removed from service, it will not create the substantial risk of injury to the public of which Complainant complains. Omega sprinklers fail to activate as designed

and, in many cases, will not activate at pressures that far exceed the water pressure that may be available in the system at the time of a fire.

43. (a) State whether Complainant contends that there is a single standard of temperature at which previously installed sprinkler heads must activate when tested to be deemed by the Complainant as not presenting any substantial risk of injury to the public and/or substantial product hazard;

If so:

(b) identify and describe any such standard;

(c) identify all documents which describe, evidence, refer, support, or relate to any such standard;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such standard; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: See Response to previous Interrogatory. According to Respondents, Omega sprinklers are designed to activate at particularly defined activation/triggering temperatures, based on the temperature at which the fusible link in their heat collector is intended to convert from solid to liquid form.

44. (a) Describe the percentage of previously installed sprinkler heads that must activate at the standards described in Interrogatory Nos. 42-43 when tested in order to be deemed by the Complainant as not presenting any substantial risk of injury to public and/or substantial product hazard;

(b) identify all documents which describe, evidence, refer, support, or relate to such a percentage;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of such a percentage; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: See Response to Interrogatory Nos 42 and 43.

45. (a) State whether Complainant contends that there is a standard of "failure" that will accurately predict whether a particular Omega will fail to activate in a fire when used in a particular building without regard to the actual hydraulic pressure that exists in the building.

If so:

(b) identify and describe any such standard;

(c) identify all documents which describe, evidence, refer, support, or relate to any such standard

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such standard; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the grounds that it is vague, ambiguous and confusing. Complaint Counsel also objects to this Interrogatory

on the ground that the terms "standard of failure" and "actual hydraulic pressure that exists in the building" are undefined, unclear, vague and ambiguous. The pressure in a building may fluctuate depending on numerous factors. Without clarification of these terms, and additional information as to those factors, Complaint Counsel is unable to respond to this Interrogatory.

46. (a) State whether Complainant contends that if a particular Omega does not activate at a minimum of [redacted] psi when tested, such an Omega would not activate if a fire occurred in a building where such Omega was installed.

(b) set forth the factual basis for any such contention:

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention:

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that the term "activate" is undefined, unclear, vague and ambiguous. Without waiving its objection, Complaint Counsel responds that it contends that if a particular Omega does not activate, as that term is defined in Complaint Counsel's discovery requests, upon exposure to its activation/triggering temperature in testing, it would not activate when exposed to that same temperature in a fire that were to occur in a building in which it was installed.

Moreover, to the extent that Omegas have been found to fail at test pressures far in excess of 7 psig, Respondents' Interrogatory is irrelevant.

47. Describe the average static water pressure (in psi) present in the sprinkler systems of most residential buildings.

Response: Complaint Counsel objects to this Interrogatory on the ground that the terms "most residential buildings" and "average static water pressure" are undefined, unclear, vague and ambiguous. Complaint Counsel further objects to this Interrogatory on the ground that it seeks irrelevant information not likely to lead to the discovery of admissible evidence. Complaint Counsel also objects to this Interrogatory on the ground that it is confusing and ambiguous, as it fails to identify the location of the buildings, or define the other factors upon which the water pressure of a building at any given time depends. The water pressure in different areas of the country (and even in different areas of a state) is different, and the water pressure of a single building may fluctuate depending upon various factors. Without additional information as to each of those variants, a response to this question is impossible.

48. Describe the average residual water pressure (in psi) present at the most remote sprinkler head in the sprinkler systems of most residential buildings, after the system has been activated.

Response: Complaint Counsel objects to this Interrogatory on the ground that the terms "average residual water pressure," "most remote sprinkler head in the sprinkler systems," "most residential buildings" and "activated" are undefined, unclear, vague and

ambiguous. Complaint Counsel reiterates its objections and comments in response to Respondents' Interrogatory No. 47.

49. Describe the average static water pressure (in psi) present in the sprinkler systems of most commercial buildings.

Response: Complaint Counsel objects to this Interrogatory on the ground that the terms "most commercial buildings" and "average static water pressure" are undefined, unclear, vague and ambiguous. Complaint Counsel further objects to this Interrogatory on the ground that it seeks irrelevant information not likely to lead to the discovery of admissible evidence. Complaint Counsel also objects to this Interrogatory on the ground that it is confusing and ambiguous, as it fails to identify the location of the buildings, or define the other factors upon which the water pressure of a building at any given time depends. The water pressure in different areas of the country (and even in different areas of a state) is different, and the water pressure of a single building may fluctuate depending upon various factors. Without additional information as to each of those variants, a response to this question is impossible.

50. Describe the average residual water pressure (in psi) present at the most remote sprinkler head in the sprinkler systems of most commercial buildings, after the system has been activated.

Response: Complaint Counsel objects to this Interrogatory on the ground that the terms "average residual water pressure," "most remote sprinkler head in the sprinkler systems," "most commercial buildings" and "activated" are undefined, unclear, vague and

ambiguous. Complaint Counsel reiterates its objections and comments in response to Respondents' Interrogatory No. 49.

51. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas "do not and/or will not function":

(a) separately for each Omega model listed in the Complaint, describe in detail all of the causes and/or reasons that the Omegas "do not and/or will not function";

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) Complaint Counsel objects to this Interrogatory on the ground that it seeks irrelevant information not likely to lead to the discovery of admissible evidence. It is not relevant why Omegas do not and will not function -- it is relevant that they do not and will not function. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a definitive response to this Interrogatory at this time. Available information suggests that the Omega sprinkler design is inadequate for its

intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(b) The Complaint refers, relates to, and provides evidence of this allegation. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC are the basis for this allegation, as is the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test results and fire data to Respondents.

(c) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's allegation. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, and any sprinkler contractors and/or AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about the basis for this allegation. Complaint Counsel is in the process of investigating the identities of all such

persons, and has requested same from Respondents in discovery.

(d) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Complaint Counsel has insufficient information upon which to formulate a response to this Interrogatory.

52. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas do not and/or will not function in a "significant percentage" of instances:

(a) expressed in terms of a specific percentage, describe what constitutes "a significant percentage" regarding this allegation;

(b) set forth the factual basis for this allegation;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) In the current case, CPSC's compilation of test data from various sources, including but not limited to Central, UL and FM, indicates that Omegas have an overall failure rate of approximately 40%.

(b) The factual basis for this allegation is the test data that indicates that

Omegas have an overall failure rate of approximately 40%.

(c) All non-privileged test data that forms the basis of Complaint Counsel's allegation will be produced to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's allegation. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, and any sprinkler contractors and/or AHJs who have dealt with defective Omegas, are all knowledgeable about the basis for this allegation. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Complaint Counsel has insufficient information upon which to formulate a response to this Interrogatory.

53. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the C-l model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which

it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with

Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

54. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the C-l A model of the

Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function

in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce this evidence to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their

properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

55. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the C-1A PRO model of the

Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function

in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their

properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

56. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the C- IA PRO ID model of the

Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has

requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who

have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

57. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the EC-20 model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate

to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s).

Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is

overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

58. **With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":**

(a) state whether Complainant contends that the EC-20A model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate

at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers,

as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

59. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the EC-20 AID model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is

inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals

knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

60. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC-12 model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant

to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of

Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

61. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC-I 2 ID model of the

Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the

failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel

will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

62. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC- 12 PRO model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant

to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires

in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

63. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC-12A PRO model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it

intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about

Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

64. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC-12 RES model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) **describe in detail the substance of each such person's knowledge and/or information about any such contention.**

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention.

Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the

knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

65. **With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":**

(a) state whether Complainant contends that the HEC-20 model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would

reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas

that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

66. **With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":**

(a) state whether Complainant contends that the HEC-20 ID model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on

these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is

overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

67. **With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":**

(a) state whether Complainant contends that the R-l model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate

at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers,

as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

68. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

If so:

(a) state whether Complainant contends that the R-1A model of the Omegas is defective;

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is

inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals

knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

69. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the R-IM model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant

to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of

Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

70. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the AC model of the Omegas

is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the

failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel

will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

71. **With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":**

(a) state whether Complainant contends that the M model of the Omegas is defective;

If so:

(b) identify and describe any such defect:

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant

to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will

produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

72. **With respect to the allegation of Paragraph 10 of the Complaint that the**

Omegas are "defective":

(a) state whether Complainant contends that the Flow Control model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a

significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint

Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

73. **With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":**

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel has already been asked and answered this Interrogatory. See Interrogatory No. 53, and Complaint Counsel's response thereto.

74. State whether the failure of any Omega to function has resulted in any bodily injury or injuries.

Response: Assuming that "failure of any Omega to function" is the failure of an Omega to activate when exposed to its activation/triggering temperature, Complaint Counsel responds that it has information at this time that would indicate that the failure of an Omega to function has resulted in injury or injuries. Complaint Counsel is continuing its investigation of this matter, and has requested this information from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding fires involving Omega sprinklers.

75. State whether the failure of any Omega to function has resulted in any death or deaths.

Response: Assuming that "failure of any Omega to function" is the failure of an Omega to activate when exposed to its activation/triggering temperature, Complaint Counsel responds that it has insufficient information at this time to respond to this Interrogatory. Complaint Counsel is continuing its investigation of this matter, and has requested this information from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding fires involving Omega sprinklers.

76. With respect to the allegation of Paragraph 13 of the Complaint that "failure of the Omegas to function exposes the public to bodily injury and/or death":

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) When an Omega sprinkler does not function in a fire situation, smoke and flames from the fire can cause injury and/or death.

(b) The Complaint refers, relates to, and provides evidence of this allegation. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC are the basis for this allegation, as is the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(c) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's allegation. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, and any sprinkler contractors and/or AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about the basis for this allegation. All persons who have knowledge of fires and/or fire behavior and/or the effects of fire on persons and property exposed to fire, have knowledge of the risk to which the public is exposed in a fire

situation. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(d) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (c) is in part revealed in those documents.

77. **With respect to the allegation of Paragraph 15 of the Complaint that the defect or the defects in the Omegas create a "substantial risk of injury to the public":**

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) When an Omega sprinkler does not function in a fire situation, smoke and flames from the fire can cause injury and/or death.

(b) The Complaint refers, relates to, and provides evidence of this allegation. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC are the basis for this allegation, as is the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(c) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's allegation. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, and any sprinkler contractors and/or AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about the basis for this allegation. All persons who have knowledge of fires and/or fire behavior and/or the effects of fire on persons and property exposed to fire, have knowledge of the risk to which the public is exposed in a fire situation. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(d) Complaint Counsel objects to this Interrogatory on the ground that it is

overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (c) is in part revealed in those documents.

78. (a) **State whether the Complainant contends that any Omegas used with plastic piping systems installed after 1990 have ever failed to activate in a fire.**

If so:

(b) **identify and describe any such failures;**

(c) **identify each and every document that describes, evidences, refers, or relates in any way to such a contention;**

(d) **identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and**

(e) **describe in detail the substance of each such person's knowledge and/or information.**

Response: Complaint Counsel objects to this Interrogatory on the ground that it is unclear, vague and ambiguous, as it is impossible to ascertain whether the Interrogatory seeks information regarding piping systems installed after 1990, or regarding Omegas installed after 1990 (regardless of when the system was installed). Complaint Counsel further objects to this Interrogatory to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory on the ground that the term "failed to

activate" is undefined, unclear, vague and ambiguous. Complaint Counsel is unable to formulate a response to this Interrogatory without clarification of how Respondents define a failure to activate. Without waiving its objections, Complaint Counsel will provide all non-privileged information it has with respect to fires that have occurred in which Omegas reportedly did not activate, as that term is defined by Complaint Counsel in its discovery to Respondents.

79. (a) **State whether the Complainant contends that any Omegas used with plastic piping systems installed after 1990 have ever failed to activate under any type of testing.**

If so:

(b) identify and describe any such a contention;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it is unclear, vague and ambiguous, as it is impossible to ascertain whether the Interrogatory seeks information regarding piping systems installed after 1990, or regarding Omegas installed after 1990 (regardless of when the system was installed). Complaint Counsel further objects to this Interrogatory to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege.

Complaint Counsel further objects to this Interrogatory on the ground that the term "failed to activate" is undefined, unclear, vague and ambiguous. Complaint Counsel is unable to formulate a response to this Interrogatory without clarification of how Respondents define a failure to activate. Without waiving its objections, Complaint Counsel will provide all non-privileged information it has with respect to testing of Omega sprinklers.

80. (a) **State whether the Complainant contends that any Omegas used with copper piping systems installed after 1990 have ever failed to activate in a fire.**

If so:

(b) **identify and describe any such failures;**

(c) **identify each and every document that describes, evidences, refers, or relates in any way to such a contention;**

(d) **identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and**

(e) **describe in detail the substance of each such person's knowledge and/or information.**

Response: Complaint Counsel objects to this Interrogatory on the ground that it is unclear, vague and ambiguous, as it is impossible to ascertain whether the Interrogatory seeks information regarding piping systems installed after 1990, or regarding Omegas installed after 1990 (regardless of when the system was installed). Complaint Counsel further objects to this Interrogatory to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory on the ground that the term "failed to

activate" is undefined, unclear, vague and ambiguous. Complaint Counsel is unable to formulate a response to this Interrogatory without clarification of how Respondents define a failure to activate. Without waiving its objections, Complaint Counsel will provide all non-privileged information it has with respect to fires that have occurred in which Omegas reportedly did not activate, as that term is defined by Complaint Counsel in its discovery to Respondents.

81. (a) **State whether the Complainant contends that any Omegas used with copper piping systems installed after 1990 have ever failed to activate under any type of testing.**

If so:

(b) identify and describe any such testing;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it is unclear, vague and ambiguous, as it is impossible to ascertain whether the Interrogatory seeks information regarding piping systems installed after 1990, or regarding Omegas installed after 1990 (regardless of when the system was installed). Complaint Counsel further objects to this Interrogatory to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege.

Complaint Counsel further objects to this Interrogatory on the ground that the term "failed to activate" is undefined, unclear, vague and ambiguous. Complaint Counsel is unable to formulate a response to this Interrogatory without clarification of how Respondents define a failure to activate. Without waiving its objections, Complaint Counsel will provide all non-privileged information it has with respect to testing of Omega sprinklers.

82. (a) **State whether the Complainant contends that any Omegas manufactured from 1996 through the present and using silicone o-rings have ever failed to activate in a fire.**

If so:

(b) **identify and describe any such failures;**

(c) **identify each and every document that describes, evidences, refers, or relates in any way to such a contention;**

(d) **identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and**

(e) **describe in detail the substance of each such person's knowledge and/or information.**

Response: Complaint Counsel objects to this Interrogatory to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory on the ground that the term "failed to activate" is undefined, unclear, vague and ambiguous. Complaint Counsel is unable to formulate a response to this Interrogatory without clarification of how Respondents define a failure to activate. Without waiving its objections,

Complaint Counsel will provide all non-privileged information it has with respect to fires that have occurred in which Omegas reportedly did not activate, as that term is defined by Complaint Counsel in its discovery to Respondents.

83. (a) **State whether the Complainant contends that any Omegas manufactured from 1996 through the present and using silicone o-rings have ever failed to activate in any type of testing.**

If so:

(b) **identify and describe any such testing;**

(c) **identify each and every document that describes, evidences, refers, or relates in any way to such a contention;**

(d) **identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and**

(e) **describe in detail the substance of each such person's knowledge and/or information.**

Response: Complaint Counsel objects to this Interrogatory to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory on the ground that the term "failed to activate" is undefined, unclear, vague and ambiguous. Complaint Counsel is unable to formulate a response to this Interrogatory without clarification of how Respondents define a failure to activate. Without waiving its objections, Complaint Counsel will provide all non-privileged and non-confidential information it has with respect to testing of Omega sprinklers. Complaint Counsel adds that one of the three Omega

sprinklers it received from Respondents in February, 1998, which had just been manufactured a few weeks earlier and had never yet been installed in a sprinkler system, did not activate (as that term is defined in Complaint Counsel's discovery requests to Respondents) when exposed to its activation/triggering temperature. The sprinkler partially deployed, releasing drips of water only, and then the fusible link cold soldered, preventing activation. Complaint Counsel has shared this knowledge with respondents, and asked for an explanation of what, why and how this occurred.

84. (a) **State whether the Complainant contends that any Omegas used with plastic piping systems installed after 1990 constitute a "substantial product hazard" pursuant to 15 U.S.C. § 2064(a).**

If so:

(b) **identify and describe any such hazards;**

(c) **identify each and every document that describes, evidences, refers, or relates in any way to such a contention;**

(d) **identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and**

(e) **describe in detail the substance of each such person's knowledge and/or information.**

Response: (a) Complaint Counsel objects to this Interrogatory on the ground that it is unclear, vague and ambiguous, as it is impossible to ascertain whether the Interrogatory seeks information regarding piping systems installed after 1990, or regarding Omegas installed after 1990 (regardless of when the system was installed). Without waiving its objection, Complaint Counsel

responds that it contends that all Omega sprinklers are substantial product hazards pursuant to 15 U.S.C. § 2064, regardless of the type of piping in which they may be used.

(b) Omega sprinklers are defective pursuant to 15 U.S.C. § 2064, as they may fail in a fire situation, and thus create a substantial risk of injury to the public.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for, among others, UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged and non-confidential test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas present a substantial product hazard. Complaint Counsel is in the process of investigating the identities

of all such persons, and has requested same from Respondents in discovery.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory.

85. (a) **State whether the Complainant contends that any Omegas used with copper piping systems installed after 1990 constitute a "substantial product hazard" pursuant to 15 U.S.C. § 2064(a).**

If so:

(b) identify and describe any such hazards;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) Complaint Counsel objects to this Interrogatory on the ground that it is unclear, vague and ambiguous, as it is impossible to ascertain whether the Interrogatory seeks information regarding piping systems installed after 1990, or regarding Omegas installed after 1990 (regardless of when the system was installed). Without waiving its objection, Complaint Counsel responds that it contends that all Omega sprinklers are substantial product

hazards pursuant to 15 U.S.C. § 2064, regardless of the type of piping in which they may be used.

(b) Omega sprinklers are defective pursuant to 15 U.S.C. § 2064, as they may fail in a fire situation, and thus create a substantial risk of injury to the public.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for, among others, UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged and non-confidential test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas present a substantial product hazard. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory.

86. (a) **State whether Complainant contends that any Omegas manufactured using silicone o-rings constitute a "substantial product hazard" pursuant to 15 U.S.C. § 2064(a).**

If so:

(b) identify and describe any such hazards;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) Complaint Counsel contends that all Omega sprinklers, including those with silicone "o" rings, are substantial product hazards pursuant to 15 U.S.C. § 2064.

(b) Omega sprinklers are defective pursuant to 15 U.S.C. § 2064, as they may fail in a fire situation, and thus create a substantial risk of injury to the public.

(c) The Complaint refers, relates to, and provides evidence of this contention.

Central's test results, and the results of testing of Omegas by or for, among others, UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged and non-confidential test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas present a substantial product hazard. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory.

87. (a) **State whether the Complainant contends that the performance of**

Omegas declines or deteriorates over time.

If so:

(b) identify and describe any such performance decline or deterioration;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that the phrase "performance of Omegas declines or deteriorates over time" is undefined, unclear, vague and ambiguous and, without clarification of same, it is impossible to formulate a response to this Interrogatory. However, deterioration of o-ring material and corrosion, which available evidence suggest may contribute to failure of Omega sprinklers, may be progressive events.

88. With respect to the allegation of Paragraph 16 of the Complaint that the Omegas present a "substantial product hazard":

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or

information.

Response: (a) Omega sprinklers are defective pursuant to 15 U.S.C. § 2064, as they may fail in a fire situation, and thus create a substantial risk of injury to the public.

(b) The Complaint refers, relates to, and provides evidence of Complaint Counsel's allegation that Omegas present a substantial product hazard. Central's test results, and the results of testing of Omegas by or for, among others, UL, FM and CPSC support and relate to this allegation, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged and non-confidential test and fire data to Respondents.

(c) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas present a substantial product hazard. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery.

(d) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory.

89. **With respect to the allegation of Paragraph 16 of the Complaint that "action under these provisions is in the public interest":**

(a) identify and describe all of the public interest factors which Complainant believes favor "action under these provisions";

(b) set forth the factual basis for such an allegation;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) Preservation of life, health and public safety, and avoidance of the risk of injury and death created by Omega sprinklers, which may fail in a fire situation.

(b) Taking Omegas out of service will abolish the risk of injury and/or death they pose to the public.

(c) Complaint Counsel objects to this subpart on the ground that it is overbroad and unduly burdensome, as all documents relating to fire behavior and injury

and death caused or potentially caused by fire are responsive. Without waiving its objection, Complaint Counsel responds that the Complaint refers, relates to, and provides evidence of Complaint Counsel's allegation that action under 15 U.S.C. § 2064 is in the public interest. Central's test results, and the results of testing of Omegas by or for, among others, UL, FM and CPSC support and relate to this allegation, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged and non-confidential test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's allegation. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's allegation that action under this section is in the public interest. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection,

Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory.

90. With respect to the allegation of Paragraph B(1) of the Complaint that Respondent give prompt "public notice of the defect in the Omegas," identify and describe the "public notice" that the Complainant seeks to impose.

Response: Complaint Counsel would seek to impose public notice pursuant to 15 U.S.C. § 2064 (c), including the following: public notice of the defect; mailing of notice to each person who is a manufacturer, distributor or retailer of Omega sprinklers; notice to every person to whom Respondents know Omega sprinklers were delivered or sold.

91. With respect to the allegation of Paragraph C(3) of the Complaint regarding repair of all Omegas so they will "perform properly," identify and describe what would constitute "performs properly" for purposes of the Complainant.

Response: Proper performance of an Omega sprinkler is full (rather than partial or no) activation of the sprinkler upon exposure to its activation/triggering temperature, as defined in Complaint Counsel's discovery to Respondents.

92. With respect to the allegation of Paragraph C(3) of the Complaint regarding the replacement of all Omegas "with a like or equivalent product which performs properly":

(a) identify and describe any and all "like or equivalent product which performs properly";

(b) state whether Complainant believes that Omegas with a silicone o-ring

qualify as a "like or equivalent product which performs properly"; and

(c) state whether Complainant believes that Omegas with a spring collar qualify as a "like or equivalent product which performs properly."

Response: (a) "Like or equivalent product which performs properly" is a fire sprinkler that, upon exposure to its activation/triggering temperature, activates fully (rather than partially or not at all).

(b) No. Complaint Counsel believes that Omegas with silicone o rings also do not or will not perform properly.

(c) No. Complaint Counsel believes that Omegas with a spring collar also do not or will not perform properly. Moreover, use of a spring collar with a sprinkler is prohibited in a number of, if not most, jurisdictions.

93. With respect to the allegation of Paragraph C(3) of the Complaint regarding a "refund to consumers [of] the purchase price of the Omegas," identify and describe how Complainant would calculate or determine a "refund to consumers [of] of the purchase price of the Omegas."

Response: Complaint Counsel has insufficient information at this time to determine how a refund of the purchase price of Omegas would be calculated. Complaint Counsel has requested from Respondents in discovery information pertaining to sale and installation prices for Omega sprinklers.

94. (a) If the Commission orders Respondents to repair some or all of the Omegas pursuant to 15 U.S.C. § 2064(d)(1), identify and describe the nature and amount of the "reasonable and foreseeable expenses" under 15 U.S.C. § 2064(e)(1) that Complainant

contends should be reimbursed to persons by Respondents.

(b) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(d) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: Complaint Counsel has insufficient information at this time to identify all reasonable and foreseeable expenses that will be incurred by people in availing themselves of any remedy provided under an order issued under 15 U.S.C. § 2064(d), pursuant to 15 U.S.C. § 2064(e). At minimum, it can be expected that consumers would face costs associated with contacting Respondents, obtaining replacement sprinklers, and installing same. The details of any such effort by Respondents will determine these and other expenses.

95. **(a) If the Commission orders Respondents to replace some or all of the Omegas pursuant to 15 U.S.C. § 2064(d)(2), identify and describe the nature and amount of the "reasonable and foreseeable expenses" under 15 U.S.C. § 2064(e)(1) that Complainant contends should be reimbursed to persons by Respondents.**

(b) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(d) describe in detail the substance of each such person's knowledge and/or

information about any such contention.

Response: Complaint Counsel has insufficient information at this time to identify all reasonable and foreseeable expenses that will be incurred by people in availing themselves of any remedy provided under an order issued under 15 U.S.C. § 2064(d), pursuant to 15 U.S.C. § 2064(e). At minimum, it can be expected that consumers would face costs associated with contacting Respondents, obtaining replacement sprinklers, and installing same. The details of any such effort by Respondents will determine these and other expenses.

96. (a) **If the Commission orders Respondents to refund some or all of the Omegas pursuant to 15 U.S.C. § 2064(d)(3), identify and describe the nature and amount of the "reasonable and foreseeable expenses" under 15 U.S.C. § 2064(e)(1) that Complainant contends should be reimbursed to persons by Respondents.**

(b) **identify all documents which describe, evidence, refer, support, or relate to any such contention;**

(c) **identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and**

(d) **describe in detail the substance of each such person's knowledge and/or information about any such contention.**

Response: Complaint Counsel has insufficient information at this time to identify all reasonable and foreseeable expenses that will be incurred by people in availing themselves of any remedy provided under an order issued under 15 U.S.C. § 2064(d), pursuant to 15 U.S.C. § 2064(e). See also response to Interrogatory No. 94.

97. (a) **If the Commission orders Respondents to repair some or all of the**

Omegas pursuant to U.S.C. § 2064(d)(1), identify and describe the nature and amount of the reimbursement to "any other person who is a manufacturer, distributor, or retailer of such product for such other person's expenses in connection with carrying out the order" that Complainant contends should be made by Respondents.

(b) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(d) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: Complaint Counsel has insufficient information at this time to identify all expenses in connection with carrying out an order under 15 U.S.C. § 2064(c) or (d), that Respondents would have to reimburse other manufacturers, distributors or retailers of Omega sprinklers. See also response to Interrogatory No. 94.

98. (a) If the Commission orders Respondents to replace some or all of the Omegas pursuant to U.S.C. § 2064(d)(2), identify and describe the nature and amount of the reimbursement to "any other person who is a manufacturer, distributor, or retailer of such product for such other person's expenses in connection with carrying out the order" that Complainant contends should be made by Respondents.

(b) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(c) identify each and every person whom Complainant knows and/or

believes to have knowledge of any such contention; and

(d) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: Complaint Counsel has insufficient information at this time to identify all expenses in connection with carrying out an order under 15 U.S.C. § 2064(c) or (d), that Respondents would have to reimburse other manufacturers, distributors or retailers of Omega sprinklers. See also response to Interrogatory No. 94.

99. **(a) If the Commission orders Respondents to refund the purchase price to some or all of the Omegas pursuant to U.S.C. § 2064(d)(3), identify and describe the nature and amount of the reimbursement to "any other person who is a manufacturer, distributor, or retailer of such product for such other person's expenses in connection with carrying out the order" that Complainant contends should be made by Respondents.**

(b) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d)[sic] identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e)[sic] describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: Complaint Counsel has insufficient information at this time to identify all expenses in connection with carrying out an order under 15 U.S.C. § 2064(c) or (d), that Respondents would have to reimburse other manufacturers, distributors or retailers of Omega sprinklers. See also response to Interrogatory No. 94.

B. Potential Witnesses

100. Identify all former and/or current employees of Respondents with whom Complainant has had any contact regarding the Omegas. For each such person, identify and describe:

(a) the person's name;

(b) the person's last known home and business address;

(c) the person's last known telephone number;

(d) the person's last known position with Respondents;

(e) the date of any such contacts;

(f) the nature of any such contacts (e.g., letter, telephone conversation, in-person interview);

(f)[sic] a detailed description of the subject matter of such communication; and

(g) the identity of any other persons who were present during such contacts.

Response: Complaint Counsel objects to the phrase "any contact" on the ground that it is vague and ambiguous. Complaint Counsel further objects to this Interrogatory on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel intends to submit certain information to the Presiding Officer for in camera review and determination of whether to provide the material to Respondents, and under what conditions.

101. For each and every contact describe an [sic] response to Interrogatory No. 100,

identify each and every document that describes, evidences, refers, or relates to such contacts, including without limitation any notes of such contacts, documents shown during the course of such contacts, lists of questions or answers given, or any reports of such communications.

Response: Complaint Counsel objects to the phrase "any contact" on the ground that it is vague and ambiguous. Complaint Counsel further objects to this Interrogatory on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege.

102. Identify each and every person whom Complainant knows and/or believes to have knowledge or information concerning or related to the subject matter of the Complaint or other discoverable information. For each such person, describe:

(a) the person's name;

(b) the person's last known home and business address;

(c) the person's last known telephone number;

(d) the corporate or government affiliation of the person;

(e) whether the Complainant has contacted such person; and

(f) the specific subject matter of the person's knowledge.

Response: Complaint Counsel objects to this Interrogatory on the ground that it is overbroad and unduly burdensome -- there are thousands of people and entities who have information concerning or related to Omega sprinklers. Complaint Counsel further objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in

anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel responds that it believes that Respondents and their current and former employees have such knowledge and information.

103. Identify each and every fact witness that Complainant expects to testify on its behalf at the hearing in this matter. For each such fact witness, identify and describe:

(a) the name, title, business address, and home address for each such witness; and

(b) the subject matter about which each witness is expected to testify.

Response: Complaint Counsel has not yet determined which witnesses it will call to testify at the hearing in this matter.

104. Identify each and every expert witness whom the Complainant expects to testify on its behalf at the hearing in this matter. For each such expert, identify and describe:

(a) the expert's name, title, home address, business address, education, employment since graduation from high school, and all publications authored or edited by the expert;

(b) the subject matter on which each expert is expected to testify;

(c) the substance and facts upon which the expert relies in forming his or her opinion;

(d) the opinions to which the expert is expected to testify;

(e) a summary of the grounds for each such opinion;

(f) and a statement and description of all information and documents upon which the expert relies or expects to rely.

Response: Complaint Counsel objects to this Interrogatory to the extent that it exceeds the requirements of 16 C.F.R. § 1026.31 regarding discovery of facts known and opinions held by experts. Without waiving its objection, Complaint Counsel responds that it has not yet determined which witnesses it will call to testify at the hearing in this matter. Complaint Counsel will supplement its response as such decisions are made.

105. Identify and describe any and all oral or written statements made by Respondents that the Complainant contends constitute an admission with reference to any of the issues raised in the Complaint. For each such statement, identify and describe:

(a) the person making the alleged statement;

(b) that person's relationship to Respondents;

(c) the content of the statement;

(d) the date, time, and place of the statement;

(e) the nature of the alleged statement (e.g., written or oral); and

(f) the identity of each person who heard the statement or otherwise has personal knowledge of the statement.

Response: Complaint Counsel objects to this Interrogatory on the ground that it calls for a legal conclusion. Complaint Counsel further objects to this Interrogatory on the ground that it is overbroad and unduly burdensome, and requests information already in Respondents' possession. Complaint Counsel further objects to this Request to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery

by the work product privilege. Complaint Counsel further objects to this Request on the ground that it calls for a legal conclusion. Without waiving its objections, Complaint Counsel responds that any and all statements made by Respondents may constitute an admission by Respondents in this matter.

C. Other Allegations Made By the CPSC

106. In a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo, Singer states, "based on multiple random inquiries of sprinkler contractors across the nation in the recent past, we believe that Central's proposed labor payment falls considerably short of what has been, and remains, customarily required to remove and install sprinklers ...." With respect to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to the "multiple random inquiries of sprinkler contractors";

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such "multiple random inquires of sprinkler contractors";

(e) describe in detail the substance of each such person's knowledge and/or information of such "multiple random inquiries of sprinkler contractors";

(f) identify and describe in terms of a specific monetary amount "what has been, and remains, customarily required to remove and install sprinklers";

(g) identify each and every document that constitutes, evidences, refers, or

relates in any way to "what has been, and remains, customarily required to remove and install sprinklers";

(h) identify each and every person whom Complainant knows and/or believes to have knowledge of "what has been, and remains, customarily required to remove and install sprinklers"; and

(i) describe in detail the substance of each such person's knowledge and/or information of "what has been, and remains, customarily required to remove and install sprinklers."

Response: (a) Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege and . Without waiving its objection, Complaint Counsel responds that a labor payment of $5.00 per sprinkler, as suggested by Central's George Meyer in November, 1997, is inadequate to compensate consumers for the charge of replacing their Omega sprinklers.

(b) Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege, and on the ground that it inquires into confidential settlement discussions. Without waiving its objection, Complaint Counsel responds that Complaint Counsel conducted inquiries of many sprinkler contractors as to the labor expense involved in removing and replacing sprinkler heads. In all

instances, sprinkler contractors indicated that the figure suggested by Central's President was grossly low, and that on average the cost may be three to six times that amount, depending on the facility.

(c) Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel responds that Counsel's written notes of its conversations relate to and evidence its inquiries of sprinkler contractors, as does an invoice from a sprinkler contractor relating to replacement of Omegas, which Complaint Counsel will produce to Respondents.

(d) Eric Singer has knowledge of such inquiries. To a lesser extent, Eric Stone, Catherine Anne Cumberland, Andrew Stadnik, Rohit Khanna, and Nicholas Marchica have knowledge of such inquiries.

(e) See response to (b), above.

(f) See response to (b), above. Please note that this cost does not include the cost for the replacement sprinkler, nor can it account for special reconstruction of the sprinkler system such as recutting the drop.

(g) Other than the letter to which Respondents refer, as well as notes reflecting its inquiries of sprinkler contractors, which are Complaint Counsel's work product, Complaint Counsel possesses one invoice from a sprinkler contractor relating to replacement of Omegas, which it will produce to

Respondents.

(h) Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel identifies the following individuals of whom it is aware:

1) David Dixon, Exec. V.P., David Dixon, 4495 Mendenhall Road South, Memphis, TN 38141

2) Jeffrey Larson, Viking Automatic Sprinkler Company, 3434 First Avenue South, Seattle, Washington 98134-1894

3) Fred Jackson, President, Jackson Fire Protection, 1906 Grace Ave., Ft. Myers, FL 33901.

4) William L. Oliver, President, Oliver Sprinkler Co., Inc., 501 Feheley Drive, King of Prussia, PA 19046

5) John C. Livingston, Jr. Chairman and CEO, Livingston Fire Protection, Inc., 5150 Lawrence Place, Hyattsville, MD 20781

6) Peter Miller, Miller Fire Protection, 2750 Marble Ct., Forestville, MD 20747

7) Thomas E. Strange, Vice President of Operations, Worsham Sprinkler Company, 400 East Arrowhead Drive, University Trade Center, Charlotte, North Carolina, 28213

8) James Lewis, American Fire Sprinkler Corp., 210 North 28A

Highway #B, Great Bend, Kansas 67530

Complaint Counsel believes that hundreds of other sprinkler contractors have knowledge of what has been and remains customarily required [in terms of labor costs] to remove and install sprinklers. At present, Complaint Counsel has insufficient information to identify them.

(i) Complaint Counsel objects to this subpart on the ground that it overbroad and unduly burdensome, and requests information pertaining to the knowledge of persons other than the Complainant. Without waiving its objection, Complaint Counsel reiterates its response to subpart (b), and indicates that it otherwise has insufficient information with which to respond to this subpart.

107. In a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo, Singer states, "the evidence we have gathered does not support the view that dezincification alone is the cause of above-required operating pressures in Omegas from plastic pipe ...." With regard to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify and describe all of the "evidence we have gathered";

(d) identify each and every document that constitutes, evidences, refers, or relates in any way to this statement;

(e) identify each and every person whom Complainant knows and/or

believes to have knowledge of this statement; and

(f) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege, and on the ground that it inquires into confidential settlement discussions. Without waiving its objection, Complaint Counsel responds that it contends that dezincification, Respondents' proposed explanation for the high activation pressures required to activate some Omegas that were installed in plastic pipe, cannot be the only explanation.

(b) Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel responds that it has evidence of at least one fire (Kent Manor Inn) in which Omega sprinklers installed in a plastic piping system that contained no copper (which Respondents claim is a prerequisite to dezincification) did not activate, and showed no signs of dezincification upon visual inspection. A number of other Omegas that have required high activation pressures in order to activate in testing have also shown no sign of dezincification, e.g., a 1992 Omega from The Fairways at Piper Glen, N.C. As well, evidence

indicating dezincification in sprinklers that have activated tends to cast doubt on the existence of a causal connection between dezincification and high activation pressures required for, or non-activation of, Omegas. In one such instance (the Madison Park Condominiums), Central itself concluded that all eight Omegas that it tested showed signs "characteristic of dezincification," yet apparently four of eight Omegas that it tested failed to activate, in part, Central claimed, as a result of swollen "o" rings. At least one forensic study of which Complaint Counsel is aware has determined that dezincification is not the cause for failure of Omegas from plastic piping systems.

(c) See response to subpart (b), above.

(d) The letter to Ms. Sanzo constitutes and evidences the statement made therein. The results of tests of Omega sprinklers relate to the contention made therein, as does the evidence of the fire at the Kent Manor Inn, both of which will be produced to Respondents. The scientific study referred to above was supplied to Complaint Counsel under a claim of confidentiality; Complaint Counsel awaits authorization from a third party to release the documents to Respondents and, if necessary, a confidentiality stipulation by Respondents and/or protective order by the Presiding Officer.

(e) The letter to Ms. Sanzo is not a public document; Complaint Counsel, other members of the CPSC staff, and Respondents have knowledge of the statement made in the letter to which Respondents refer.

(f) Complaint Counsel objects to this subpart on the ground that it is overbroad

and unduly burdensome, and requests information pertaining to the knowledge of persons other than the Complainant. Without waiving its objection, Complaint Counsel reiterates its response to subpart (b), and indicates that it otherwise has insufficient information with which to respond to this subpart.

108. **In a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo, Singer states, "the evidence we have gathered does not support the view . . . that swollen o-rings due to cutting oil exposure are the exclusive cause of non-activation in Omegas manufactured before 1996." With regard to this statement:**

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify and describe all of the "evidence we have gathered";

(d) identify each and every document that constitutes, evidences, refers, or relates in any way to this statement;

(e) identify each and every person whom Complainant knows and/or believes to have knowledge of this statement; and

(f) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product

privilege, and on the ground that it inquires into confidential settlement discussions. Without waiving its objection, Complaint Counsel responds that it contends that swollen "o" rings due to cutting oil exposure Respondents' proposed explanation for the high activation pressures required to activate some Omegas that were installed in steel pipe) cannot be the only explanation for non-activation of Omegas.

(b) Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel responds that:

1) it had (and still has) received no evidence from Respondents that Omegas were in fact exposed to excessive hydrocarbons, or that hydrocarbons were the source of any "o" ring swelling;

2) there is evidence of Omegas that showed no "o" ring swelling that did not activate when exposed to their activation/triggering temperature in testing;

3) there are at least two studies that have attributed failure of Omegas to causes other than swollen "o" rings;

4) Central's own public statement in May, 1996, that "the presence of high concentrations of hydrocarbons (found in petroleum based cutting fluids), in conjunction with varying degrees of corrosion," (emphasis added), suggests that swelling due to excessive

hydrocarbons is not the only cause of failure in these Omegas;

5) A number of Omegas that have activated properly in testing have exhibited swollen "o" rings.

(c) See response to subpart (b), above.

(d) The letter to Ms. Sanzo constitutes and evidences the statement made therein. The results of tests of Omega sprinklers relate to the contention made therein, and will be produced to Respondents. The scientific studies referred to above were supplied to Complaint Counsel under a claim of confidentiality; Complaint Counsel awaits authorization from a third party to release the documents to Respondents, the execution of an appropriate confidentiality stipulation by Respondents, and/or a protective order from the Presiding Officer.

(e) The letter to Ms. Sanzo is not a public document; Complaint Counsel, other members of the CPSC staff, and Respondents have knowledge of the statement made in the letter to which Respondents refer.

(f) Complaint Counsel objects to this subpart on the ground that it is overbroad and unduly burdensome, and requests information pertaining to the knowledge of persons other than the Complainant. Without waiving its objection, Complaint Counsel reiterates its response to subpart (b), and indicates that it otherwise has insufficient information with which to respond to this subpart.

109. In a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo, Singer states, "rather, primarily, the data points to multiple failure modes rooted in

the design and construction of these sprinklers." With regard to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify and describe the "multiple failure modes rooted in the design and construction of these sprinklers";

(d) identify and describe "the data" referenced in the statement;

(e) identify and describe each and every document that constitutes, evidences, refers, or relates in any way to this statement;

(f) identify each and every person whom Complainant knows and/or believes to have knowledge of this statement; and

(g) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it misquotes the letter from Complaint Counsel to Counsel for Respondents. The letter states that preliminarily the data points to multiple failure modes rooted in the design and construction of these sprinklers. Complaint Counsel further objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege, and on the ground that it inquires into confidential settlement discussions. Complaint Counsel further objects to this Interrogatory on the ground that it seeks irrelevant information not reasonably calculated to lead to

the discovery of admissible evidence. Complaint Counsel's theories on the basis for the activation failure of Omega sprinklers is irrelevant, as it is the fact that the Omegas fail, and not why they fail, that is at issue herein. Without waiving its objection, Complaint Counsel responds that it contends that none of the proposed explanations that Respondents have suggested are, alone, sufficient to explain the activation failures of Omegas. See responses to Interrogatories 107 and 108 for an explanation of Complaint Counsel's position, and the bases therefor.

110. **In a February 19, 1998 letter from Eric Stone of the CPSC to Kathleen Sanzo, the CPSC refuses to accept a "testing based corrective action proposal" from Respondents. With regard to this rejection:**

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for rejecting a "testing based corrective action proposal";

(c) identify and describe any and all reasons that the CPSC believes are correct in rejecting such a proposal;

(d) identify each and every document that constitutes, evidences, refers, or relates in any way to the rejection of this proposal;

(e) identify each and every person whom Complainant knows and/or believes to have knowledge of the rejection of this proposal; and

(f) describe in detail the substance of each such person's knowledge and/or information.

Response: See Response to Interrogatory No. 114, below.

111. In a February 19, 1998 letter from Eric Stone of the CPSC to Kathleen Sanzo, the CPSC states that "Central continues to insist on selling Omega sprinklers with silicone o-rings despite serious concerns about whether they will function in the long term." With regard to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify and describe all "serious concerns" that the CPSC has regarding the functioning of Omega sprinklers with silicone o-rings;

(d) identify each and every document that constitutes, evidences, refers, or relates in any way to such "serious concerns"; and

(e) identify each and every person whom Complainant knows and/or believes to have knowledge of such "serious concerns."

Response: a) Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege, and on the ground that it inquires into confidential settlement discussions. Without waiving its objection, Complaint Counsel responds that it contends that Central continues to insist on selling Omega sprinklers with silicone o-rings, and that Complaint Counsel has serious concerns about whether those sprinklers will function both currently and in the long term.

b) Complaint Counsel has evidence that, and Respondents have admitted that Central is continuing to sell Omegas with silicone o rings. The basis for Complaint Counsel's concerns regarding silicone o ring Omegas is the same as its concern regarding other Omegas -- that they are a substantial product hazard, as they may fail in a fire situation, thus exposing the public to substantial risk of injury and/or death. Complaint Counsel points Respondents to its response to Interrogatory No. 112, below, for an explanation of the problem with a silicone o ring sprinkler manufactured in February, 1998, and tested by CPSC only a few weeks later and found not to activate properly, but instead to 'drip' and cold-solder. Complaint Counsel's concerns with respect to silicone o ring Omegas relate to the design of the sprinkler, Respondents' manufacturing (and quality control) procedures, and to the silicone material itself -- including but not limited to the possibility of adhesion, susceptibility to corrosion, inadequate or improper lubrication, inadequate clearances, and possible malfunctioning parts. Complaint Counsel has requested information from Respondents in discovery regarding each of these (and other) issues.

c) See response to subparts (a) and (b), above.

d) See responses to Interrogatories 86 and 112.

e) Complaint Counsel has insufficient information at this time to provide full identification for each person or organization whom Complaint Counsel knows or believes to know of the serious concerns that Complaint Counsel

has with respect to Omegas utilizing a silicone o-ring. Provisionally, however, in addition to Respondents, it provides the following list:

Underwriters Laboratories
333 Pfingsten Road
Northbrook, IL 60062-2096
847-272-8800

Factory Mutual Research Corporation
1151 Boston-Providence Turnpike
Norwood, MA 02062
781-762-4300

Parco, Inc.
2150 Parco Ave.
Ontario, CA 91761
909-923-0288

Loss Prevention Council
Melrose Avenue
Borehamwood
Hertfordshire WD6 2BJ
United Kingdom
011-44-0181-207-2345

112. In a February 24, 1998 letter from Eric Stone of the CPSC to Kathleen Sanzo, Stone states, "x-ray examination of the unit showed that the internal shaft was cocked or tipped slightly and jammed in that position" and that the CPSC "plans to conduct non-destructive analysis of the unit ...." With regard to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify and describe any evidence that Omegas may be "cocked or tipped slightly and jammed in that position";

(d) identify each and every document that constitutes, evidences, refers, or relates in any way to the statement that Omegas are "cocked or tipped slightly and jammed in that position";

(e) identify each and every person whom Complainant knows and/or believes to have knowledge of any such problems;

(f) describe in detail the substance of each such person's knowledge and/or information; and

(g) describe any "non-destructive analysis of the unit" performed by or on behalf of the CPSC.

Response: (a) Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel responds that although it does not at this time intend to rely on a letter it wrote to Ms. Sanzo, Complaint Counsel may rely on the evidence that the letter to Ms. Sanzo discusses.

(b) The factual basis for the statement is stated in the phrase quoted by Respondents.

(c) The evidence that the Omega referred to in the letter was cocked or tipped is described in the letter -- it is the x-ray of the unit described.

(d) Complaint Counsel objects to this interrogatory on the ground that it misquotes the statement in the letter. The statement refers to a single

Omega, manufactured in February, 1998, and never installed in a sprinkler system, that, when tested by Complainant a few weeks after it was manufactured by Central, failed to activate, as that term is defined in Complaint Counsel's discovery to Respondents, when exposed to its activation/triggering temperature, and instead "leaked" or "wept," dripping water and then cold-soldering. When the sprinkler was x-rayed, it demonstrated what was described in the letter. Complaint Counsel shared this information with Respondents to demonstrate to Respondents that their various theories of what is wrong with Omegas, including the installation-based explanations that point to installer error and/or mishandling of the Omegas, cannot suffice to account for the problem with Omega sprinklers. The sprinkler that exhibited this activation failure had never been installed, nor had it ever been exposed to cutting oils, stop leak, or any other substance, by any sprinkler contractor or installer. Further, Complaint Counsel sought efforts by Respondents to ensure that the sprinklers they are currently manufacturing are safe and will function properly.

(e) Complaint Counsel objects to this subpart on the ground that it requests information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel identifies Complaint Counsel, its staff and consultants, Respondents and Counsel for Underwriters Laboratories.

(f) See (a) through (d), above.

113. In a January 6, 1998 letter from Eric Singer of the CPSC to the state attorneys general, Singer states, "this contrasts with automatic fire sprinklers' historical rate of proving 99.5 percent effective." With regard to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify and describe all evidence that automatic fire sprinklers have an "historical rate of proving 99.5 percent effective";

(d) identify each and every document that constitutes, evidences, refers, or relates in any way to such historical rate of effectiveness;

(e) identify each and every person whom Complainant knows and/or believes to have knowledge of such historical rate of effectiveness; and

(f) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) Complaint Counsel objects to this Interrogatory on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence in this case. The effectiveness of sprinklers other than Omegas is irrelevant herein. Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege.

(b) Complaint Counsel objects to this Interrogatory on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence in this case. Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel responds that statistics on the high reliability of other automatic fire sprinklers is in the public domain, and is available from the National Fire Protection Association and National Fire Sprinkler Association. Complaint Counsel is in the process of gathering evidence on the historical rate of effectiveness of automatic fire sprinklers, but offers the following list:

1) Rural/Metro Fire Department (Scottsdale, Arizona), Automatic Sprinklers: A 10 Year Study (1997);

2) Fire Sprinkler Advisory Board of Southern California, City of Los Angeles Civil Disturbance: Report on the Buildings Protected by Automatic Fire Sprinkler Systems and Their Performance Record (1992);

3) H.W. Marryatt, Fire: Automatic Sprinkler Performance in Australia and New Zealand, 1886-1968 (Melbourne: Australian Fire Protection Association, 1971);

4) "Sprinklers for Your Home," This Old House (magazine) (Jan./Feb.

1998);

5) Walter W. Maybee, "Sprinkler Performance Update: 1952- to 1986," Bulletin of the Society of Fire Protection Engineers (1988).

(c) See response to subpart (b).

(d) See response to subpart (b).

(e) Complaint Counsel objects to this subpart on the ground that it is overbroad and unduly burdensome. Without waiving its objection, Complaint Counsel identifies the following as having information pertaining to the high rate of effectiveness of automatic fire sprinklers:

1) Russell P. Fleming, P.E., Vice President of Engineering, National Fire Sprinkler Association, Inc., Robin Hill Corporate Park, Route 22 - P.O. Box 1000, Patterson, New York 12563;

2) John A. Viniello, President, National Fire Sprinkler Association, Inc., Robin Hill Corporate Park, Route 22- P.O. Box 1000, Paterson, New York 12563.

f) Complaint Counsel objects to this subpart on the ground that it requests information pertaining to entities other than Complainant. Without waiving its objection, Complaint Counsel responds that it has insufficient information at this time to describe in detail the complete substance of each person's knowledge and/or information on the high rate of effectiveness of automatic fire sprinklers.

114. (a) **State whether Complainant deems any corrective action proposal to be**

acceptable that is based in part on testing of a sample of sprinkler heads from a building and comparing the results of the sample to the hydraulically calculated operating pressure of that building.

If so:

(b) identify and describe such an acceptable corrective action proposal;

If not:

(c) identify and describe all reasons for such unacceptability;

(e)[sic] identify each and every document that constitutes, evidences, refers, or relates in any way to such unacceptability;

(f) identify each and every person whom Complainant knows and/or believes to have knowledge of such unacceptability; and

(g) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) Complaint Counsel objects to this Interrogatory on the ground that the terms "hydraulically calculated operating pressure" are undefined, unclear, vague and ambiguous. Without waiving its objection, and assuming that Respondents ask whether Complainant deems acceptable any corrective action plan that would involve a one-time test of a sample of Omegas from buildings in which Omegas are installed, Complaint Counsel responds that such a corrective action plan is unacceptable to correct the substantial product hazard presented by Omegas.

(b) (inapplicable in light of response to (a); no response necessary pursuant to

instructions)

(c) Complaint Counsel incorporates its response to (a), above. Complaint Counsel further objects to this Interrogatory on the ground that it seeks privileged work product, and legal conclusions. Without waiving its objections, Complaint Counsel responds that it deems such a corrective action plan unacceptable because (1) the overall failure rate of Omegas in testing, based on thousands of samples tested to date, is so high, coupled with the fact that fires have been documented in which Omegas reportedly failed to activate, that removal of Omegas cannot be delayed; (2) testing in light of the high failure rate of Omegas to date would divert resources and time unnecessarily from correcting the hazard presented by Omegas; (3) testing in this manner has been shown to be an unreliable indicator of whether any given Omega (that was not one of the sample tested from a building) will operate when exposed to its activation/triggering temperature; (4) the water pressure in a building is not a constant - it is a variable, based on numerous factors, and therefore there is no "static pressure" that can be used as a standard; and (5) once one or more sprinklers activate in a fire situation, the water pressure "seen" by any other sprinkler will always be less than the building's water pressure prior to the opening of any sprinklers.

(d) (no subpart (d) is included in this Interrogatory)

(e) All results of tests of Omega sprinklers provide evidence of the reasons stated by Complaint Counsel in section (c), above. As well, all reports of

fires in which Omegas allegedly failed to activate support same.

(f) Complaint Counsel and its staff have knowledge of their contention that such proposed corrective action plans are unacceptable. Respondents and their attorneys also have knowledge of Complaint Counsel's position, as that position has been communicated to them.

(g) The substance of the knowledge possessed by Complaint Counsel and its staff, as well as by Respondents, regarding Complaint Counsel's position on the unacceptability of a testing-based corrective action plan is as stated in subpart (c), above.

D. CPSC Investigation

115. Identify all persons employed or otherwise retained by the CPSC who in any way participated in the CPSC's investigation of the Omegas. For each person identified, describe his or her role in the investigation.

Response: Complaint Counsel objects to this Interrogatory on the ground that the term "participated in the CPSC's investigation of the Omegas" is unclear, vague and ambiguous, as the use of the past tense indicates an intent to limit the Interrogatory to some time in the past, and the Interrogatory fails to specify the time period to which it refers. Complaint Counsel further objects to this Interrogatory on the ground that it requests information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel identifies the following staff who have participated in the CPSC's investigation of Omega sprinklers prior to the assignment of Complaint Counsel of record to the case: Catherine Cumberland, Marc

Schoem, Eric Stone, Andrew Stadnik, Rohit Khanna, Nicholas Marchica, Mark Kumagi, James Hoebel. Complaint Counsel objects to this Interrogatory to the extent that it exceeds the requirements of 16 C.F.R. § 1026.31 regarding discovery of facts known and opinions held by experts. Without waiving its objection, Complaint Counsel further responds that it has not yet determined which witnesses it will call to testify at the hearing in this matter. Complaint Counsel will supplement its response as such decisions are made.

116. Describe the circumstances surrounding, and the reasons giving rise to the CPSC's decision to investigate alleged risks associated with the Omegas. Your response should include, without limitation, the following:

(a) the date that the CPSC decided to investigate the Omegas;

(b) the identity of all persons at the CPSC involved in the decision to investigate the Omegas; and

(c) the identity of all information (including, but not limited to, any consumer complaints) available to or otherwise relied upon by the CPSC in deciding to initiate an investigation of the Omegas.

Response: Complaint Counsel objects to this Interrogatory on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Interrogatory on the ground that it requests information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory on the ground that it seek irrelevant information not reasonably calculated to lead to the discovery of admissible evidence, as the CPSC's investigation of Omega

sprinklers, and the propriety thereof and bases therefore, are not at issue in this litigation. Without waiving its objections, Complaint Counsel responds as follows:

(a) CPSC initiated its investigation of Omega sprinklers on or about May, 1996.

(b) Catherine A. Cumberland and Marc J. Schoem, in consultation with Eric L. Stone.

(c) CPSC initiated its investigation after receiving information regarding two fires in which Central Omega sprinklers reportedly failed to operate: one at a VA hospital in New York, and the other at a Marriott Hotel in Michigan.

117. Describe in detail any investigation by the CPSC relating to consumer complaints and/or consumer reports of personal injury, property damage, non-activation, or any other problems allegedly associated with the Omegas. Your response should include, without limitation, the following:

(a) the identity of any and all persons employed or otherwise retained by the CPSC who participated in this aspect of the investigation;

(b) the identity of all consumers with whom the CPSC communicated in connection with this aspect of the investigation;

(c) the identity of all consumers who complained of or reported an incident relating to the Omegas;

(d) the identification of any consumer questionnaires or other surveys used by the CPSC in conducting this aspect of the investigation; and

(e) the identification of any and all data, reports, survey results, or other information revealing the results of this aspect of the investigation.

Response: Complaint Counsel objects to this Interrogatory on the ground that the terms "non-activation" and "consumer complaints" are undefined, unclear, vague and ambiguous. Complaint Counsel objects to this Interrogatory on the ground that it requests information pertaining to the identity of consumers in prohibition of 15 U.S.C. § 2074(c). Complaint Counsel further objects to this Interrogatory on the ground that it requests information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence, as the CPSC's investigation of Omega sprinklers, and the propriety thereof and bases therefore, are not at issue in this litigation. Without waiving its objections, Complaint Counsel responds that it is currently investigating whether reports that it has received regarding sprinklers are "in connection with the Omegas," and whether they report property damage and/or personal injury in connection therewith. Complaint Counsel will supplement its response to this Interrogatory as additional information becomes available.

118. **Identify and describe any and all incidents known to the CPSC in which a consumer or other person has reported a fire in connection with use of the Omegas. For each such incident, state the following:**

(a) the name and address of the consumer;

(b) the date of the incident involving the fire;

(c) a description of any and all property damage, if any, caused by or associated with the fire; and

(d) a description of any and all personal injuries, if any, sustained as a

result of or associated with the fire.

Response: Complaint Counsel objects to this Interrogatory on the ground that it is vague, ambiguous, and unclear as worded. Complaint Counsel further objects to this Interrogatory on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Interrogatory on the ground that it requests information pertaining to the identity of consumers in prohibition of 15 U.S.C. § 2074(c). Complaint Counsel further objects to this Interrogatory on the ground that it requests information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, and assuming that a fire "in connection with use of the Omegas" means a fire in which one or more Omegas exposed to their activation/triggering temperature may not have activated, as that term is defined in Complaint Counsel's discovery to Respondents, Complaint Counsel identifies the following fires of which it is aware:

1. (a) Location: Marriott International, Inc., 10400 Fernwood Road, Bethesda, MD 20817

   (b) 1/26/95

   (c) damage to room

   (d) employee injured

2. (a) Department of Veteran's Affairs, Veteran's Health Administration, Washington, DC

   (b) 5/16/95

   (c) smoke and water damage

   (d) Complaint Counsel has insufficient information at this time with which to

respond to this subpart.

3. (a) Location: Uptown Manor, 1354 N. Harper, West Hollywood, CA

(b) 1/18/97

(c) damage to property and contents

(d) Complaint Counsel has insufficient information at this time with which to respond to this subpart.

4. (a) Location: Ft. Wayne Children's Home/Crossroads, 2525 Lake Avenue, Ft. Wayne, IN

(b) 4/6/97

(c) damage to bed, bedding, and room

(d) Complaint Counsel has insufficient information at this time with which to respond to this subpart.

5. (a) Location: Mel's Marina, 300 Pensacola Beach Road, Gulf Breeze, FL 32561

(b) 9/28/97

(c) property damage; contents damage; total on the order of $3 million

(d) Complaint Counsel has insufficient information at this time with which to respond to this subpart.

6. (a) Location: Kent Manor Inn, 500 Kent Manor Dr., Stevensville, MD 21666

(b) 10/27/97

(c) approx. $50,000 damage - structural and contents

(d) Complaint Counsel has insufficient information at this time with which to

respond to this subpart.

7. (a) Location: Lorene Lodge, 470 Lorene Dr., SW, Marietta, GA 30060

(b) 2/6/98

(c) damage to room and contents

(d) Complaint Counsel has insufficient information at this time with which to respond to this subpart.

8. (a) Location: Monserrat School of Art, 31 Elliott St., Beverly, MA 01915

(b) 3/1/98

(c) approx. $15,000 damage to contents and structure

(d) Complaint Counsel has insufficient information at this time with which to respond to this subpart.

Complaint Counsel is continuing its investigation into possible fires in which an Omega failed to activate, and will supplement its response to this Interrogatory as additional information becomes available. Further, Complaint Counsel has requested information responsive to this Interrogatory from Respondents in discovery.

119. To the extent not already identified in response to Interrogatory Nos. 117-118, identify and describe any and all incidents known to the CPSC in which a consumer or other person has reported any form of property damage or personal injury in connection with the Omegas. For each such incident, state the following:

(a) the name and address of the consumer;

(b) the date of the incident involving the alleged property damage and/or personal injury;

(c) a description of the type of property damage allegedly sustained; and

(d) a description of any and all personal injury allegedly sustained.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests information pertaining to the identity of consumers in prohibition of 15 U.S.C. § 2074(c). Without waiving its objections, Complaint Counsel responds that it is currently investigating whether reports that it has received regarding sprinklers are "in connection with the Omegas," and whether they report property damage and/or personal injury in connection therewith. Complaint Counsel will supplement its response to this Interrogatory as additional information becomes available.

120. Describe in detail any and all communications between the CPSC and any dealer, retailer, or distributor in connection with the Omegas. Your response should include, without limitation, the following:

(a) the identity of any and all persons employed or otherwise retained by the CPSC who participated in this aspect of the investigation;

(b) the identity of any and all dealers, retailers, or distributors with whom the CPSC communicated in connection with this aspect of the investigation of the Omegas;

(c) a description of the content of the CPSC's communications with each such dealer, retailer, or distributor;

(d) the identification of any questionnaires or other surveys used by the CPSC in communicating with each such dealer, retailer, or distributor; and

(e) the identification of any and all data, reports, surveys results, or other

information revealing the results of this aspect of the investigation.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests information prepared by or for Complaint Counsel in preparation for litigation, and thus protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory to the extent that it seeks information provided to CPSC by third parties who claim confidentiality or trade secret. Without waiving its objection, Complaint Counsel will provide copies of all such communications that are in the public domain.

121. Describe in detail any and all communications between the CPSC and any Authority Having Jurisdiction ("AHJ") in connection with the Omegas. Your response should include, without limitation, the following:

(a) the identity of any and all persons employed or otherwise retained by the CPSC who participated in this aspect of the investigation;

(b) the identity of any and all AHJ's with whom the CPSC communicated in connection with this aspect of the investigation;

(c) a description of the content of the CPSC's communication with each such AHJ;

(d) the identification of any questionnaires or other surveys used by the CPSC in communicating with each such AHJ; and

(e) the identification of any and all data, reports, surveys results, or other information revealing the results of this aspect of the investigation.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests information prepared by or for Complaint Counsel in preparation for litigation, and thus protected

from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory to the extent that it seeks information provided to CPSC by third parties who claim confidentiality or trade secret. Without waiving its objection, Complaint Counsel will provide copies of all such communications that are in the public domain.

122. Describe in detail any and all communications between the CPSC and any state law enforcement authorities in connection with the Omegas. Your response should include, without limitation, the following:

(a) the identity of any and all persons employed or otherwise retained by the CPSC who participated in this aspect of the investigation;

(b) the identity of any and all state law enforcement authorities with whom the CPSC communicated in connection with this aspect of the investigation of the Omegas;

(c) a description of the content of the CPSC's communications with each such state law enforcement authority;

(d) the identification of any questionnaires or other surveys used by the CPSC in communicating with each such state law enforcement authority; and

(e) the identification of any and all data, reports, surveys results, or other information revealing the results of this aspect of the investigation.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests information prepared by or for Complaint Counsel in preparation for litigation, and thus protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory to the extent that it seeks information provided to CPSC by third parties who claim confidentiality or trade secret. Without waiving its objection, Complaint Counsel will provide

copies of all such communications that are in the public domain.

123. Describe in detail any and all communications between the CPSC and any federal law enforcement authorities in connection with the Omegas. Your response should include, without limitation, the following:

(a) the identity of any and all persons employed or otherwise retained by the CPSC who participated in this aspect of the investigation;

(b) the identity of any and all federal law enforcement authorities with whom the CPSC communicated in connection with this aspect of the investigation of the Omegas;

(c) a description of the content of the CPSC's communications with each such federal law enforcement authority;

(d) the identification of any questionnaires or other surveys used by the CPSC in communicating with each such federal law enforcement authority; and

(e) the identification of any and all data, reports, surveys results, or other information revealing the results of this aspect of the investigation.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests information prepared by or for Complaint Counsel in preparation for litigation, and thus protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory to the extent that it seeks information provided to CPSC by third parties who claim confidentiality or trade secret. Without waiving its objection, Complaint Counsel will provide copies of all such communications that are in the public domain.

E. Design and Testing

124. Identify and describe any and all testing of the Omegas conducted by or on behalf of the CPSC. Your response should include, without limitation, the following:

(a) a description of any testing protocols used by the CPSC in testing the Omegas;

(b) the identity of the person(s) who created or established any such testing protocols for the Omegas;

(c) a description of the methodology employed during each and every test of the Omegas;

(d) the date of each and every test of the Omegas;

(e) an identification of the person(s) who conducted, participated in, or were otherwise present during each test of the Omegas;

(f) a description of the results of each and every test of the Omegas; and

(g) the identification of any and all documents (including videotapes and audiotapes) relating to any testing of the Omegas.

Response: Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and thus protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel responds that it is currently in the process of testing Omega sprinklers, and will produce all non-privileged documents relating thereto as soon as they are available.

125. Identify any and all outside consultants, experts, or other persons who assisted, advised, or otherwise communicated with the CPSC with respect to any testing of the Omegas. For each such person, describe his or her role in the testing, and the communications between that person and the CPSC.

Response: Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in preparation for litigation, and therefore protected from discovery pursuant to the work product privilege. Complaint Counsel further objects to this Interrogatory to the extent that it exceeds the requirements of 16 C.F.R. § 1026.31 regarding discovery of facts known and opinions held by experts, and on the ground that it violates 16 C.F.R. 1025.31(c)(4)(ii). Without waiving its objections, Complaint Counsel will produce all non-privileged results of testing of Omega sprinklers, and will identify, in its supplemental response to Interrogatory No. 104, all experts whom it expects to call at trial in this matter, and all information required to be disclosed pursuant to 16 C.F.R. § 1025.31(c)(4), once it is determined who those experts will be.

126. For each test of the Omegas conducted by the CPSC, describe in detail the condition and age of the specific Omegas used in the test. Your response should include, without limitation, the following:

(a) an identification of each specific Omega by model number;

(b) a description of how and when the CPSC obtained each specific Omega used in the testing;

(c) a description of the condition of each specific Omega used in the testing (e.g., new, used, damaged, dented, etc. . .);

(d) a statement of the age of each specific Omega used in the testing;

(e) a statement of whether the CPSC has retained and the current location of each specific Omega used in the testing; and

(f) if the CPSC has since destroyed or discarded any Omegas used in its testing, a statement of the reasons for that action.

Response: See Response to Interrogatory No. 126. Complaint Counsel also objects to this interrogatory on the ground that the terms "condition" and "age" are undefined, unclear, vague and ambiguous.

127. For each test of the Omegas conducted by the CPSC, describe in detail the piping used in the sprinkler system from which the Omegas were removed. Your response should include, without limitation, the following:

(a) the material constituting the piping;

(b) the presence of any treatments or substances applied to the piping;

(c) the contents of any and all materials or substances inside the piping; and

(d) a description of the overall condition of the piping.

Response: See Response to Interrogatories 124, 125 and 126. Complaint Counsel also objects to this Interrogatory on the ground that the terms "materials or substances inside" and

"overall condition" are undefined, unclear, vague and ambiguous.

128. **For the time period 1990 through the present, identify and describe any and all testing of any non-Omega sprinkler heads conducted by or on behalf of the CPSC. Your response should include, without limitation, the following:**

(a) a description of any testing protocols used by the CPSC in testing the non-Omega sprinkler heads;

(b) the identity of the person(s) who created or established any such testing protocols for the non-Omega sprinkler heads;

(c) a description of the methodology employed during each and every test of the non-Omega sprinkler heads;

(d) the dates of each and every test of the non-Omega sprinkler heads;

(e) an identification of the person(s) who conducted, participated in, or were otherwise present during each test of the non-Omega sprinkler heads;

(f) a description of the results of each and every test of the non-Omega sprinkler heads; and

(g) the identification of any and all documents (including videotapes and audiotapes) relating to any testing of the non-Omega sprinkler heads.

Response: Complaint Counsel objects to this Request to the extent that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel further objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request on the ground that to the

extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel responds that it has not at this time conducted any testing on non-Omega sprinklers.

129. To the extent that you contend, or otherwise intend to present at the hearing in this matter, the feasibility and/or propriety of any alternative design features for the Omegas, identify and describe any such proposed alternative design features. Your response should include, without limitation, a description of all data, testing, reports, or other information supporting this contention.

Response: Complaint Counsel objects to this Request on the ground that the terms "feasibility and/or propriety of" (in the context of "alternative design features for the Omegas"), and "any alternative design features for the Omegas" are undefined, unclear, vague and ambiguous, and that the question as a whole is unintelligible, and thus precludes Complaint Counsel from formulating a response without clarification of its meaning.

F. Risk Assessment

130. Set forth the factual basis of your contention in Paragraph 15 of the Complaint that the Omegas "create a substantial risk of injury to the public within the meaning of Section 15(a)(2) of the CPSA, 15 U.S.C. § 2064(a)(2)." Your response should include, without limitation, the following:

(a) a description of the specific risks of injury that you contend are presented by the Omegas;

(b) a description of the criteria or factors used by the CPSC in determining that each risk allegedly associated with the Omegas constitutes a "substantial risk" within the meaning of 15 U.S.C. § 2064(a)(2); and

(c) an identification of any and all data, survey information, or testing relating to the alleged risks associated with the Omegas.

Response: See Complaint Counsel's Response to Interrogatory No. 77.

131. Describe in detail any and all measures taken by the CPSC to determine the severity of the risk allegedly associated with the Omegas, including, without limitation:

(a) a description of how the CPSC measures the severity of the risk allegedly associated with the Omegas;

(b) a statement of whether the measurement employed by the CPSC incorporates, considers, or is in any way adjusted to reflect the number of products in use and the frequency of use of the Omegas;

(c) a description of all efforts taken by the CPSC to measure the severity of the risk or probability of injury allegedly associated with the Omegas; and

(d) an identification of all data, studies, and reports that quantify or otherwise provide an assessment of the risk or probability of injury allegedly associated with the Omegas.

Response: a) Complaint Counsel objects to this Interrogatory on the ground that the term "measures" is undefined, unclear, vague and ambiguous as used herein. Complaint Counsel also objects to this Interrogatory on the ground that it

calls for a legal conclusion. Without waiving its objection, Complaint Counsel responds that CPSC does not measure severity of the risk created by consumer products as the term "measure" is defined by Webster's Dictionary, to which Respondents point for definition of terms not otherwise defined. Without waiving its objection, Complaint Counsel responds that it determined the severity of the risk posed by Omega sprinklers according to 15 U.S.C. § 2064(a)(2) and 16 C.F.R. § 1115.12. Pursuant to 15 U.S.C. § 2064(a)(2), severity of the risk is one of the factors the staff may consider in determining whether a product defect creates a substantial risk of injury to the public. According to 16 C.F.R. § 1115.12(g)(1)(iii), a risk is severe if the injury which might occur is serious and/or if the injury is likely to occur. When a sprinkler does not activate in a fire, it cannot suppress or contain the fire, thus exposing the public to the risk of injury and/or death that are both serious and likely to occur.

b) Complaint Counsel objects to this Interrogatory on the ground that the term "measurement" is undefined, unclear, vague and ambiguous, as used herein. Without waiving its objection, and by way of clarification, Complaint Counsel responds that CPSC does not engage in a measurement of the severity of the risk created by consumer products as the term "measurement" is defined by Webster's Dictionary, to which Respondents

point for definition of terms not otherwise defined. Moreover, pursuant to 15 U.S.C. § 2064(a)(2), the number of defective products distributed in commerce is one of the factors the staff may consider in determining whether a product defect creates a substantial risk of injury to the public, and that factor is a distinct factor from the severity of the risk, pursuant to 16 C.F.R. § 1115.12(g)(1). By way of further clarification, Complaint Counsel states that one defective product can present a substantial risk of injury to the public, if the injury which might occur is serious and/or if the injury is likely to occur. 16 C.F.R. § 1115.12(g)(1)(ii).

c) Complaint Counsel reiterates its objections and responses to subparts (a) and (b) of this Interrogatory. Complaint Counsel further objects to this Interrogatory on the ground that it requests information prepared by or for Complaint Counsel in anticipation of litigation, and thus protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel responds that it reviewed Central's test results, and the results of testing of and incidents related to Omegas, by or for UL, FM and CPSC, S.E.A., Hughes Associates, BodyCote Taussig, University of Maryland, governmental entities (Office of the Maryland State Fire Marshall; Farifax County Virginia Fire Prevention Division), independent entities (NFPA) and other third parties.

d) See Response to subpart (c), above. Complaint Counsel objects to this

Interrogatory to the extent that it seeks information provided to Complaint Counsel on a confidential basis by third parties. Complaint Counsel will produce all non-privileged and non-confidential documents pertaining to the tests and fires. Complaint Counsel will produce other responsive documents received by third parties subject to a confidentiality claim upon receipt of permission by those parties, execution of an appropriate confidentiality stipulation by Respondents, and/or protective order by the Presiding Officer.

132. **Describe the CPSC's preliminary determination of the alleged risks associated with the Omegas. Your response should include, without limitation, the following:**

(a) the date the CPSC Staff issued its preliminary determination of the alleged risks associated with the Omegas;

(b) the identity of all persons involved in the Staff's preliminary determination;

(c) the level of hazard assigned to the Omegas in accordance with the applicable provisions of the CPSC Recall Handbook; and

(d) an identification of all data, studies, reports, and/or testing upon which CPSC relied in making its preliminary determination.

Response: Complaint Counsel objects to this Interrogatory on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of

admissible evidence. Without waiving its objection, Complaint Counsel responds as follows:

(a) 1/28/98

(b) Complaint Counsel objects to this subpart on the ground that the term "involved in the preliminary determination" is undefined, unclear, vague and ambiguous. Without waiving its objection, Complaint Counsel responds that Marc J. Schoem, Catherine A. Cumberland, and Eric H. Singer signed off on the preliminary determination. Eric Stone, Rohit Khanna, Nicholas Marchica, and Andrew Stadnik were all present for and/or contributed to the decision.

(c) Complaint Counsel objects to this subpart on the ground that it calls for a legal conclusion. Complaint Counsel further objects to this subpart on the ground that it request irrelevant information not likely to lead to the discovery of admissible evidence. Complaint Counsel further objects to this subpart on the ground that it requests confidential Agency information. The letter category of hazard classification is an internal Agency classification that is not generally publicly disclosed. Without waiving its objections, Complaint Counsel responds that Omegas were classified as a class "a" hazard.

(d) See response to (c), above.

133. Explain the factual basis underlying the level of hazard assigned to the

Omegas in the CPSC Staffs preliminary determination of the alleged risks associated with the Omegas. Your response should include a statement of the specific factors considered, and the data or information relied upon, by the CPSC Staff in determining the level of hazard assigned to the Omegas.

Response: Complaint Counsel objects to this Interrogatory on the ground that the terms "level of hazard assigned" are undefined, unclear, vague and ambiguous. Assuming that Respondents intend to refer to the Agency's internal hazard classification of Omega sprinklers, Complaint Counsel objects to this Interrogatory on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel further objects to this Interrogatory on the ground that it calls for a legal conclusion. Complaint Counsel further objects to this Interrogatory on the ground that it seeks information protected from discovery by the work product and/or attorney client privileges. Complaint Counsel also objects to this Interrogatory on the ground that it requests confidential Agency information. The letter category of hazard classification is an internal Agency classification that is not publicly disclosed. Without waiving its objections, Complaint Counsel responds that the basis for its hazard classification of Omega sprinklers was the results of testing by four organizations of a total of over 4,800 Omega sprinklers from sites around the nation, which yielded an approximately 40% failure rate, coupled with evidence of six fires in which Omegas reportedly failed to activate, and the fact that Omegas are designed to be a life safety device. When they do not function to suppress or contain a fire, the public is exposed to the risk of death or grievous injury.

134. State whether CPSC's preliminary determination and/or initial assignment of the level of hazard allegedly presented by the Omegas has changed over time. If so, describe any such change and the information or testing giving rise to the change.

Response: Complaint Counsel objects to this Interrogatory on the ground that the terms "initial assignment of the level of hazard" are undefined, unclear, vague and ambiguous. Assuming that Respondents intend to refer to the Agency's internal hazard classification of Omega sprinklers, Complaint Counsel objects to this Interrogatory on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel further objects to this Interrogatory on the ground that it calls for a legal conclusion. Complaint Counsel further objects to this Interrogatory on the ground that it seeks information protected from discovery by the work product and/or attorney client privileges. Complaint Counsel also objects to this Interrogatory on the ground that it requests confidential Agency information. The letter category of hazard classification is an internal Agency classification that is not generally publicly disclosed. Without waiving its objections, Complaint Counsel responds that its hazard classification for Omega sprinklers has not changed over time.

135. For the period from 1990 through the present, identify all consumer products classified by the CPSC as presenting a hazard level equal to, or greater than, the hazard level assigned to the Omegas. For example, if the Omegas have been classified as a "Class B" hazard, identify all other consumer products that have been classified as "Class B" hazards and all consumer products identified as "Class A" hazards. For each consumer

product identified in your response, you should provide the following:

(a) the identity of the consumer product by brand name or other description;

(b) the identification of the manufacturer of each such consumer product;

(c) the date of the CPSC's classification of the consumer product as presenting a hazard;

(d) the hazard level assigned each such consumer product;

(e) a description of the hazard presented by each such consumer product;

(f) for each such consumer product, the estimated total number of units manufactured as of the date the CPSC made its determination of the hazard level;

(g) for each such consumer product, the estimated total number of units in the hands of the consumers as of the date the CPSC made its determination of the hazard level;

(h) the number and severity of any and all personal injuries associated with each such consumer product;

(i) the number of deaths associated with each such consumer product; and

(j) the nature and number of property damage reports associated with each such consumer product.

Response: Complaint Counsel objects to this Interrogatory on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence.

Information pertaining to other consumer products classified by the staff as presenting a hazard priority level equal to or greater than the hazard level assigned to the Omegas will not lead to the discovery of admissible evidence regarding the hazard presented by the Omegas. Complaint Counsel further objects to this Interrogatory on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Interrogatory on the ground that it seeks confidential and/or trade secret or other information whose disclosure is prohibited pursuant to 15 U.S.C. § 2074 and/or 15 U.S.C. § 2055. Plaintiffs also object to this question to the extent that it seeks information that is protected by the attorney-client and work product privileges. Without waiving its objections, Complaint Counsel will provide all non-privileged and non-confidential information pertaining to other consumer products classified at a level equal to or greater than the hazard level at which Omega sprinklers are classified.

G. Sufficiency of Corrective Action

136. For each consumer product identified in your response to Interrogatory No. 135, describe any and all corrective action taken with respect to that product. Your response should include, without limitation, the following:

(a) a statement of the CPSC's role in effecting the corrective action;

(b) a statement of whether the corrective action that was taken was completely voluntary on the part of the manufacturer, retailer, or distributor, was the result of a negotiated corrective action plan with the CPSC, or otherwise was compelled by the CPSC through the initiation of an adjudicative proceeding pursuant to 15 U.S.C. § 2064; and

(c) the identification of all documents evidencing the corrective action taken with respect to each such consumer product.

Response: See response to Interrogatory No. 135.

137. For each consumer product identified in your response to Interrogatory No. 135, describe the nature and extent of the public notice provided as part of the corrective action taken. Your response should include, without limitation, the following:

(a) the specific nature of the notice given (e.g., written notice to consumers and retailers, press releases, bill-boards, posters, etc. . .);

(b) a description of the media coverage associated with the corrective action (e.g., newspaper ads and reports, magazine ads and reports, wire services, other print media, television coverage, radio coverage, and/or internet exposure);

(c) a description of the extent of media coverage and exposure of the corrective action (e.g., a list of all newspapers, magazines, wire services, television stations, radio stations, and internet services that provided notice or otherwise covered the corrective action);

(d) a description of the frequency and amount of media coverage associated with the corrective action (e.g., the number of days newspapers carried a written notice, or the number of days the notice appeared on television); and

(e) a description of any and all point of purchase notification to consumers associated with the corrective action (e.g., posters and notices provided to retailers to

display at stores).

Response: See Response to Interrogatory No. 135.

138. For each consumer product identified in your response to Interrogatory No. 135, describe the nature of the recall component, if any, of the corrective action taken. Your response should include, without limitation, the following:

(a) the number of individual units recalled;

(b) the remedy options offered to consumers (e g., replacement, refund, substitute products);

(c) an assessment of consumer participation in the recall (e g, percentage of units in the hands of consumers that were actually received by the recall);

(d) identification of any and all documents revealing the level of consumer participation in the recall; and

(e) a description of any studies conducted by the manufacturer, distributor, or retailer of the consumer product, or by the CPSC, or by both, or by any other person or entity, assessing the effectiveness of the recall program.

Response: See Response to Interrogatory No. 135.

139. Explain the factual basis of your contention, if any, that the corrective action proposal of Respondents in connection with the Omegas is insufficient to protect the public or otherwise fails to provide adequate remedial measures under 15 U.S.C. § 2064.

Response: Complaint Counsel objects to this Interrogatory on the ground that it does not specify to which proposal of Respondents it refers. Without waiving its objection, and assuming

that Respondents refer to their counsel's latest proposal for a testing-based corrective action program, Complaint Counsel reiterates its explanation in Response to Interrogatory No. 114.

140. Describe in detail the public notice, recall, and/or other remedial measures that you contend are necessary with respect to the Omegas to constitute a sufficient remedy and/or corrective action proposal under 15 U.S.C. § 2064.

Response: Complaint Counsel would seek to impose public notice pursuant to 15 U.S.C. § 2064 (c), including the following: public notice of the defect, including paid advertisements, video news releases, and other necessary and/or appropriate methods under the circumstances; mailing of notice to each person who is a manufacturer, distributor or retailer of Omega sprinklers; notice to every person to whom Respondents know Omega sprinklers were delivered or sold.

141. Identify and describe all efforts taken by the CPSC (including, without limitation, consumer surveys, press surveys, and public opinion polls) to evaluate, test, or otherwise determine the sufficiency of the corrective action proposal of Respondents with respect to the Omegas.

Response: Complaint Counsel objects to this Interrogatory on the ground that it does not specify to which proposal of Respondents it refers. Complaint Counsel further objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, and assuming that Respondents refer to their counsel's latest

proposal for a testing-based corrective action program, Complaint Counsel refers Respondents to its Response to Interrogatory No. 114.

142. Identify and describe all criteria and factors considered by the CPSC in measuring the sufficiency of the corrective action proposal of Respondents with respect to the Omegas.

Response: Complaint Counsel objects to this Interrogatory on the ground that it does not specify to which proposal of Respondents it refers. Complaint Counsel further objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel refers Respondents to its Response to Interrogatory No. 114.

143. Identify all public statements, press releases, or other information released to the public by the CPSC that in any way relates to or otherwise refers to the Omegas and/or Respondents.

Response: March 3, 1998 Administrative Complaint; March 4, 1998 press release and press statement; March 4, 1998 video news release relating to Omega sprinklers; Omega Sprinkler Questionnaire on CPSC web site; Omega Sprinkler Questionnaire on CPSC fax-on-demand service.

H. <u>Initiation of Adjudicative Proceedings</u>

144. For the time period beginning January 1, 1982 to the present, identify all

incidents in which the CPSC has filed an administrative complaint pursuant to Section 15 of the Consumer Product Safety Act (CPSA), 15 U.S.C. § 2064. Your response should include, without limitation, the following:

(a) the date the administrative action was filed;

(b) the identity of the manufacturers, distributors, or retailers of the consumer product named as respondents in the administrative action;

(c) the identity of the consumer product at issue;

(d) a description of the alleged "substantial product hazard" at issue in each case; and

(e) a description of the outcome of the administrative action and the nature of the remedy awarded.

Response: Complaint Counsel objects to this Interrogatory on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Any other administrative litigation relating to any product other than the Omega is irrelevant to the instant action.

145. Identify all persons employed or otherwise retained by the CPSC who in any way participated in the CPSC's decision to initiate the instant adjudicative proceeding against the Respondents.

Response: Complaint Counsel objects to this Interrogatory on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence.

The propriety of the Commission's decision to initiate the instant adjudicative proceeding against Respondents is not at issue herein. Complaint Counsel further objects to this Interrogatory on the ground that it is unclear, vague and ambiguous, as it fails to define "participated." Complaint Counsel also objects to this Interrogatory on the ground that it is overbroad and unduly burdensome. Without waiving its objections, Complaint Counsel responds that the Commissioners made the decision of whether to initiate the instant adjudicative proceeding, upon consultation with and advice of their staff and the Office of the General Counsel. Alan Schoem, Eric Singer, Eric Stone, Deborah Orlove and Catherine Cumberland could all be said to have participated in the decision to initiate the adjudicative proceeding.

146. State the date on which the CPSC authorized Complaint Counsel to initiate the instant adjudicative proceeding against the Respondents.

Response: Complaint Counsel objects to this Interrogatory on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. The timing of the Commission's decision to initiate the instant adjudicative proceeding, in relation to the filing of same, is not at issue herein. Without waiving its objections, Complaint Counsel responds that the Commissioners voted on whether to authorize the Complaint by ballot submitted on February 18, 1998, and voted on on February 18, 1998 (Chairman Ann Brown), February 26, 1998 (Commissioner Gall) and March 2, 1998 (Commissioner Moore).

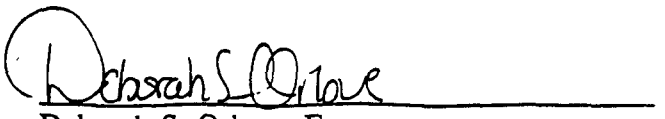
147. Identify all communications and documents (including internal memoranda and correspondence) relating to the CPSC's decision to initiate the instant adjudicative proceeding against the Respondents.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel further objects to disclosure of such information on the ground that it seeks information protected from discovery by the work-product and attorney-client privileges.

148. State the reasons for the CPSC's authorization of, and decision to initiate, the instant adjudicative proceeding against the Respondents.

Response: Complaint Counsel objects to this Interrogatory on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. The reasons for the CPSC's authorization of, and decision to initiate, the instant adjudicative proceeding are irrelevant to this action (though the basis for the staff's recommendation of same have been indicated herein). Complaint Counsel further objects to this Interrogatory on the ground that it calls for speculation on the part of Complaint Counsel as to the thoughts of the Commissioners. Complaint Counsel is unable to speak to the reasons for the individual Commissioner's authorizations of, and decisions to initiate, the instant adjudicative proceeding and, pursuant to proper agency procedure, is prohibited from making inquiry into such matters, other than to state that the Commission authorizes the issuance of administrative complaints upon information and belief that a product or products present a substantial product hazard. Complaint Counsel further responds that the Complaint speaks for itself.

DATED: April 27, 1998



Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.

Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, Maryland 20814
301-504-0626

dso\central\int.req

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, Complaint Counsel's **Responses to Respondents' First Set of Interrogatories** were deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

J. Gordon Cooney, Jr., Esq.
Thomas P. Hogan, Jr., Esq.
Emily J. Lawrence, Esq.
MORGAN, LEWIS & BOCKIUS LLP
2000 One Logan Square
Philadelphia, PA 19103
(215) 963-5000

Michael F. Healy, Esq.
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1800 M Street, NW
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(202) 467-7000

John C. Fenningham, Esq.
CORR, STEVENS & FENNINGHAM
Five Neshaminy Interplex, Suite 315
Trevose, PA 19053
(215) 639-4070

Attorneys for Central Sprinkler Corporation and Central Sprinkler Company

A copy was also served on the Presiding Officer pursuant to 16 C.F.R. § 1025.31(h) at:

The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
1099 14th St., NW, Suite 350
Washington, DC 20005

Dorothy S. Clark

Dated: April 27, 1998

certif.ser

ALL-STATE* LEGAL 800-222-0510 EDR11 RECYCLED

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of CENTRAL SPRINKLER CORP., and CENTRAL SPRINKLER CO., Respondents	CPSC DOCKET NO. 98-2

COMPLAINT COUNSEL'S INDEX OF RESPONSIVE DOCUMENTS TO RESPONDENTS' FIRST INTERROGATORIES AND FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS

Complaint Counsel provides this list of documents produced in response to Respondents' first set of discovery requests, indicating the Requests and Interrogatories to which the documents correspond. Documents listed as responsive to particular Interrogatories and/or Requests may be responsive to other Requests and Interrogatories as well.

Request for Production	Bates Nos.
1	0001-1025; 1082-1458
	1459-1519
4	2037 - 2134
9	0001-1025; 1082-1458
15	1459-1519
16	1459-1519
17	2022-2035

22	2016
30	1991 - 1998
38	2138 - 2140
40	2135 - 2137
42	2000 - 2001
	and Video News Release (video)
43	2000 - 2015
	and Video News Release (video)

Interrogatory	Bates Nos.
51	0001-1025; 1082-1458
	1459-1519
52	0001-1025; 1082-1458
53	0001-1025; 1082-1458
	1459-1519
82	1459-1519
106	2016
131	0001-1025; 1082-1458
	1459-1519
136	1026 - 1080
143	press release

DATED: April 27, 1998

Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.

Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, Maryland 20814
301-504-0626

index.doc

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, Complaint Counsel's **INDEX OF RESPONSIVE DOCUMENTS TO RESPONDENTS' FIRST INTERROGATORIES AND FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS** was deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

J. Gordon Cooney, Jr., Esq.
Thomas P. Hogan, Jr., Esq.
Emily J. Lawrence, Esq.
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John C. Fenningham, Esq.
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Five Neshaminy Interplex, Suite 315
Trevose, PA 19053
(215) 639-4070

Attorneys for Central Sprinkler Corporation and Central Sprinkler Company

Responsive documents were copied by Complaint Counsel and provided to J. Gordon Cooney at the above address.

A copy was also served on the Presiding Officer pursuant to 16 C.F.R. § 1025.31(h) at:

The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
1099 14th St., NW, Suite 350
Washington, DC 20005

Dated: 4/27/98

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Morgan, Lewis
& Bockius LLP
COUNSELORS AT LAW
125 years
1873 1998

Thomas P. Hogan, Jr.
215-963-5253

May 1, 1998

VIA TELECOPIER

Deborah S. Orlove
Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4430 East West Highway
Bethesda, MD 20814

Re: In the Matter of Central Sprinkler Corp., et al. (CPSC Docket No. 98-2)

Dear Ms. Orlove:

On Wednesday, April 29, 1998, we received Complaint Counsel's written discovery responses. However, to date, we still have not received any documents. Please immediately address this matter. In addition, in the future, please arrange for prompt and reliable service of any documents and/or pleadings.

Regarding your discovery responses, a quick reading reveals that these responses are highly deficient. In essence, the Staff has failed to provide any evidence or requested information supporting the Complaint in this matter. We will provide a detailed analysis of the deficiencies in the Staff's discovery responses once we receive the documents you are producing, and hope that you will make a good faith attempt to provide meaningful supplemental responses. In the absence of such supplemental responses, we will be forced to file a motion to compel.

There are several preliminary matters regarding the Staff's discovery responses which must be addressed immediately. First, regarding all claims of documents or information allegedly protected by the attorney-client privilege or work product doctrine, please immediately produce a privilege log as required by the discovery requests and applicable practice and procedure. Given the expedited nature of these proceedings, we will expect to receive such a log no later than May 8, 1998.

Second, the Staff has delayed providing certain documents pending the entry of a Confidentiality Agreement. Unfortunately, you did not choose to raise this issue with us prior to raising such an objection, nor have you suggested any agreement. To remedy this problem, attached is a draft Confidentially Agreement. Please provide me with any comments by the end of the day on May 5, 1998. In the absence of any comments, given the expedited nature of these proceedings, we will submit the Confidentiality Agreement for Court approval.

Third, your discovery responses reveal that the CPSC has been in contact with not only former Central employees, but also current Central employees. Such ex parte contacts are a clear breach of ethical obligations and are contrary to the Staff's prior written representations that no such contacts had occurred. Please immediately produce all evidence related to such contacts, which clearly cannot be considered privileged in any manner. Under no circumstances should the Staff engage in ex parte contacts with the Court regarding these contacts, which appears to be the course of action you suggest in your discovery responses. In this regard, please immediately confirm that you will not make any ex parte submissions to Judge Moran without substantial prior notice that would give us an opportunity to object to any such one-sided factual submissions to the Court.

Regards,

Thomas P. Hogan, Jr.

TPH/lgh

Enclosure

DRAFT

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446	:	**CPSC Docket No. 98-2**
	:	
and	:	
	:	
Central Sprinkler Co., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446,	:	
	:	
Respondents.	:	
	:	

CONFIDENTIALITY AGREEMENT

Respondents Central Sprinkler Corporation and Central Sprinkler Company (collectively, "Central") and Petitioner the Consumer Product Safety Commission (the "CPSC"), through undersigned counsel, hereby agree:

1. Petitioner and Respondents shall have the right to limit access to any document or other item relevant to this litigation, including without limitation answers to interrogatories and any portion of deposition testimony or other testimony by a witness, to the undersigned outside counsel for the parties.

2. Such documents or other tangible items must be designated by conspicuously stamping the words "OUTSIDE COUNSEL ONLY" on each page of the designated material or by notifying the other party in writing of the material to be considered so designated. With regard to testimony, a party may limit access to such testimony to the undersigned outside counsel by notifying the other party of the portion of testimony to be designated on the record at the deposition or in writing no later than two days after the transcript is received.

3. Information designated for "OUTSIDE COUNSEL ONLY" shall not be disclosed or disseminated to anyone, except:

a. the undersigned outside counsel for any party, and the employees of such counsel to whom it is necessary that the information be disclosed for purposes of this litigation only; or

b. any expert engaged by a party for the purposes of assisting in the preparation of this litigation, provided, however, that no such information shall be disseminated to any expert who is employed by a direct business competitor of Central or its affiliates; or

c. any person, entity, or firm with the prior written consent of all parties.

4. Petitioner and Respondents shall have the right to designate as CONFIDENTIAL any document or other item relevant to this litigation, including without limitation answers to interrogatories and any portion of deposition testimony or other testimony by a witness.

5. Such documents or other tangible items must be designated by conspicuously stamping the words "CONFIDENTIAL" on each page of the designated material or by notifying the other party in writing of the material to be considered so designated. With regard to testimony, a party may designate portions of the record CONFIDENTIAL by notifying the other party on the record at the deposition or in writing no later than two days after the transcript is received.

6. Information designated "CONFIDENTIAL" shall not be disclosed or disseminated to anyone, except:

a. a party, counsel for any party, and the employees of such counsel to whom it is necessary that the information be disclosed for purposes of this litigation only; or

b. any expert engaged by a party for the purpose of assisting in the preparation of this litigation, provided, however, that no CONFIDENTIAL information shall be disseminated to any expert who is employed by a direct business competitor of Central or its affiliates; or

c. any person who was involved in the preparation of the document or information; or

d. any other person, entity, or firm with the prior written consent of all parties.

7. Any party that provides documents or other discovery obtained from the other party in the course of this litigation to any person (other than the Court, court personnel, and court reporters) will first obtain from such person, prior to any such dissemination, a written statement in the form attached as Exhibit "A" hereto, that such person agrees to be bound by this Confidentiality Agreement. The undersigned counsel shall maintain a list of all such persons along with the written agreement of each person. Upon request of any party at any time, counsel in possession of the written agreements shall immediately either: (a) provide copies of the written agreements to the requesting party; or (b) submit the written agreements to the Court to determine whether any aspect of the written agreements are protected from discovery by any privilege.

8. When any document or information designated "CONFIDENTIAL" or "OUTSIDE COUNSEL ONLY," or other pleadings or papers disclosing or referring to such information are used in connection with any motion, hearing, filing or other submission to the Court, they shall be filed in an envelope under seal pursuant to the rules of this Court and shall be marked as follows:

> CONFIDENTIAL/RESTRICTED:
> The contents of this envelope are not to be revealed to anyone except the Court, or with the prior consent of all the parties herein, or pursuant to any other Order of this Court. If the contents are thus revealed, they shall thereafter be resealed.

9. a. Nothing in this Agreement shall preclude any party from challenging a designation of "CONFIDENTIAL" OR "OUTSIDE COUNSEL ONLY" by another party. If any party elects to challenge a designation of any document, deposition testimony, or

information pursuant to this order, that party must provide at least five days advance notice to afford the designating party an opportunity to remove voluntarily such designation.

b. If, after the five-day period has expired, the designating party has not agreed to remove the designation and the parties are otherwise unable to resolve the challenge to the designation, the challenging and designating parties shall contact the Court for a determination of whether the challenged designation is appropriate. The challenging party shall provide the Court with one copy of each document, response, or portion of transcript challenged. The challenging party has the burden of proving the inapplicability and/or incorrectness of any designation.

c. If the challenge is not resolved by agreement, or by voluntary removal, and if the Court is not contacted, then the designation shall remain in effect and shall continue to apply to such document or information.

10. All documents and other discovery produced or obtained in the course of this litigation, whether designated "CONFIDENTIAL" or "OUTSIDE COUNSEL ONLY" or not, shall be used for the sole and limited purpose of preparation for and trial of this action and shall not be used for any other purpose. "For purposes of preparation and trial of this action," as used in this Order, means that individuals obtaining access to discovery: (i) can read and review such discovery to become knowledgeable about this litigation; and (ii) can comment on such discovery to counsel for the parties if they so choose. All other uses, including but not limited to (1) making such discovery available to any person who has not signed Exhibit "A" hereto and (2) causing such discovery to be published in any trade journal, newspaper, or other written

publication other than filings with this Court connected with this litigation, shall fall outside the definition of "For purposes of preparation for and trial of this action." Nothing in this Confidentiality Agreement shall preclude persons wishing to use discovery from this litigation for purposes other than "For purposes of preparation for and trial of this action" from moving this Court, upon reasonable notice to the parties, for appropriate relief.

11. Within thirty days of the close of this litigation for any reason, each party shall retrieve all copies of materials designated "CONFIDENTIAL" or "OUTSIDE COUNSEL ONLY" from his or its own files, and from experts or other persons to whom he or it has provided such materials consistent with this Confidentiality Agreement, and shall do one of the following: (1) return to the designating party all such materials, including all copies thereof, produced by such designating party during this action; or (2) certify in writing to the designating party that all materials designated "CONFIDENTIAL" or "OUTSIDE COUNSEL ONLY" produced by such other party during this action have been destroyed. All material protected by this Confidentiality Agreement which has been placed in any computer databank, hard drive, or disk shall be completely erased, and any documents listing or summarizing information protected by this Confidentiality Agreement shall be destroyed within the same period.

12. Nothing herein contained shall be construed to preclude or limit any party from opposing any discovery on any grounds that would otherwise be available. This Agreement shall not, in and of itself, prejudice any contention of any party upon any motion, nor shall this Agreement constitute a waiver of any right to seek relief from the Court from any and all of the provisions hereof or other modifications of the terms hereof. This Agreement shall not limit any party's

right to seek judicial review or to seek further and additional protection against or limitation upon production or dissemination of information and documents or their contents.

13. Nothing herein shall be construed to preclude or limit the presence of any individual at any hearings in or the trial of this action.

DRAFT

Dated: _____

_____

J. Gordon Cooney, Jr.
Thomas P. Hogan, Jr.
Emily J. Lawrence
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John C. Fenningham
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Five Neshaminy Interplex, Suite 315
Trevose, PA 19053
(215) 639-4070

Attorneys for Respondents
CENTRAL SPRINKLER CORP. and
CENTRAL SPRINKLER COMPANY

DRAFT

Dated: _____

_____

Deborah S. Orlove
Eric H. Singer
Howard N. Tarnoff

Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4430 East West Highway
Bethesda, MD 20814
(301) 504-0626

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446	:	**CPSC Docket No. 98-2**
	:	
and	:	
	:	
Central Sprinkler Co., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446,	:	
	:	
Respondents.	:	
	:	

EXHIBIT "A" TO CONFIDENTIALITY AGREEMENT

I hereby certify that I have read the CONFIDENTIALITY AGREEMENT entered into by the parties in the above-captioned litigation. I hereby agree to be bound by the terms of the CONFIDENTIALITY AGREEMENT and to submit personally to the jurisdiction of the Administrative Law Judge assigned to this action for purposes of enforcing my agreement to be bound by the terms of the CONFIDENTIALITY AGREEMENT.

I hereby agree that I will use any documents or other discovery produced or provided by a party in the above-captioned litigation for the sole and limited purposes of preparation for and trial of the above-captioned litigation.

DRAFT

Date: _____ Signature: _____

2000 One Logan Square
Philadelphia, PA 19103-6993
215-963-5000
Fax: 215-963-5299

Thomas P. Hogan, Jr.
215-963-5253

Morgan, Lewis
& Bockius LLP
COUNSELORS AT LAW
125 years

May 4, 1998

VIA TELECOPIER & REGULAR MAIL

Deborah S. Orlove
Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4430 East West Highway
Bethesda, MD 20814

Re: In the Matter of Central Sprinkler Corp., et al. (CPSC Docket No. 98-2)

Dear Ms. Orlove:

As we preliminarily indicated to you in my letter of May 1, the Staff's discovery responses are deficient. In fact, it appears either that the Staff is entirely lacking in any factual predicate for the Complaint or that the Staff is simply refusing to produce even the most fundamental information in its possession.

This letter will serve to detail the deficiencies in the Staff's discovery responses. Due to the 20 day limitation imposed by 16 C.F.R. § 1025.36, we will expect supplemental responses in hand on or before May 8, 1998. In the absence of such responses, we will file a motion to compel.[1/]

A. Interrogatories

1. Failure To Identify People -- Throughout the Staff's Interrogatory Responses, you have failed to provide the names of persons with knowledge of pertinent information (e.g., Response Nos. 5-24, 53-72). Such basic information is explicitly required by the discovery rules, and is necessary in order for Central to take the depositions of key witnesses. Given the

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1/ Additionally, this letter will confirm that we finally received the actual documents from the Staff on May 4, 1998, a full week after such documents were due. In the future, please arrange for prompt delivery of all discovery responses and pleadings.

time limits imposed by the Administrative Regulations, the Staff's failure to provide the requested information severely prejudices Central.

2. Failure To Identify Documents -- Except in the most general and vague fashion, you have failed to identify documents related to key information (e.g., Response Nos. 5-24, 53-72). In addition, merely promising to produce relevant and responsive documents at some unspecified future date is inadequate (e.g., Response Nos. 78-83) -- documents identifiable and available now must be identified and produced now.

3. Failure To Respond -- For a large majority of the Staff's Interrogatory Responses, you have simply provided no response whatsoever (e.g., Response Nos. 5-40, 74-84, 102, 105, 124, 140-42). While repeating voluminous objections and half-answers, you fail to provide clear and concise responses to relatively simple and straightforward questions. If the Staff lacks the supporting information, it should state so plainly; otherwise, the Staff has a duty to provide responses and the support therefor.

4. Referring To Own Pleadings -- It is insufficient as a discovery response simply to reference your own self-serving pleadings (e.g., Response Nos. 5-24).

5. Documents In Respondents' Possession -- The mere fact that some requested information may also be contained in Respondents' files does not relieve the Staff from revealing information in its own files (e.g., Response Nos. 1-3).

6. Application Of Law To Facts -- Interrogatories seeking the application of law to the specific facts of the case are permissible; objections that such interrogatories call for conclusions of law are groundless (e.g., Response Nos. 5-25).

7. Failure To Differentiate Among Models And Piping Systems -- Throughout the Staff's Responses, you have refused to examine or provide information relevant to the differences between the various models of Omegas, different o-rings, and different piping systems (e.g., Response Nos. 5-24, 53-72, 78-86). The Staff must either admit that it has failed to examine and test for such differences, or it must provide Respondents with the Staff's differing analysis for each of these variations.

8. Purported Claims Of Privilege -- The Staff repeatedly refuses to provide information about its contacts with third parties (even contacts with Respondents' employees) and information underlying the Complaint based on a purported claim of privilege (e.g., Response Nos. 100-01, 106-14). Neither the attorney-client privilege nor the work product doctrine applies to such information. The Staff cannot hide information unfavorable to its

position behind a specious claim of privilege. Because it is charged with acting in the public interest and with due regard to Central's rights, the Staff must reveal even unfavorable information developed by its attorneys. Moreover, the Staff is required to produce a detailed privilege log addressing all claims of privilege.

B. Responses To Requests For Documents

1. Purported Claims Of Privilege -- As with the Interrogatory Responses, the Staff's Responses To Requests For Documents repeatedly refuse to provide information based upon a flawed claim to either attorney-client privilege or the work product doctrine (e.g., Response Nos. 8, 19-20). Such privileges have either been waived (in the context of contacts with third partes) or simply do not apply where the Staff is pursuing active, offensive litigation. Once the Staff decided to file the Complaint, it opened itself up to discovery.

2. Failure To Produce Identified Documents/ Administrative File -- The Staff has refused to produce the documents identified in the "List and Summary of Documentary Evidence" attached to the Complaint and the Staff's administrative file (e.g., Response Nos. 1, 7). This is the most basic and fundamental discovery expected under the rules of procedure. Denying access to such documents after filing a Complaint is preposterous.

3. Miscellaneous Problems -- The Staff's other responses to the document requests suffer from many of the same problems as the Staff's responses to the interrogatories: (a) the Staff cannot delay producing available documents; (b) the Staff must admit where it knows of no supporting documents; (c) the Staff cannot refuse to produce documents by claiming that Respondents already possess the documents or by referring to the Staff's own self-serving pleadings; and (d) the Staff cannot refuse to respond to document requests by pretending not to understand simple requests or by providing only partial answers.

4. Completeness Of Responses -- Not withstanding the very serious charges that you have leveled against Central, the Staff's entire production consists of half of one box of documents. Most of these documents appear to be copies of documents supplied to you previously by Central. Your incomplete discovery responses suggest, however, that there may be other documents that you intend to use at trial that you have not yet produced. Moreover, during telephone and other conversations with Kathy Sanzo, members of the Staff have stated that you have documents in your possession that would prove harmful or embarrassing to Central if publicly revealed. Our review of the documents that you have produced reveals no such documents. Please produce any documents in your possession that are responsive to the

requests. Be advised that we will seek to have any documents that are not produced excluded from evidence at trial.

We will expect complete and responsive supplemental responses no later than May 8. Please advise us by the end of the day on May 5 whether the Staff intends to provide such responses, in order to avoid the unnecessary time and expense of preparing a motion to compel.

Regards,

Thomas P. Hogan, Jr.

TPH/lgh

U.S. CONSUMER PRODUCT SAFETY COMMISSION
WASHINGTON, D.C. 20207-0001

OFFICE OF COMPLIANCE
Legal Division

Deborah S. Orlove
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May 6, 1998

VIA TELECOPIER AND FIRST CLASS MAIL
(215) 963-5299
Thomas P. Hogan, Jr., Esq.
MORGAN, LEWIS & BOCKIUS LLP
2000 One Logan Square
Philadelphia, PA 19103

Re: *In the Matter of Central Sprinkler Corp. and Central Sprinkler Co.*, CPSC Docket No. 98-2
Complaint Counsel's Responses to Respondents' First Discovery Requests

Dear Mr. Hogan:

I am writing in response to your May 1, 1998 and May 4, 1998 correspondence in the above-referenced matter. As you know, I attempted to call you immediately after receiving your fax at 2:00 p.m. last Friday, in which you informed us that you had received our written discovery responses without any attached documents. As your office informed me that you had left for the day, I left you a voice mail message expressing my concern and confusion that you had received our written responses without receiving the box of documents in which they were contained. I trust from your message yesterday, and letter today, that you have the box of documents. As you may have noted, the responses and documents were sent via certified mail, return receipt, to your office on April 27. Pursuant to the applicable regulations, service via certified mail is appropriate and acceptable.

As you know, Complaint Counsel sent a box with over 2000 Bates-stamped pages of documents, as well as a videotape, to Respondents with its discovery responses. As we indicated in those responses, a number of documents that Complaint Counsel has that may be responsive to Respondents' requests were provided to Complaint Counsel by third parties. As you know, Complaint Counsel is prohibited by statute from disclosing any information received from third parties that may be confidential commercial information or trade secret. To ensure speedy disclosure of information to Respondents, and to prevent unnecessarily calling upon the Presiding Officer to resolve such issues, Complaint Counsel has attempted to negotiate with the third parties directly to obtain permission to provide all such information to Central. At this time, we have received such permission from two parties - Marriott and

Sheraton. The Marriott documents were produced in the box of documents forwarded to you last week. Having just received final permission today from counsel for Sheraton, those documents are being Bates stamped and copied at this time, and will be sent to you immediately.

We also have voluminous documents from two testing laboratories, one of which has indicated preliminarily that they will agree to production of their documents as long as there is a protective order preventing public disclosure of same; however, their counsel has requested that it be given until the middle of this week to make a final determination on disclosure. We await review of documents and responses from the other laboratory, and will prepare those documents immediately upon receipt of permission to disclose. If you would prefer a resolution of this matter before the Presiding Officer, however, we would be pleased to copy and provide the documents to him immediately.

You suggested in your letter that the CPSC has been in contact with current Central employees without the presence of Respondents' counsel. CPSC staff has not engaged in any such *ex parte* contacts. As indicated in Complaint Counsel's responses to discovery, Complaint Counsel will submit a document that may be responsive to Respondents' Request for Production #20 to the Presiding Officer for *in camera* review for a determination of whether, and to what extent, this document should be produced.

You also indicated in your correspondence your desire to obtain a copy of the data compilation prepared by Complaint Counsel with respect to Omega failures. Although Complaint Counsel has provided you with the underlying test data upon which its compilation is based, and although the compilation is continually evolving and is Complaint Counsel and its staff's work product, in the interest of full disclosure, Complaint Counsel will produce its compilation as it existed at the time the complaint was filed.

Additionally, Complaint Counsel is in the process of preparing a privilege log of documents received or created that may be responsive to Respondents' requests, and for which a claim of privilege has been made.

We appreciate and share Respondents' perspectives on the importance of full disclosure in this matter, and trust that Respondents will apply such perspectives in responding to Complaint Counsel's discovery requests.

Sincerely,

Deborah S. Orlove

Deborah S. Orlove, Esq.
Complaint Counsel

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1873 1998

Thomas P. Hogan, Jr.
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May 7, 1998

VIA TELECOPIER & REGULAR MAIL

Deborah S. Orlove
Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4430 East West Highway
Bethesda, MD 20814

Re: In the Matter of Central Sprinkler Corp., et al. (CPSC Docket No. 98-2)

Dear Ms. Orlove:

This letter responds to your letter of May 6, 1998.

First, regarding the scope of discovery provided by the Staff, your letter fails to address the multiple deficiencies with the Staff's discovery responses raised in my letter of May 4. For example, you still refuse or fail to identify persons with knowledge regarding the key allegations in the Complaint. By failing to provide such information, you completely block Central's ability to take depositions of your witnesses and effectively shut down discovery. Moreover, you fail to address the large number of interrogatories and document requests for which the Staff has provided no response whatsoever. These are only two examples of your letter's failure to address the many deficiencies described in my letter of May 4. It would thus appear that the Staff is refusing to engage in any good faith attempt to resolve this discovery dispute. Therefore, in the absence of full and complete supplemental responses from the Staff as discussed in my letter of May 4, we will be forced to file a motion to compel.

Second, in your letter, you represented that the Staff will provide us with a privilege log. You have not indicated when you will provide it, however. Given the pervasive nature of your privilege objections, the timing requirements established for motions to compel by the CPSC rules of practice, and the fact that such a log already is tardy, we will expect to receive the Staff's privilege log no later than May 8, 1998, as we requested in my letter of May 4.

Your letter also represents that you will begin to provide the Staff's initial test results, but again you do not provide a set date for production. As indicated to you in my letter of May 4, we will expect to receive a full supplemental production by no later than May 8, 1998.

In addition, your letter reiterates a refusal to produce purportedly confidential documents from third parties absent a confidentiality agreement. In my letter to you of May 1, we provided you with a draft Confidentiality Agreement. Despite your stated willingness to produce the referenced documents pursuant to such an agreement, your letter does not comment on or otherwise address the proposed Confidentiality Agreement. In the absence of your comments, we will submit the Confidentiality Agreement for Court approval contemporaneously with any necessary motion to compel. Moreover, please be advised that if you refuse to produce any document for any reason, Central will oppose the admission of that document or class of documents into evidence at the trial of this matter.

Finally, we hereby reiterate our request that the Staff not attempt to engage in any ex parte contacts with the Court.

To date, the Staff has not provided any meaningful discovery to Respondents. Of the 2000 pages of documents produced, approximately 1500 consist of test results provided to you by Central, and many of the remaining 500 consist of publicly available documents. Your discovery provides no meaningful information to Central regarding the bases of your claims and substantially impairs Central's ability to prepare for trial. The Staff cannot and should not be permitted to file a public Complaint, but then refuse to provide the evidence purportedly supporting such claims. We hope that the Staff will choose to take a more reasonable and forthcoming approach going forward in this litigation.

Regards,

Thomas P. Hogan, Jr.

TPH/lgh

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OFFICE OF COMPLIANCE
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May 8, 1998

VIA TELECOPIER AND FIRST CLASS MAIL
Thomas P. Hogan, Jr., Esq.
MORGAN, LEWIS & BOCKIUS LLP
2000 One Logan Square
Philadelphia, PA 19103
(215) 963-5299

Re: *In the Matter of Central Sprinkler Corp. and Central Sprinkler Co.*, CPSC Docket No. 98-2
Complaint Counsel's Responses to Respondents' First Interrogatories and Request for Production of Documents

Dear Mr. Hogan:

I am writing to confirm my receipt of the United States Certified Mail return receipt for the box of documents we forwarded to you on April 27, 1998 in response to Respondents' First Request for Production of Documents. The return receipt confirms that the documents were received by you on Friday, May 1, 1998, and not on Monday, May 4, 1998, as your May 4 correspondence claims.

I am also writing in response to your telecopy of yesterday late afternoon, May 7, 1998, which reached my desk this morning. I assume that your letter was written prior to your receipt of our supplemental discovery, which was forwarded to your office via certified mail, return receipt, yesterday.

In your May 7 letter, you indicate that Respondents are unable to take depositions of Complaint Counsel's witnesses, as Complaint Counsel has "failed to identify persons with knowledge regarding the key allegations in the Complaint." However, please note that Complaint Counsel has identified numerous persons with such knowledge, in response to Interrogatories 106, 111, 113, 115, 132, and 145. As indicated in our responses to Respondents' Interrogatories, Complaint Counsel has not yet determined who it will call as witnesses, either factual or expert, in this matter. As we determine who our witnesses will be, we will be sure to supplement our responses to identify same in accordance with the Rules of Practice.

With respect to your concern regarding *ex parte* communications, please be assured that Complaint Counsel has no intention of engaging in any prohibited communications with the Presiding Officer or anyone else. Complaint Counsel will follow all applicable procedures, and will serve upon Respondents a copy of any and all motions it files regarding discovery and other matters. As you know, Respondents may, by motion, set forth their justification for desiring access to, or disclosure of, *in camera* materials for the preparation and presentation of their case.

Additionally, you stated in your May 7, 1998 letter that my letter of the previous day promised you the Staff's test results. In my letter, I indicated that we would provide the data compilation of test results compiled by the staff -- which you requested in discovery. Although Complaint Counsel considers the compilation its work product, and has provided you with the underlying data upon which the compilation is based, we agreed to (and did, in yesterday's production) provide you with the compilation in the spirit of full and open disclosure.

With respect to your conclusion that the 2200 documents provided by Complaint Counsel in response to Respondents' First Request are not "meaningful," we invite you to again review those documents, which, along with other documents that we are attempting to obtain permission to produce, form the foundation and basis of this case, and demonstrate that the Omega is defective and poses a substantial risk of injury to the public.

Please do not hesitate to contact me if you have any further concerns. Additionally, in order to avoid crossing of correspondence, it may be more effective for all concerned if you would kindly allowing sufficient time for my response and supplement to reach you via first class mail prior to sending further correspondence on the same topic.

Sincerely,

Deborah S. Orlove

Deborah S. Orlove, Esq.
Complaint Counsel

dso/discov4.ltr

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Thomas P. Hogan, Jr.
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May 13, 1998

VIA TELECOPIER & REGULAR MAIL

Deborah S. Orlove
Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4430 East West Highway
Bethesda, MD 20814

Re: In the Matter of Central Sprinkler Corp., et al. (CPSC Docket No. 98-2)

Dear Ms. Orlove:

This letter is written in response to your letter of May 8, 1998.

We have received Complaint Counsel's supplemental production of documents. This production remains deficient, as it provides little more than the naked conclusions of Complaint Counsel regarding test results. Absent the underlying data and methodology, these results provide Central with little relevant information and no opportunity to examining the validity of the results.1/

Nevertheless, please clarify whether it is Complaint Counsel's position that you have produced all relevant and responsive documents, including all documents currently in your possession which you intend to introduce at trial. If so, Central will begin to prepare for the trial of this matter based on the documents already produced. For example, based on the test results produced in your supplemental production, this will mean, inter alia, that Complaint Counsel has no information that indicates any failures regarding Omegas using silicone o-rings, and no

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1/ Contrary to the assertions in your letter, your discovery responses to date have not provided the underlying data supporting these test results, unless such results are compiled almost entirely from Respondents' own test results already produced to Complaint Counsel. In fact, your prior discovery responses and correspondence indicate that you have not produced the underlying data and methodology based on a claim to work product protection.

information that indicates failures in any post-1990 Omegas used in copper or plastic systems. If Complaint Counsel has not produced all relevant documents, please confirm this fact in writing by May 14, so that we can begin to prepare a motion to compel.

Regarding Complaint Counsel's identification of potential witnesses, your letter points to the fact that you have identified "numerous persons with . . . knowledge" in response to six of Respondents' interrogatories. It appears, however, that this represents a selective and incomplete disclosure of "persons with knowledge." Moreover, Complaint Counsel has not provided sufficient documents that would allow Respondents to identify other potential witnesses. If it is Complaint Counsel's position that the persons identified by Complaint Counsel in discovery responses to date represent the universe of potential fact witnesses for Complaint Counsel, please confirm this fact. On the other hand, if Complaint Counsel is aware of other "persons with knowledge" that Complaint Counsel has not disclosed, please confirm this fact in writing by May 14.

In addition, to date, Complaint Counsel continues to ignore several other pressing issues. Complaint Counsel has not addressed the multiple deficiencies in your discovery responses as described in my letters of May 4 and May 7. Moreover, Complaint Counsel has failed to produce a privilege log despite repeated requests from Respondents. Finally, despite several reminders, Complaint Counsel has neither commented on nor responded to the draft Confidentiality Agreement that Respondents sent to you two weeks ago.

Regards,

Thomas P. Hogan, Jr.

TPH/lgh

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The SAS System

OBS	LEVEL		SITES	SAMPSIZE	FAILURES	P
1	OVERALL(7)		376	5858	2377	0.406
2	OVERALL(20)		376	5858	2128	0.363
3	OVERALL(40)		376	5858	1767	0.302
4	OVERALL(60)		376	5858	1454	0.248
5	OVERALL(80)		376	5858	1220	0.208
6	OVERALL(100)		376	5858	1009	0.172
7	COPPER		12	110	27	0.245
8	PLASTIC		11	334	120	0.359
9	STEEL		170	3057	1143	0.374
10	UNKNOWN		183	2357	1087	0.461
11	CENTRAL		169	1999	993	0.497
12	FAIRFAX		12	314	130	0.414
13	FM		96	843	251	0.298
14	UL		143	2702	1003	0.371
15	CENTRAL	STEEL	47	307	115	0.375
16	CENTRAL	UNKNOWN	122	1692	878	0.519
17	FAIRFAX	COPPER	1	8	7	0.875
18	FAIRFAX	PLASTIC	4	238	95	0.399
19	FAIRFAX	STEEL	7	68	28	0.412
20	FM	STEEL	41	235	61	0.260
21	FM	UNKNOWN	55	608	190	0.313
22	UL	COPPER	11	102	20	0.196
23	UL	PLASTIC	7	96	25	0.260
24	UL	STEEL	119	2447	939	0.384
25	UL	UNKNOWN	6	57	19	0.333
26	1983		6	48	26	0.542
27	1984		17	63	16	0.254
28	1985		41	355	21	0.059
29	1986		61	385	119	0.309
30	1987		91	956	715	0.748
31	1988		82	723	393	0.544
32	1989		117	884	297	0.336

The SAS System

OBS	LEVEL		SITES	SAMPSIZE	FAILURES	P
33	1990		101	799	341	0.427
34	1991		51	322	147	0.457
35	1992		36	277	141	0.509
36	1993		57	304	41	0.135
37	1994		39	231	34	0.147
38	1995		35	227	39	0.172
39	1996		30	151	0	0.000
40	1997		4	14	0	0.000
41		PLASTIC	3	14	6	0.429
42		STEEL	14	31	7	0.226
43		UNKNOWN	11	74	34	0.459
44	1983	COPPER	1	1	0	0.000
45	1983	PLASTIC	1	1	1	1.000
46	1983	STEEL	1	1	0	0.000
47	1983	UNKNOWN	3	45	25	0.556
48	1984	COPPER	2	9	4	0.444
49	1984	STEEL	11	37	11	0.297
50	1984	UNKNOWN	4	17	1	0.059
51	1985	COPPER	5	17	6	0.353
52	1985	STEEL	22	216	11	0.051
53	1985	UNKNOWN	14	122	4	0.033
54	1986	COPPER	8	26	11	0.423
55	1986	PLASTIC	2	16	13	0.813
56	1986	STEEL	31	222	58	0.261
57	1986	UNKNOWN	20	121	37	0.306
58	1987	COPPER	2	7	5	0.714
59	1987	PLASTIC	1	15	11	0.733
60	1987	STEEL	32	378	297	0.786
61	1987	UNKNOWN	56	556	402	0.723
62	1988	PLASTIC	4	128	68	0.531
63	1988	STEEL	26	144	62	0.431
64	1988	UNKNOWN	52	451	263	0.583

The SAS System

OBS	LEVEL	SITES	SAMPSIZE	FAILURES	P
65	1989 COPPER	1	2	1	0.500
66	1989 PLASTIC	4	100	21	0.210
67	1989 STEEL	55	392	129	0.329
68	1989 UNKNOWN	57	390	146	0.374
69	1990 COPPER	2	7	0	0.000
70	1990 PLASTIC	1	3	0	0.000
71	1990 STEEL	57	522	199	0.381
72	1990 UNKNOWN	41	267	142	0.532
73	1991 COPPER	1	1	0	0.000
74	1991 STEEL	37	262	129	0.492
75	1991 UNKNOWN	13	59	18	0.305
76	1992 COPPER	1	1	0	0.000
77	1992 PLASTIC	1	24	0	0.000
78	1992 STEEL	30	233	136	0.584
79	1992 UNKNOWN	4	19	5	0.263
80	1993 COPPER	4	31	0	0.000
81	1993 PLASTIC	1	9	0	0.000
82	1993 STEEL	36	202	41	0.203
83	1993 UNKNOWN	16	62	0	0.000
84	1994 COPPER	1	8	0	0.000
85	1994 STEEL	24	168	29	0.173
86	1994 UNKNOWN	14	55	5	0.091
87	1995 STEEL	28	178	34	0.191
88	1995 UNKNOWN	7	49	5	0.102
89	1996 PLASTIC	1	24	0	0.000
90	1996 STEEL	20	57	0	0.000
91	1996 UNKNOWN	9	70	0	0.000
92	1997 STEEL	4	14	0	0.000
93	-1990	310	4332	1975	0.456
94	1991+	138	1526	402	0.263
95	-1990 COPPER	10	69	27	0.391
96	-1990 PLASTIC	9	277	120	0.433

The SAS System

OBS	LEVEL		SITES	SAMPSIZE	FAILURES	P
97	-1990 STEEL		126	1943	774	0.398
98	-1990 UNKNOWN		165	2043	1054	0.516
99	1991+ COPPER		4	41	0	0.000
100	1991+ PLASTIC		3	57	0	0.000
101	1991+ STEEL		90	1114	369	0.331
102	1991+ UNKNOWN		41	314	33	0.105
103	AC		5	36	31	0.861
104	C-1		57	742	372	0.501
105	C-1A		171	2271	906	0.399
106	C-1A PRO		4	9	4	0.444
107	C1A/HEC12		5	73	46	0.630
108	EC-10		1	5	5	1.000
109	EC-20		28	160	53	0.331
110	EC-20A		46	604	225	0.373
111	FC		15	74	40	0.541
112	HEC-12		96	660	204	0.309
113	HEC-20		15	85	12	0.141
114	M		3	8	6	0.750
115	PRO-M		11	58	57	0.983
116	R-1		12	110	10	0.091
117	R-1/HEC-12		1	22	1	0.045
118	R-1M		3	23	0	0.000
119		UNKNOWN	67	918	405	0.441
120	AC	STEEL	4	24	19	0.792
121	AC	UNKNOWN	1	12	12	1.000
122	C-1	COPPER	3	11	6	0.545
123	C-1	PLASTIC	2	13	8	0.615
124	C-1	STEEL	35	565	296	0.524
125	C-1	UNKNOWN	17	153	62	0.405
126	C-1A	COPPER	5	24	0	0.000
127	C-1A	PLASTIC	3	65	24	0.369
128	C-1A	STEEL	94	1539	560	0.364

The SAS System

OBS	LEVEL		SITES	SAMPSIZE	FAILURES	P
129	C-1A	UNKNOWN	69	643	322	0.501
130	C-1A PRO	STEEL	2	5	4	0.800
131	C-1A PRO	UNKNOWN	2	4	0	0.000
132	C1A/HEC12	UNKNOWN	5	73	46	0.630
133	EC-10	COPPER	1	5	5	1.000
134	EC-20	COPPER	4	15	7	0.467
135	EC-20	PLASTIC	1	2	1	0.500
136	EC-20	STEEL	13	100	24	0.240
137	EC-20	UNKNOWN	10	43	21	0.488
138	EC-20A	COPPER	1	3	0	0.000
139	EC-20A	PLASTIC	4	190	71	0.374
140	EC-20A	STEEL	32	335	93	0.278
141	EC-20A	UNKNOWN	9	76	61	0.803
142	FC	COPPER	1	1	1	1.000
143	FC	STEEL	14	73	39	0.534
144	HEC-12	COPPER	9	39	2	0.051
145	HEC-12	PLASTIC	5	38	4	0.105
146	HEC-12	STEEL	34	226	55	0.243
147	HEC-12	UNKNOWN	48	357	143	0.401
148	HEC-20	COPPER	3	9	4	0.444
149	HEC-20	PLASTIC	1	2	0	0.000
150	HEC-20	STEEL	9	55	7	0.127
151	HEC-20	UNKNOWN	2	19	1	0.053
152	M	STEEL	3	8	6	0.750
153	PRO-M	COPPER	1	3	2	0.667
154	PRO-M	PLASTIC	1	12	12	1.000
155	PRO-M	STEEL	5	30	30	1.000
156	PRO-M	UNKNOWN	4	13	13	1.000
157	R-1	STEEL	9	87	10	0.115
158	R-1	UNKNOWN	3	23	0	0.000
159	R-1/HEC-12	UNKNOWN	1	22	1	0.045
160	R-1M	PLASTIC	1	12	0	0.000
161	R-1M	STEEL	1	10	0	0.000
162	R-1M	UNKNOWN	1	1	0	0.000

CENTRAL SPRINKLER FAILURE RATES
AT 7 PSI OF PRESSURE

OBS	LEVEL	SITES	SAMPSIZE	FAILURES	P
1	OVERALL(7)	376	5858	2377	0.406
2	COPPER	12	110	27	0.245
3	PLASTIC	11	334	120	0.359
4	STEEL	170	3057	1143	0.374
5	UNKNOWN	183	2357	1087	0.461
6	-1990	310	4332	1975	0.456
7	1991+	138	1526	402	0.263
8	-1990 COPPER	10	69	27	0.391
9	-1990 PLASTIC	9	277	120	0.433
10	-1990 STEEL	126	1943	774	0.398
11	-1990 UNKNOWN	165	2043	1054	0.516
12	1991+ COPPER	4	41	0	0.000
13	1991+ PLASTIC	3	57	0	0.000
14	1991+ STEEL	90	1114	369	0.331
15	1991+ UNKNOWN	41	314	33	0.105

CENTRAL SPRINKLER FAILURE RATES
AT 20 PSI OF PRESSURE

OBS	LEVEL	SITES	SAMPSIZE	FAILURES	P
1	OVERALL(20)	376	5858	2128	0.363
2	COPPER	12	110	24	0.218
3	PLASTIC	11	334	83	0.249
4	STEEL	170	3057	1058	0.346
5	UNKNOWN	183	2357	963	0.409
6	-1990	310	4332	1760	0.406
7	1991+	138	1526	368	0.241
8	-1990 COPPER	10	69	24	0.348
9	-1990 PLASTIC	9	277	83	0.300
10	-1990 STEEL	126	1943	715	0.368
11	-1990 UNKNOWN	165	2043	938	0.459
12	1991+ COPPER	4	41	0	0.000
13	1991+ PLASTIC	3	57	0	0.000
14	1991+ STEEL	90	1114	343	0.308
15	1991+ UNKNOWN	41	314	25	0.080

CENTRAL SPRINKLER FAILURE RATES
AT 40 PSI OF PRESSURE

OBS	LEVEL	SITES	SAMPSIZE	FAILURES	P
1	OVERALL(40)	376	5858	1767	0.302
2	COPPER	12	110	20	0.182
3	PLASTIC	11	334	51	0.153
4	STEEL	170	3057	879	0.288
5	UNKNOWN	183	2357	817	0.347
6	-1990	310	4332	1454	0.336
7	1991+	138	1526	313	0.205
8	-1990 COPPER	10	69	20	0.290
9	-1990 PLASTIC	9	277	51	0.184
10	-1990 STEEL	126	1943	586	0.302
11	-1990 UNKNOWN	165	2043	797	0.390
12	1991+ COPPER	4	41	0	0.000
13	1991+ PLASTIC	3	57	0	0.000
14	1991+ STEEL	90	1114	293	0.263
15	1991+ UNKNOWN	41	314	20	0.064

CENTRAL SPRINKLER FAILURE RATES
AT 60 PSI OF PRESSURE

OBS	LEVEL	SITES	SAMPSIZE	FAILURES	P
1	OVERALL(60)	376	5858	1454	0.248
2	COPPER	12	110	17	0.155
3	PLASTIC	11	334	37	0.111
4	STEEL	170	3057	710	0.232
5	UNKNOWN	183	2357	690	0.293
6	-1990	310	4332	1190	0.275
7	1991+	138	1526	264	0.173
8	-1990 COPPER	10	69	17	0.246
9	-1990 PLASTIC	9	277	37	0.134
10	-1990 STEEL	126	1943	459	0.236
11	-1990 UNKNOWN	165	2043	677	0.331
12	1991+ COPPER	4	41	0	0.000
13	1991+ PLASTIC	3	57	0	0.000
14	1991+ STEEL	90	1114	251	0.225
15	1991+ UNKNOWN	41	314	13	0.041

CENTRAL SPRINKLER FAILURE RATES
AT 80 PSI OF PRESSURE

OBS	LEVEL	SITES	SAMPSIZE	FAILURES	P
1	OVERALL(80)	376	5858	1220	0.208
2	COPPER	12	110	9	0.082
3	PLASTIC	11	334	31	0.093
4	STEEL	170	3057	577	0.189
5	UNKNOWN	183	2357	603	0.256
6	-1990	310	4332	998	0.230
7	1991+	138	1526	222	0.145
8	-1990 COPPER	10	69	9	0.130
9	-1990 PLASTIC	9	277	31	0.112
10	-1990 STEEL	126	1943	367	0.189
11	-1990 UNKNOWN	165	2043	591	0.289
12	1991+ COPPER	4	41	0	0.000
13	1991+ PLASTIC	3	57	0	0.000
14	1991+ STEEL	90	1114	210	0.189
15	1991+ UNKNOWN	41	314	12	0.038

CENTRAL SPRINKLER FAILURE RATES
AT 100 PSI OF PRESSURE

OBS	LEVEL	SITES	SAMPSIZE	FAILURES	P
1	OVERALL(100)	376	5858	1009	0.172
2	COPPER	12	110	9	0.082
3	PLASTIC	11	334	27	0.081
4	STEEL	170	3057	449	0.147
5	UNKNOWN	183	2357	524	0.222
6	-1990	310	4332	832	0.192
7	1991+	138	1526	177	0.116
8	-1990 COPPER	10	69	9	0.130
9	-1990 PLASTIC	9	277	27	0.097
10	-1990 STEEL	126	1943	284	0.146
11	-1990 UNKNOWN	165	2043	512	0.251
12	1991+ COPPER	4	41	0	0.000
13	1991+ PLASTIC	3	57	0	0.000
14	1991+ STEEL	90	1114	165	0.148
15	1991+ UNKNOWN	41	314	12	0.038

6/02/98

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp.	:	
	:	
and	:	**CPSC Docket No. 98-2**
	:	
Central Sprinkler Co.,	:	
	:	
Respondents.	:	
	:	

RESPONDENTS' RESPONSES AND OBJECTIONS TO COMPLAINT COUNSEL'S FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS

Respondents Central Sprinkler Corporation and Central Sprinkler Company (collectively, "Central"), pursuant to 16 C.F.R. § 1025.33, hereby provide responses and objections to Complaint Counsel's First Request For Production of Documents and Things. Central's responses may be supplemented in accordance with 16 C.F.R. § 1025.31(f).

PREFATORY STATEMENT

Complaint Counsel has made extremely broad discovery requests. The responses to Complaint Counsel's request will exceed 400 boxes of documents, and the copying to make the documents available for inspection will cost Central in excess of $100,000.00. Despite this extraordinary volume and expense, Central will make every effort to comply with Complaint Counsel's requests.

Pursuant to 16 C.F.R. § 1025.33, Central will permit Complaint Counsel to inspect and designate for copying the responsive documents described below. This inspection will take place at a mutually convenient time at the offices of Morgan, Lewis & Bockius LLP, 1800 M Street, N.W., Washington, DC 20036. Because of the extremely large volume of documents, such

documents will be made available for inspection on a "rolling basis," with the documents made available to Complaint Counsel at their request after Central's counsel has reviewed such documents. Central anticipates that it will be able to make available immediately approximately 100 boxes for review by Complaint Counsel, and Central's counsel will continue to review the remaining responsive documents, estimated to encompass 300 boxes, as quickly as possible. Central also anticipates providing Complaint Counsel with a privilege log corresponding to the documents produced on a rolling basis.[1/]

In addition to the approximately 400 boxes described above, Central is in possession of more than 1,000 additional boxes consisting of the following categories: accounts payable purchase journals, accounts payable cash disbursement journals, sales commission reports, accounts receivable trial balances, customer sales activity reports, flash reports, general ledger statements, inventory accounting summaries, accounts payable post reports, labor tickets, invoices and credits, vendor invoices, sales analyses, accounts payable batch files, and miscellaneous documents located in multiple field offices across the nation. Central does not regard these documents to be responsive or relevant to this matter. In addition, the time and expense of reviewing and producing these documents would be prohibitive. Nevertheless, if Complaint Counsel desires to inspect such documents, they should notify Central's counsel, and Central will attempt to provide Complaint Counsel an opportunity to inspect such documents.

1/ If Complaint Counsel desires an independent copy of all of the documents contained in the 400 boxes, and Complaint Counsel is willing to pay for the cost of copying and transporting such documents, Central will of course cooperate fully with Complaint Counsel to arrange for such copying.

As with Complaint Counsel's discovery responses, Central's production of documents is subject to the entry of a reasonable Confidentiality Agreement.

OBJECTIONS TO EACH AND EVERY DISCOVERY REQUEST

Central objects to each and every Interrogatory, Document Request, and/or Request for Admission (collectively, the "Discovery Requests") stated by Complaint Counsel for the reasons set forth herein, and each stated objection is incorporated into the response to each numbered sub-part of the Discovery Requests as if set forth fully therein.

1. Central objects to each and every Discovery Request on the ground and to the extent that they seek information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence, and thus exceed the scope of permissible discovery as defined by 16 C.F.R. § 1025.31(c)(1).

2. Central objects to each and every Discovery Request on the ground and to the extent that they seek information and/or documents that are not in the possession, custody, or control of Central.

3. Central objects to each and every Discovery Request on the ground and to the extent that they call for a conclusion of law.

4. Central objects to each and every Discovery Request on the ground and to the extent that they seek information and/or documents protected from discovery by the attorney-client privilege pursuant to 16 C.F.R. § 1025.31(c)(2); specifically, any information or documents that contain, describe, refer, relate to, or reflect confidential communications between Central and their attorneys or their representatives regarding legal advice, opinions, counsel, or

confidential communications that were created, produced, written, prepared, typed, transcribed, copied, photographed, duplicated, or reproduced.

5. Central objects to each and every Discovery Request on the ground and to the extent they seek information and/or documents protected from discovery by the self-critical privilege or any other applicable privilege.

6. Central objects to each and every Discovery Request on the ground and to the extent that they seek information and/or documents prepared in anticipation of litigation or for trial by or for Central, Central's counsel, or Central's representative, because such materials are protected from discovery pursuant to 16 C.F.R. § 1025.31(c)(3).

7. Central objects to each and every Discovery Request on the ground and to the extent that they seek information and/or documents that contain, report, describe, reflect, refer, or relate to facts or opinions held or known by an expert retained or specially employed by Central in anticipation of litigation or preparation for trial, and who is not expected to be called as a witness at trial, because such material is protected from discovery pursuant to 16 C.F.R. § 1025.31(c)(4).

8. Central objects to each and every Discovery Request on the grounds and to the extent that they are overly vague, unduly broad, and/or unnecessarily burdensome.

9. Central objects to each and every Discovery Request on the grounds and to the extent that they are duplicative of other discovery requests, request information already provided to Complaint Counsel by Central, and/or request information equally available to or ascertainable by Complaint Counsel.

10. Central objects to each and every Discovery Request on the grounds and to the extent that such requests seek documents or information that constitute a trade secret or other confidential research, development, or commercial information.

11. Central objects to each and every Discovery Request on the ground and to the extent that they seek information and/or documents that are not owned by Central and/or are documents in which other parties have a proprietary interest.

12. Central objects to each and every Discovery Request on the grounds and to the extent that it fails to distinguish between Central Sprinkler Corporation and Central Sprinkler Company.

13. To the extent that a document request refers to or incorporates an interrogatory, or any part thereof, Central hereby fully incorporates by reference into the response to the document request any objections raised in responding to the interrogatory.

14. Central objects to each and every Discovery Request on the ground and to the extent that they exceed the scope of discovery permitted under 16 C.F.R. § 1025.31.

15. Central objects to the instruction and definitions included in the Discovery Requests on the ground and to the extent that they exceed the scope of permissible discovery under 16 C.F.R. § 1025.31.

16. To the extent that Central objects to a particular Discovery Request on the basis of a specific objection, Central hereby states that they do not thereby waive the General Objections. To the extent that Central objects to a particular Discovery Request but then proceeds to answer said Discovery Request in whole or in part, Central hereby states that they do not thereby waive any objection to the Discovery Request in question.

RESPONSES

REQUEST NO. 1: Provide all records relating in any way to your sale of any Omega sprinkler, including but not limited to purchase orders, shipping documents, billing statements and sales receipts.

RESPONSE NO. 1: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information.

By way of further explanation of these objections, Central states as follows: Central keeps records such as those requested for up to ten years. Thus, Central has an extremely large number of potentially responsive documents. Total compliance with this request would require production of approximately 900 boxes of invoices (each box containing 3000 to 5000 invoices), as well as similar numbers of shipping documents stored on-site at fourteen locations throughout the United States. In addition, Central generates multiple sales reports, including "flash reports" (total sales activity), sales by part, sales by product, sales by salesman, sales by region, and sales by warehouse. These weekly reports generally are kept for seven years and number in the thousands of boxes.

Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 2: Provide all records relating in any way to your provision of any Omega sprinkler as a free sample or promotional item.

RESPONSE NO. 2: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information.

Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 3: Provide all records relating in any way to marketing and/or sale of Omega sprinklers by you.

RESPONSE NO. 3: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information.

By way of further explanation of these objections, Central states as follows: Potentially responsive documents include all of the documents created by two entire

departments of Central: Technical Service and Sales. Technical Services creates all marketing documents, including product cut sheets, sales catalogues, pricebooks, and instructional videos. An entire floor of a building is dedicated to storage of current and obsolete Technical Services documents. Central's Sales Department is comprised of individuals working and creating documents on three continents, including every state in the United States.

Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 4: For each year in which you manufactured and/or distributed Omega sprinklers, provide all records relating in any way to

(a) your gross income;
(b) your net income;
(c) the amount in revenues generated from product sales;
(d) the amount in revenues generated from sales of Omega sprinklers.

RESPONSE NO. 4: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information.

By way of further explanation of these objections, Central states as follows: There are thousands of potentially responsive reports created on a weekly or monthly basis over sixteen years. While many of these reports exist in paper form, most are stored as data on tape. To retrieve this data, each tape would have to be located, loaded, and queried for relevant information. Central's Information Services department estimates that it would take a person working full-time at least two months to complete this task. Moreover, this request alone could amount to well over a million pages.

Subject to and without waiver of the foregoing objections, Central responds as follows: See Interrogatory Response No. 10. To the extent Central has any such information, pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 5: Provide all records relating in any way to the number of Omega sprinklers installed in the United States and/or its territories in:

(a) steel piping systems;
(b) copper piping systems;
(c) plastic piping systems;
(d) polybutylene piping systems;
(e) other piping systems not listed above (specify the type of piping system)?

RESPONSE NO. 5: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; and it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiver of the foregoing objections, Central responds as follows: See Interrogatory Response No. 10. To the extent Central has any

such information, pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 6: Provide all records relating in any way to the number of Omega sprinklers installed in the United States and/or its territories in:

a) private homes
b) apartment buildings
c) schools (including universities and colleges, public or private)
d) nursing homes
e) hospitals
f) detention facilities (including jails, juvenile detention facilities, etc.)
g) homeless shelters
h) facilities used for recreation (e.g., health clubs, gymnasiums, sports arenas, public pools, country clubs, etc.)
i) hotels
j) museums
k) offices (including office buildings)
l) warehouses with no public access areas
m) industrial facilities with no public access areas

RESPONSE NO. 6: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; and it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiver of the foregoing objections, Central responds as follows: See Interrogatory Response No. 10. To the extent Central has any such information, pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 7: Provide all records relating in any way to the current sales price for each Omega make and/or model listed in your response to Complaint Counsel's Interrogatory No. 13.

RESPONSE NO. 7: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information.

By way of further explanation of these objections, Central states as follows: The final price paid by a particular customer will vary because price is contingent on several factors, including negotiation, discounts for timely payment, credit, quantity and purchasing history.

Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 8: Provide the complete personnel files for all persons identified in your response to Complaint Counsel's Interrogatory No. 15.

RESPONSE NO. 8: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; and it seeks information and/or documents that constitute trade

secrets or other confidential research, development, commercial, or otherwise proprietary information.

REQUEST NO. 9: Provide the complete personnel files for all persons involved in design and/or development of each make and/or model Omega sprinkler.

RESPONSE NO. 9: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, commercial, or otherwise proprietary information.

REQUEST NO. 10: Provide all records relating in any way to the design of and/or specifications for each component part and each chemical (including lubricants), tool and/or substance used in the Omega manufacturing process.

RESPONSE NO. 10: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents

available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 11: Provide all records relating in any way to your acquisition of any component part, chemical (including lubricants, etc.), tool and/or substance identified in your response to Complaint Counsel's Interrogatory No. 17.

RESPONSE NO. 11: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information.

By way of further explanation of these objections, Central states as follows: In addition to the documents Central will produce, there are at least 700 additional boxes of Accounts Payable documents called "batch files" that might contain minimally responsive documents. Batch files are created and stored in such a fashion that responsive documents cannot be separated from non-responsive documents without reading every file. Batch files are stored according to the day a vendor invoice was paid, rather than by a vendor or part. In addition, there are over 700 boxes of Purchase Orders that may contain some responsive materials.

Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents

available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 12: Provide the complete personnel files of any persons who were/are employed by you who in any way took part or were involved in the design, specifications, and/or development of each component part, chemical (including lubricants, etc.), tool and/or substance identified in your response to Complaint Counsel's Interrogatory No. 17.

RESPONSE NO. 12: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, commercial, or otherwise proprietary information.

REQUEST NO. 13: Provide all records relating in any way to the procedures and specifications for the manufacture of each different make and/or model Omega sprinkler, including any changes in such procedures and/or specifications over time, including all tools, chemicals and substances used in the manufacture of same, including but not limited to cut sheets, drawings, and manufacturing instructions.

RESPONSE NO. 13: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or

commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 14: Provide three samples of each make and model of Omega sprinkler that you have ever manufactured.

RESPONSE NO. 14: Central responds as follows: Because the design of many of the Omega models has changed over time, it is possible that samples of every make and model of Omega sprinkler ever manufactured may not still be in existence. Pursuant to 16 C.F.R. § 1025.33, to the extent available, Central will make responsive Omega models manufactured by Central Sprinkler Company available to Complaint Counsel for inspection, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 15: Provide three samples of each tool, chemical and/or substance used in the manufacture of each make and model of Omega sprinkler. (If any such tools, chemicals and/or substances are used for more than one make and/or model of Omega, you need only provide one set of three samples).

RESPONSE NO. 15: Central objects to this request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks things that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks things that constitute trade secrets or other confidential research, development, or commercial information; it is duplicative of other discovery requests; and it seeks things that are not in

Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel.

REQUEST NO. 16: Provide all records relating in any way to any chemical or substance used in the manufacture of Omega sprinkler(s) to prevent leaking of those sprinklers when they are later installed into a sprinkler system.

RESPONSE NO. 16: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome. Subject to and without waiver of the foregoing objections, Central responds as follows: to the extent that this document request is referring to products such as "Stop-Leak," no such documents are known to exist.

REQUEST NO. 17: Provide all records relating in any way to any tests performed by you or anyone else to assess whether and/or how each chemical and/or substance listed in your response to Complaint Counsel's Interrogatory No. 23 affects the operation of Omega sprinkler(s) or any Omega component part.

RESPONSE NO. 17: Central hereby incorporates its response and objections to Interrogatory No. 23.

REQUEST NO. 18: Provide all records relating in any way to each communication between you and any persons and/or entities (including your employees, agents, and consultants) regarding each chemical and/or substance listed in your response to Complaint Counsel's Interrogatory No. 23.

RESPONSE NO. 18: Central hereby incorporates its response and objections to Interrogatory No. 23.

REQUEST NO. 19: Provide all records relating in any way to each prototypes and/or precursors of any of the Omega sprinklers listed in your response to Complaint Counsel's Interrogatory No. 5.

RESPONSE NO. 19: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 20: Provide the complete personnel files of any and all employees who were in any way involved in designing, developing and/or reviewing any and all prototypes and/or precursors of any of the Omega sprinklers listed in your response to Complaint Counsel's Interrogatory No. 5.

RESPONSE NO. 20: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, commercial, or otherwise proprietary information.

REQUEST NO. 21: Provide all records relating in any way to any and all measures and/or procedures taken by you or anyone on your behalf at any time before, during, and/or after each Omega sprinkler is manufactured, to ensure that each Omega sprinkler will fully and properly activate when exposed to its activation (triggering) temperature.

RESPONSE NO. 21: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 22: Provide all records relating in any way to any actual or alleged problems with, imperfections or flaws in, defects or deficiencies in or associated with any component part(s) of any Omega sprinkler, or any chemical, tool or substance used in manufacturing Omegas (including whether any component part has been or alleged to have been out of tolerance) of which you have knowledge or have been advised.

RESPONSE NO. 22: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it calls for a legal conclusion. Subject to and without waiver of the

foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 23: Provide all records relating in any way to the mechanism of proper operation of each different make and model of Omega sprinkler, once exposed to its activation (triggering) temperature.

RESPONSE NO. 23: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it calls for a legal conclusion. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 24: Provide all records relating in any way to whether pressure (not internal to or part of the Omega itself) is required for activation of any make and/or model of Omega sprinkler.

RESPONSE NO. 24: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or

other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 25: Provide all records relating in any way to the amount of pressure (not internal to or part of the Omega itself) required for activation of each make and/or model of Omega sprinkler.

RESPONSE NO. 25: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 26: Provide all records relating in any way to any non-Omega sprinklers that contain an "o" ring.

RESPONSE NO. 26: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome ; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from

discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel; and it is duplicative of other discovery requests.

By way of further explanation of these objections, Central states as follows: Most of the sprinkler heads manufactured by Central contain an o-ring. However, only the Omegas use a dynamic o-ring. The remaining models use a static o-ring seal. In addition, there are sprinklers manufactured by other companies that contain o-rings.

Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 27: Provide all records relating in any way to the approval, listing and/or certification of each Omega make and/or model, and each adaptation or device to be used with any Omega make and/or model (such as the "helper spring"), including testing or submission for approval, listing and/or certification by a certifying laboratory or institution (such as LJL or FM), and including all records relating in any way to whether approval, listing or certification was ever refused, withdrawn, discontinued or canceled for any Omega sprinkler, sprinkler component part or allegedly assistive operating device (such as the helper spring), and/or whether any certifying laboratory or institution has ever objected to your sale and/or distribution of any Omega sprinkler.

RESPONSE NO. 27: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or

work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 28: Provide all records relating in any way to any advertisement, representation, indication and/or suggestion in any marketing material that Omega sprinklers that are not listed or certified by FM are listed or certified by FM.

RESPONSE NO. 28: Central hereby incorporates its response and objections to Interrogatory No. 32.

REQUEST NO. 29: Provide all records relating in any way to any advertisement, representation, indication and/or suggestion in any marketing material that Omega sprinklers that are not listed or certified by UL are listed or certified by UL.

RESPONSE NO. 29: Central hereby incorporates its response and objections to Interrogatory No. 33.

REQUEST NO. 30: Provide all records relating in any way to any Omega that did not or allegedly did not activate in a fire.

RESPONSE NO. 30: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client

privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 31: Provide all records relating in any way to anyone who was injured or allegedly was injured as a result of or in association with a fire (including death incurred or allegedly incurred in attempting to escape the fire) in which any Omega did not or allegedly did not activate.

RESPONSE NO. 31: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 32: Provide all records relating in any way to anyone who died or allegedly died as a result of or in association with a fire (including death incurred or allegedly incurred in attempting to escape the fire) in which any Omega did not or allegedly did not activate.

RESPONSE NO. 32: Central responds as follows: no such documents are known to exist.

REQUEST NO. 33: Provide all records relating in any way to any property damage or allegedly property damage as a result of or in association with a fire (including death incurred or allegedly incurred in attempting to escape the fire) in which any Omega did not or allegedly did not activate.

RESPONSE NO. 33: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 34: Provide all records relating in any way to any testing and/or examination of each Omega that failed to activate or allegedly failed to activate in a fire, the system in which that Omega was installed, and/or any other sprinkler from the same site.

RESPONSE NO. 34: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; it seeks information and/or documents that are not in Central's possession, are not owned by Central,

and/or are equally accessible to or ascertainable by Complaint Counsel; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 35: Provide all records relating in any way to each Omega sprinkler of which you are aware or have been notified that, when tested, did not activate at 7 psig or below when exposed to its activation/triggering temperature.

RESPONSE NO. 35: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; it calls for a legal conclusion; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 36: Provide all records relating in any way to any examination and/or test on any Omega of which you are aware that failed to activate or allegedly failed to activate at 7 psig or below when exposed to its activation/triggering temperature in testing, the system in which it was installed, and/or any other sprinkler from the same site.

RESPONSE NO. 36: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; it calls for a legal conclusion; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 37: Provide all records relating in any way to any Omega sprinkler of which you are aware that, when tested in the field, did not activate or allegedly did not activate when exposed to its activation/triggering temperature.

RESPONSE NO. 37: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 38: Provide all records relating in any way to any examination and/or test on any Omega of which you are aware that failed to activate or allegedly failed to activate when exposed to its activation/triggering temperature when tested in the field.

RESPONSE NO. 38: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 39: Provide all records relating in any way to the design and/or development of the Omega "helper spring," and/or specifications for the manufacture of the "helper spring."

RESPONSE NO. 39: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 40: If you contend that an Omega that is installed into a sprinkler system containing water at a pressure of at least 7 psig, that does not activate upon being exposed to its activation (triggering) temperature for long enough for its fusible like to melt, will activate if fitted with the "helper spring" (that Central has proposed for use with the Omega), provide all records that you claim or believe support your contention.

RESPONSE NO. 40: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 41: Provide all records relating in any way to the method of operation of "helper spring."

RESPONSE NO. 41: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 42: Provide all records relating in any way to any and all tests performed by you or anyone else to assess whether and/or how the "helper spring" affects the operation of an Omega sprinkler or any Omega component part.

RESPONSE NO. 42: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 43: Provide all records relating in any way to your communications with any persons and/or entities (including your employees, agents, and consultants) regarding the operation and/or efficacy of the helper spring.

RESPONSE NO. 43: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 44: Provide all records relating in any way to any Omega sprinkler or component of which you are aware or have been notified has cracked or broken, or allegedly cracked or broken.

RESPONSE NO. 44: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 45: Provide all records relating in any way to any Omega sprinkler or component of which you are aware or have been notified has exhibited corrosion.

RESPONSE NO. 45: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 46: Provide all records relating in any way to any Omega sprinkler or component of which you are aware or have been notified has leaked and/or weeped when tested or in a fire.

RESPONSE NO. 46: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 47: Provide all records relating in any way to any Omega sprinkler or component of which you are aware or have been notified has activated unnecessarily or prematurely (either without or before being exposed to its activation/triggering temperature) when tested or in a fire.

RESPONSE NO. 47: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or

commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 48: If you contend that dezincification may cause an Omega to:

(a) leak and/or weep;
(b) activate prematurely and/or unnecessarily;
(c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or
(d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or
(e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature),

provide all records that you claim or believe support your contention.

RESPONSE NO. 48: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 49: Provide all records relating in any way to any Omega with a plunger housing made of an alloy other than CDA 35330, from a plastic or copper piping system, that has exhibited or allegedly exhibited dezincification.

RESPONSE NO. 49: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 50: Provide all records relating in any way to testing and/or examination of the system in which any Omega with a plunger housing made of an alloy other than CDA 35330, from a plastic or copper piping system, that has exhibited or allegedly exhibited dezincification, was installed, and/or testing and/or examination of any other sprinkler from the same site.

RESPONSE NO. 50: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 51: Provide all records relating in any way to any Omega with a plunger housing made of CDA 35330 alloy, from a plastic or copper piping system, that has exhibited or allegedly exhibited dezincification.

RESPONSE NO. 51: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 52: Provide all records relating in any way to testing and/or examination of the system in which any Omega with a plunger housing made of CDA 35330 alloy, from a plastic or copper piping system, that has exhibited or allegedly exhibited dezincification was installed, and/or testing and/or examination of any other sprinkler from the same site.

RESPONSE NO. 52: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 53: Provide all records relating in any way to any Omega from a piping system that is neither copper or plastic that has exhibited or allegedly exhibited dezincification.

RESPONSE NO. 53: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 54: Provide all records relating in any way to testing and/or examination of the system in which any Omega from a piping system that is neither copper or plastic, that has exhibited or allegedly exhibited dezincification, was installed, and/or testing and/or examination of any other sprinkler from the same site.

RESPONSE NO. 54: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 55: Provide all records relating in any way to any Omega sprinkler from a copper or plastic piping system that did not exhibit dezincification, and that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire.

RESPONSE NO. 55: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 56: Provide all records relating in any way to testing and/or examination of the system in which any Omega that did not exhibit dezincification, and that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire, was installed, and/or testing and/or examination of any other sprinkler from the same site.

RESPONSE NO. 56: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information

and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 57: Provide all records relating in any way to any and all changes listed in your response to Complaint Counsel's Interrogatory No. 47.

RESPONSE NO. 57: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 58: Provide all records relating in any way to any and all tests and/or examinations conducted to determine whether an Omega manufactured after any and all changes listed in your response to Complaint Counsel's Interrogatory No. 47 exhibits dezincification.

RESPONSE NO. 58: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 59: Provide all records relating in any way to any and all substances that you contend have been used by sprinkler installers/contractors, plumbers and/or others directly involved in installation and/or maintenance of sprinkler systems, that may cause an Omega to:

(a) leak and/or weep;
(b) activate prematurely and/or unnecessarily;
(c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or
(d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or
(e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature).

RESPONSE NO. 59: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from

discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 60: If you contend that the use of stop leak or other sealant, leakage prevention substance or pipe cement by sprinkler installers/contractors, plumbers and/or others directly involved in installation and/or maintenance of sprinkler systems may cause an Omega to:

(a) leak and/or weep;
(b) activate prematurely and/or unnecessarily;
(c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or
(d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or
(e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature), provide all records that you claim or believe support your contention.

RESPONSE NO. 60: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents

available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 61: Provide all records relating in any way to any and all Omegas that were exposed or were allegedly exposed to stop leak or any other sealant, leakage prevention substance or pipe cement.

RESPONSE NO. 61: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 62: Provide all records relating in any way to testing and/or examination of the system in which any and all Omegas that have been exposed or allegedly have been exposed to stop leak or any other sealant, leakage prevention substance or pipe cement, were installed, and/or testing and/or examination of any other sprinkler from the same site.

RESPONSE NO. 62: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing

objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 63: Provide all records relating in any way to any and all Omegas that were not exposed to stop leak or any other sealant, leakage prevention substance or pipe cement, but that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire?

RESPONSE NO. 63: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 64: Provide all records relating in any way to any and all changes listed in your response to Complaint Counsel's Interrogatory No. 51.

RESPONSE NO. 64: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks

information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 65: Provide all records relating in any way to any and all tests and/or examinations conducted to determine whether an Omega manufactured after any and all changes listed in your response to Complaint Counsel's Interrogatory No. 51 was affected by the use of stop leak or any other sealant., leakage prevention substance or pipe cement.

RESPONSE NO. 65: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 66: If you contend that the use of cutting oil or other substances used by sprinkler installers/contractors, plumbers and/or others directly involved in installation and/or maintenance of sprinkler systems to cut pipe may cause an Omega to:

(a) leak and/or weep;
(b) activate prematurely and/or unnecessarily;

(c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or
(d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or
(e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature),

provide all records that you claim or believe support your contention.

RESPONSE NO. 66: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 67: Provide all records relating in any way to any Omega that was exposed or was allegedly exposed to cutting oils or other substances used to cut pipe.

RESPONSE NO. 67: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or

work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 68: Provide all records relating in any way to testing and/or examination of the system in which any Omega that has been exposed or allegedly has been exposed to cutting oils or other substances used to cut pipe, was installed, and/or testing and/or examination of any other sprinkler from the same site.

RESPONSE NO. 68: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 69: Provide all records relating in any way to any Omega sprinkler that was not exposed to cutting oil or other substance used to cut pipe, but that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire.

RESPONSE NO. 69: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 70: Provide all records relating in any way to testing and/or examination of the system in which any Omega that was not exposed or allegedly exposed to cutting oils or other substances used to cut pipe, but that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire, was installed, and/or testing and/or examination of any other sprinkler from the same site.

RESPONSE NO. 70: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the

discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 71: Provide all records relating in any way to any and all changes listed in your response to Complaint Counsel's Interrogatory No. 55.

RESPONSE NO. 71: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 72: Provide all records relating in any way to the testing and/or examination of any Omega manufactured after any and all changes listed in your response to

Complaint Counsel's Interrogatory No. 55, to determine whether it was exposed to cutting oil or other substance used to cut pipe.

RESPONSE NO. 72: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 73: If you contend that swelling of the "o" ring in an Omega sprinkler may cause the Omega to:

(a) leak and/or weep;
(b) activate prematurely and/or unnecessarily;
(c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or
(d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or
(e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature),

provide all records that you believe or claim support your contention.

RESPONSE NO. 73: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information

and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 74: Provide all records relating in any way to any and all Omegas containing an EPDM "o" ring, from a steel piping system, that have exhibited or allegedly exhibited "o" ring swelling.

RESPONSE NO. 74: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 75: Provide all records relating in any way to testing and/or examination of the system in which any Omega containing an EPDM "o" ring, from a steel piping system, that has exhibited or allegedly exhibited "o" ring swelling, was installed, and/or testing and/or examination of any other sprinkler from the same site.

RESPONSE NO. 75: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks

information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 76: Provide all records relating in any way to any Omega containing a silicone "o" ring, from a steel piping system, that has exhibited or allegedly exhibited "o" ring swelling.

RESPONSE NO. 76: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 77: Provide all records relating in any way to testing and/or examination of the system in which any Omega containing a silicone "o" ring, from a steel

piping system, that has exhibited or allegedly exhibited "o" ring swelling, was installed, and/or testing and/or examination of any other sprinkler from the same site.

RESPONSE NO. 77: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 78: Provide all records relating in any way to any Omega from a piping system that is not steel that has exhibited or allegedly exhibited "o" ring swelling.

RESPONSE NO. 78: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 79: Provide all records relating in any way to testing and/or examination of the system in which any Omega, from a steel piping system, that has exhibited or allegedly exhibited "o" ring swelling, was installed, and/or testing and/or examination of any other sprinkler from the same site.

RESPONSE NO. 79: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 80: Provide all records relating in any way to any Omega from a steel piping system that did not exhibit "o" ring swelling, but that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire.

RESPONSE NO. 80: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information

and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 81: Provide all records relating in any way to testing and/or examination of the system in which any Omega that did not exhibit "o" ring swelling, but that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire, was installed, and/or testing and/or examination of any other sprinkler from the same site.

RESPONSE NO. 81: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 82: Provide all records relating in any way to any and all changes listed in your response to Complaint Counsel's Interrogatory No. 61.

RESPONSE NO. 82: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 83: Provide all records relating in any way to the testing and/or examination of any Omega manufactured after any and all changes listed in your response to Complaint Counsel's Interrogatory No. 61, to determine whether it exhibits "o" ring swelling.

RESPONSE NO. 83: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 84: Provide all records relating in any way to the methods used by you or anyone on your behalf to determine whether an Omega has a swollen "o" ring.

RESPONSE NO. 84: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 85: If you contend that adhesion of an Omega sprinkler's "o" ring to the plunger housing or main housing of the Omega may cause the Omega to:

(a) leak and/or weep;
(b) activate prematurely and/or unnecessarily;
(c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or
(d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or
(e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature),

provide all records that you claim or believe support your contention.

RESPONSE NO. 85: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or

commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 86: Provide all records relating in any way to any Omega that has exhibited or allegedly exhibited "o" ring adhesion.

RESPONSE NO. 86: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 87: Provide all records relating in any way to any and all changes listed in your response to Complaint Counsel's Interrogatory No. 64.

RESPONSE NO. 87: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or

other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 88: Provide all records relating in any way to the testing and/or examination of any Omega manufactured after any and all changes listed in your response to Complaint Counsel's Interrogatory No. 64, to determine whether the Omega exhibits "o" ring adhesion.

RESPONSE NO. 88: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 89: Provide all records relating in any way to the methods used by you or anyone on your behalf to determine whether an Omega exhibits "o" ring adhesion.

RESPONSE NO. 89: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from

discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 90: Provide all records relating in any way to any and all fires in which all Omegas exposed to temperatures at or in excess of their activation/triggering temperature activated.

RESPONSE NO. 90: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 91: Provide all records relating in any way to any testing and/or examination of any Omegas from sites in which all Omegas exposed to temperatures at or in excess of their activation/triggering temperature activated.

RESPONSE NO. 91: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute

trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 92: Provide all records relating in any way to any tests and/or examinations of Omega sprinklers conducted by you or anyone on your behalf.

RESPONSE NO. 92: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 93: Provide all records relating in any way to any and all tests and/or examinations of Omega sprinklers conducted pursuant to the protocol in UL 199 or UL 1626, that one or more Omegas did not pass (according to the criteria listed in UL 199 for that test).

RESPONSE NO. 93: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or

other confidential research, development, or commercial information; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 94: Provide all records relating in any way to any testing of any Omega conducted by you or on your behalf in which the Omega that, upon being exposed to its activation/triggering temperature, did not activate within 5 seconds at a pressure at or below 7 psig pressure.

RESPONSE NO. 94: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 95: Provide all records relating in any way to any meetings, discussions and/or communications in which you were in any way involved, and/or which you have received, in which the following were discussed:

a) failure of Omega sprinklers to activate in testing or in a fire;

b) dezincification as a cause or possible cause of Omega non-activation in testing or in a fire;
c) stop leak or other leak prevention substance as a cause or possible cause of Omega non-activation in testing or in a fire;
d) "o" ring swelling as a cause or possible cause of Omega non-activation in testing or in a fire;
e) if o" ring adhesion as a cause or possible cause of Omega non-activation in testing or in a fire;
f) excessive hydrocarbons as a cause or possible cause of Omega non-activation in testing or in a fire;
g) improper system design as a cause or possible cause of Omega non-activation in testing or in a fire;
h) UL listing or certification of any Omega sprinkler or sprinkler assistive device such as the "helper spring;"
i) FM listing or certification of any Omega sprinkler or sprinkler assistive device such as the "helper spring;"
j) NFPA 13 requirements or applicability with respect to fire sprinklers or sprinkler systems;
k) NFPA 25 requirements or applicability with respect to fire sprinklers or sprinkler systems;
1) UL 199 requirements or applicability with respect to fire sprinklers or sprinkler systems;
m) UL 1626 requirements or applicability with respect to fire sprinklers or sprinkler systems.

RESPONSE NO. 95: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it calls for a legal conclusion. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will

make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 96: Provide all records relating in any way to any problem, potential problem, complaint or concern (including any reports of nonactivation or possibility of nonactivation) or which you have been notified, regarding or in any way relating to an Omega sprinkler.

RESPONSE NO. 96: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it calls for a legal conclusion. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 97: Provide all records relating in any way to your notification (or notification on your behalf) of any person and/or entity of any and all problems, potential problems, complaints or concerns (including any reports of nonactivation or possibility of nonactivation) regarding or in any way related to any Omega sprinkler.

RESPONSE NO. 97: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the

discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it calls for a legal conclusion. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 98: Provide all records relating in any way to any and all requests for information by you (or on your behalf) to any sprinkler contractor or sprinkler owner regarding any Omega sprinkler, including the sprinkler contractor or owner's response.

RESPONSE NO. 98: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 99: Provide all records relating in any way to your (or anyone on your behalf) provision (either by sale or without charge) of sprinklers to anyone to replace some or all of the Omegas installed in a particular location.

RESPONSE NO. 99: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 100: Provide all records relating in any way to the cost of replacement of any and all Omega sprinklers.

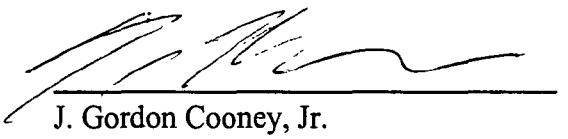
RESPONSE NO. 100: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central

responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 101: Provide all records relating in any way to your testing (or testing on your behalf) of any Omega sprinklers from any building or structure in which Omega sprinklers are/were installed.

RESPONSE NO. 101: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

Dated: May 26, 1998



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Attorneys for Respondents
CENTRAL SPRINKLER CORP. and
CENTRAL SPRINKLER COMPANY

CERTIFICATE OF SERVICE

I, Thomas P. Hogan, Jr., hereby certify that on this date a true and correct copy of the foregoing Respondents' Responses and Objections to Complaint Counsel's First Requests for Production of Documents and Things was served via regular mail upon the following:

Eric H. Singer
Howard Tarnoff
Deborah S. Orlove
Complaint Counsel
U.S. Consumer Product Safety Commission
4430 East West Highway
Bethesda, MD 20814

Alan H. Schoem
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Office of Compliance
U.S. Consumer Product Safety Commission
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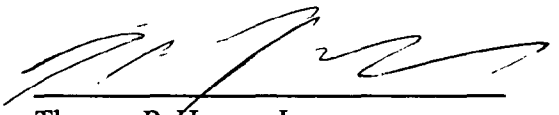
The Hon. William B. Moran
United States Administrative Law Judge
Office of Administrative Law Judges
401 M Street, S.W.
Mail Code 1900L
Washington, DC 20460

Dated: May 26, 1998



Thomas P. Hogan, Jr.

6/02/98

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp.	:	
	:	**CPSC Docket No. 98-2**
and	:	
	:	
Central Sprinkler Co.,	:	
	:	
Respondents.	:	
	:	

RESPONDENTS' RESPONSES AND OBJECTIONS TO COMPLAINT COUNSEL'S FIRST SET OF INTERROGATORIES

Respondents Central Sprinkler Corporation and Central Sprinkler Company (collectively, "Central"), pursuant to 16 C.F.R. § 1025.32, hereby provide responses and objections to Complaint Counsel's First Set of Interrogatories. Central's responses may be supplemented in accordance with 16 C.F.R. § 1025.31(f).

PREFATORY STATEMENT

Central hereby fully incorporates by reference the Prefatory Statement set forth in Respondents' Responses and Objections to Complaint Counsel's First Request for Production of Documents and Things.

OBJECTIONS TO EACH AND EVERY DISCOVERY REQUEST

Central hereby full incorporates by reference the Objections To Each and Every Discovery Request set forth in Respondents' Responses and Objections to Complaint Counsel's First Set of Interrogatories.

INTERROGATORY RESPONSES

INTERROGATORY NO. 1: Identify the person(s) answering these Interrogatories.

RESPONSE NO. 1: Carmine Schiavone and counsel for Central.

INTERROGATORY NO. 2: Identify yourself.

RESPONSE NO. 2: Counsel for Central.

INTERROGATORY NO. 3: Identify all officers, directors and/or shareholders of your company since its formation. For each such person, specify all positions they have held, and the dates they held each position.

RESPONSE NO. 3: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; and it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: annual reports, organizational charts.

INTERROGATORY NO. 4: Provide the date on which the first "Omega" sprinkler was sold or given away as a free sample or promotional item. Identify the fist [sic] "Omega" sprinkler sold or given away as a free sample.

RESPONSE NO. 4: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents that are neither relevant nor reasonably

calculated to lead to the discovery of admissible evidence. Subject to and without waiver of the foregoing objections, Central responds as follows: The first Flow Control was sold in 1978, and the first Omega sprinkler was sold in 1982.

INTERROGATORY NO. 5: Identify all makes and/or models of "Omega" sprinklers you have ever designed, manufactured, and/or distributed. For each model, indicate the date(s) it was designed, manufactured and distributed.

RESPONSE NO. 5: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome. Subject to and without waiver of the foregoing objections, Central responds as follows: C-1; C-1A; C-1A PRO; C-1A PRO ID; EC-20; EC-20A; EC-20 AID; HEC-12; HEC-12 ID; HEC-12 PRO; HEC-12A PRO; HEC-12 RES; HEC-20; HEC-20 ID; R-1; R-1A; R-1M; AC; M; and Flow Control. For the remainder of the information requested in this interrogatory, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: cut sheets, product catalogues, engineering drawings.

INTERROGATORY NO. 6: Provide the total number of Omega sprinklers that:

a) have been sold;
b) have been given away as free samples or promotional items;
c) are installed in the United States and its territories. Of these, how many contain:
   i) EPDM "o" rings;
   ii) silicone "o" rings;
   iii) neither EPDM or silicone "o" rings (specify whether the model has an "o" ring, and if so, the composition of the "o" ring).

RESPONSE NO. 6: Central estimates that approximately 8.9 million Omegas have been sold and installed. All Omegas contain either EPDM or silicone o-rings. For the remainder of the information requested in this interrogatory, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: sales reports.

INTERROGATORY NO. 7: How many Omega sprinklers:

a) have been sold;
b) have been given away as free samples or promotional items;
c) are installed

in each state and territory of the United States.

RESPONSE NO. 7: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; and it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiver of the foregoing objections, Central responds as follows: Central estimates that approximately 8.9 million Omegas have been sold. Central is not able to provide precise information in response to the remaining questions in this interrogatory. Because Central generally does not sell to end-users and generally does not install sprinkler heads, Central lacks specific knowledge regarding the number of Omegas sold to end-users and installed for end-users. To the extent that Central has any such information, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 8: Provide the sales price for each Omega sold by you (or anyone on your behalf) in the United States and/or its territories.

RESPONSE NO. 8: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: price books, product catalogues.

INTERROGATORY NO. 9: For each year in which you manufactured and/or distributed Omega sprinklers, provide:

a) your gross income;
b) your net income;
c) the amount in revenues generated from product sales;
d) the amount in revenues generated from sales of Omega sprinklers.

RESPONSE NO. 9: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred

to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: annual reports, sales reports.

INTERROGATORY NO. 10: How many total Omega sprinklers are installed in the United States and/or its territories in:

a) steel piping systems;
b) copper piping systems;
c) plastic piping systems;
d) polybutylene piping systems;
e) other piping systems not listed above (specify the type of piping system)?

RESPONSE NO. 10: Central responds as follows: Central is not able to provide precise information in response to this interrogatory. Because Central generally does not sell to end-users and generally does not install sprinkler heads, Central lacks specific knowledge regarding the number of Omegas installed in the various types of piping systems. Central has estimated that there are approximately 5.0 million Omegas installed in steel piping systems, and approximately 3.9 million Omegas installed in non-steel piping systems. To the extent that Central has any such information, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 11: How many Omega sprinklers are installed in each state and territory of the United States in:

a) steel piping systems;
b) copper piping systems;
c) plastic piping systems;
d) polybutylene piping systems;

e) other piping systems not listed above (specify the type of piping system)?

RESPONSE NO. 11: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; and it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiver of the foregoing objections, Central responds as follows: See Interrogatory Response No. 10.

INTERROGATORY NO. 12: How many Omega sprinklers are installed in the United States and/or its territories in:

a) private homes
b) apartment buildings
c) schools (including universities and colleges, public or private)
d) nursing homes
e) hospitals
f) detention facilities (including jails, juvenile detention facilities, etc.)
g) homeless shelters
h) facilities used for recreation (e.g., health clubs, gymnasiums, sports arenas, public pools, country clubs, etc.)
i) hotels
j) museums
k) offices (including office buildings)
1) warehouses with no public access areas
m) industrial facilities with no public access areas

RESPONSE NO. 12: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: See Interrogatory Response No. 10. In addition, to the extent that Central has any such information, pursuant to 16 C.F.R. §

1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 13: Identify which Omega makes and/or models you are currently manufacturing and/or selling.

RESPONSE NO. 13: Central responds as follows: C-1A; C-1A PRO; C-1A PRO ID; EC-20A; EC-20 AID; HEC-12; HEC-12 ID; HEC-12 PRO; HEC-12 RES; HEC-20 ID; R-1M; and Flow Control. In addition, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: product catalogues, cut sheets, price books.

INTERROGATORY NO. 14: What is the current sales price for each Omega make and/or model listed in your response to Interrogatory No. 13?

RESPONSE NO. 14: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome, it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: product catalogues, price books.

INTERROGATORY NO. 15: Identify all of your employees, agents, representatives or consultants who have held a supervisory, managerial, or executive position or role in the following areas of your company at any time:

1) sales;
2) marketing;
3) product design and/or development;
4) engineering and/or technical services;
5) customer service/customer relations;
6) public and/or governmental relations;
7) product manufacturing and/or production;
8) product sales, marketing and/or distribution;
9) corporate mergers and/or acquisitions;
10) quality assurance/control;
11) any divisions, subdivisions or areas that deal or dealt with Omega automatic fire sprinklers and/or any component parts of Omega automatic fire sprinklers.

For each employee, agent, representative or consultant, please state the position(s) and title(s) of those position(s), term(s) of employment, and salary. If the person is no longer in your employ, please indicate their reason for leaving and, if known, provide their current address and telephone number.

RESPONSE NO. 15: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: annual reports, employee status reports.

INTERROGATORY NO. 16: Identify all persons and/or entities who were in any way involved in:

a) design and/or development;
b) testing
c) the UL listing process and/or submission of Omega sprinkler samples and/or prototypes for same;
d) marketing;
e) sale; or
f) manufacturing of any makes and/or models of each make and/or model Omega sprinkler.

For each such person and entity, indicate:

i) whether the person or entity is currently employed by your company;
ii) their position in your company (or, if not in your company, elsewhere) at the time of their involvement;
iii) which makes and/or models the involvement related to; and
iv) describe in detail the nature of their involvement.

RESPONSE NO. 16: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: annual reports, employee status reports.

INTERROGATORY NO. 17: For each make and/or model of Omega sprinkler, identify and describe (including specifications for) each component part and each chemical (including lubricants), tool and/or substance used in the Omega manufacturing process.

RESPONSE NO. 17: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is overly vague, unduly broad, and/or unnecessarily burdensome. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: bills of materials, sub-assembly drawings, work instructions.

INTERROGATORY NO. 18: Identify the manufacturer of each component part, chemical (including lubricants, etc.), tool and/or substance identified in your response to Interrogatory No. 17.

RESPONSE NO. 18: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is overly vague, unduly broad, and/or unnecessarily burdensome. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel

is specifically referred to the following categories of documents: bills of materials, purchase orders.

INTERROGATORY NO. 19: Identify the person and/or entity who supplied to you each component part, chemical (including lubricants, etc.), tool and/or substance identified in your response to Interrogatory No. 17.

RESPONSE NO. 19: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is overly vague, unduly broad, and/or unnecessarily burdensome. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: bills of materials; purchase orders.

INTERROGATORY NO. 20: Identify all persons and/or entities who were involved in any way in the design, specifications, and/or development of each component part, chemical (including lubricants, etc.), tool and/or substance identified in your response to Interrogatory No. 17.

RESPONSE NO. 20: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial

information; and it is overly vague, unduly broad, and/or unnecessarily burdensome. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 21: Describe in detail the procedures and specifications for the manufacture of each different make and/or model Omega sprinkler, including any changes in such procedures and/or specifications over time. Specify and describe all tools, chemicals and substances used, including when, how and in what amount they are used.

RESPONSE NO. 21: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is overly vague, unduly broad, and/or unnecessarily burdensome. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: bills of materials, sub-assembly drawings, work instructions, engineering change notices, project proposals, corrective action reports.

INTERROGATORY NO. 22: For each change in procedure or specification identified in your response to Interrogatory No. 21:

a) explain the differences between the procedure or specification and its predecessor(s);
b) explain the reasons for the change;
c) identify all persons and/or entities involved in bringing about the change, and explain their role in same;
d) identify all persons and/or entities who implemented the change;

e) indicate whether any tests were done on the models before or after the change occurred. If so:
   i) describe the tests and provide a detailed protocol;
   ii) identify the persons and entities involved in setting up and/or conducting the tests;
   iii) describe and explain the results of the tests, including all observations and conclusions;
   iv) identify the persons and entities involved in evaluating the test results.

RESPONSE NO. 22: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is overly vague, unduly broad, and/or unnecessarily burdensome. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: engineering change notices, project proposals, material review board minutes, first article reports, vendor certifications, corrective action reports.

INTERROGATORY NO. 23: Have you (or anyone on your behalf) ever utilized any chemical or substance in the manufacture of Omega sprinkler(s) to prevent leaking of those sprinklers when they are later installed into a sprinkler system? If so, identify, for each such chemical or substance:

a) its name (and brand name, if applicable);
b) its chemical composition;
c) its manufacturer; and
d) the person and/or entity from whom you purchased and/or received the chemical or substance;
e) identify and describe any tests performed by you or anyone else to assess whether and/or how the substance affects the operation of Omega sprinkler(s) or any Omega component part, providing the following information:
   i) describe the tests and provide a detailed protocol;

ii) identify the persons and entities involved in setting up and/or conducting the tests;
iii) describe and explain the results of the tests, including all observations and conclusions;
iv) identify the persons and entities involved in evaluating the test results.

f) indicate whether you have communicated with any persons and/or entities (including your employees, agents, and consultants) regarding any such chemical or substance. If so, provide the following information:
i) identify all such persons and/or entities;
ii) state the date of the communication;
iii) describe the content of the communication;
iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 23: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome. Subject to and without waiver of the foregoing objections, Central responds as follows: to the extent that this interrogatory is referring to products such as "Stop-Leak," Central has not utilized such substances.

INTERROGATORY NO. 24: Were/are there any prototypes or precursors of any of the Omega sprinklers listed in your response to Interrogatory No. 6? If so:

a) identify and describe each prototypes or precursor, including any modifications in composition or design;
b) indicate the date on which it was designed and/or developed;
c) identify all persons and entities who were in any way involved in designing, developing and/or reviewing the prototype or precursor;
d) identify the Omega model to which the prototype or precursor corresponds;
(e) describe all tests and evaluations performed on the prototype or precursor, providing the following information:
i) the date on which the test or evaluation was conducted;
ii) the protocol for the test or evaluation;
iii) identify all persons and entities who conducted, attended, reviewed, and/or supervised the test or evaluation;
f) indicate whether the prototype or precursor was ever submitted to a testing laboratory for review, certification or listing. If so, fully describe the circumstances and outcome of the submission and testing, and identify the laboratory;

g) indicate whether you have communicated with any persons and/or entities (including your employees, agents, and consultants) regarding any such prototype or precursor. If so, provide the following information:
   i) identify all such persons and/or entities;
   ii) state the date of the communication;
   iii) describe the content of the communication;
   iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 24: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 25: Identify and describe all measures and/or procedures taken by you or anyone on your behalf at any time before, during, and/or after each Omega sprinkler is manufactured, to ensure that each Omega sprinkler will fully and properly activate when exposed to its activation (triggering) temperature.

RESPONSE NO. 25: A general, non-exhaustive description of such measures and procedures may be described as follows: Central maintains work instructions on its manufacturing floor to ensure that the employees know the process and procedure for assembly of Omega sprinklers. In addition, there is a quality plan for the assembly of Omegas, which is inspected by

quality control inspectors to ensure that it is being followed for proper assembly. The quality control inspectors may conduct visual and/or measurement tasks to verify that the heads coming from the production line meet or exceed the specifications in the quality plan. Moreover, quality control personnel conduct random bath tests of the eutectic to ensure proper temperature operation. UL inspections also are conducted by quality control personnel to ensure that the Omegas produced meet or exceed UL 199 and UL 1626 requirements.

For a more detailed description of such measures and procedures, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals, work instructions.

INTERROGATORY NO. 26: Have you ever known or been advised of any problems with, imperfections or flaws in, defects or deficiencies in or associated with any component part(s) of any Omega sprinkler, or any chemical, tool or substance used in manufacturing Omegas, including whether any component part has been or alleged to have been out of tolerance? If so, for each such problem, flaw, defect and deficiency:

a) describe in full detail the problem, imperfection, flaw, defect, deficiency or extent to which the part was out of tolerance;

b) indicate the date on which you were notified or learned of the problem, flaw, defect or deficiency;

c) indicate how you became aware or were notified of the problem, flaw, defect or deficiency;

d) describe all actions, if any, you took as a result, indicating when those actions were taken; and

e) state whether the affected component part was ever delisted, recalled, discontinued. taken off the market, or requested to be returned to the manufacturer, supplier, distributor, etc. and, if so, explain the circumstances of same.

RESPONSE NO. 26: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it calls for a legal conclusion. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: incoming inspection reports, first article reports, non-conformance reports.

INTERROGATORY NO. 27: Explain in full detail the mechanism of proper operation of each different make and model of Omega sprinkler, once exposed to its activation (triggering) temperature.

RESPONSE NO. 27: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, the general mechanism of operation for most Omegas may be described as follows: A fusible alloy pellet is compressed by a bearing disc into a copper housing by a ball plunger. Heat is absorbed by the heat collecting fins and conducted to the alloy pellet. At the rated temperature, the alloy melts, causing the ball plunger to drop, freeing balls from the retaining groove. This movement allows system water pressure to force the orifice reeling mechanism and deflector assembly open. Water is then discharged in a designed flow pattern. For specific

information regarding each different make and models of Omega sprinklers, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 28: Once the activation (triggering) temperature has been reached, indicate whether water pressure or any other source of pressure (not internal to or part of the Omega itself) is a prerequisite to or requirement for activation of any make and/or model of Omega sprinkler(s). If so:

a) identify the Omega
b) indicate, for each make and/or model of Omega, what the necessary pressure is (in psig);
c) indicate the expected or required source of that pressure;
d) explain how the pressure activates or assists the Omega's activation;
e) explain why the sprinkler will not activate without that pressure.

RESPONSE NO. 28: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: Water pressure is one element in the activation of Omegas. Central also incorporates its Response No. 27. The necessary pressure for activation varies depending on the Omega model and the specific building and system in which it is installed. The appropriate testing criteria is based on the hydraulically calculated operating pressure specific to the particular installed system in each individual building. In order to calculate that pressure, Complaint Counsel is referred to information and/or documents that are not in Central's possession, custody, or control; and/or pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 29: Are you aware of any non-Omega sprinklers that contain an "o" ring? If so:

a) identify the sprinkler make and/or model;
b) identify the manufacturer of the sprinkler;
c) indicate where in the sprinkler the "o" ring is located;
d) explain the mechanism of proper operation/activation of the sprinkler, including how the "o" ring is used; and
e) identify all persons and entities involved in any way in the design of each such sprinkler make and/or model;
f) indicate whether you are aware or have been notified of any instances in which a non-Omega sprinkler containing an "o" ring did not or allegedly did not activate, either in testing or in a fire, when exposed to its activation (triggering) temperature. If so, indicate when, how, and from whom you received such notification;
g) identify all tests of which you are aware that were conducted on the sprinkler to determine whether or not it operates properly, providing the following information:
    i) identify the sprinkler;
    ii) describe the tests and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting the tests;
    iv) describe and explain the results of the tests, including all observations and conclusions;
    v) identify the persons and entities involved in evaluating the test results;
h) indicate whether you have communicated with any persons and/or entities (including your employees, agents, and consultants) regarding the operation of any non-Omega sprinklers containing an "o" ring. If so, provide the following information:
    i) identify all such persons and/or entities;
    ii) state the date of the communication;
    iii) describe the content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 29: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel; and it seeks information and/or documents protected from discovery by the

attorney-client privilege and/or work product doctrine. Subject to and without waiver of the foregoing objections, Central responds as follows: Central is aware of non-Omega sprinklers that contain o-rings, including other sprinklers manufactured by Central Sprinkler Company and certain sprinkler models manufactured by other companies. For the remaining information requested by this interrogatory, Complaint Counsel is referred to information and/or documents that are not in Central's possession, custody, or control; and/or pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 30: Indicate which Omega makes and/or models, and which, if any, adaptations or devices to be used with any Omega make and/or model (such as the "helper spring"), have been tested or submitted for approval, listing and/or certification by a certifying laboratory or institution such as UL or FM? For each such Omega, for each testing and/or submission, and for each certifying laboratory or institution:

a) describe all efforts involved and steps taken in an effort to obtain approval, listing and/or certification;
b) indicate the date on which each such effort or step took place;
c) indicate the project number, if any, that each such effort or step related to or was part of,
d) identify all persons and/or entities involved in each effort or step;
e) with respect to any testing and/or examinations:
    i) describe the tests and/or examinations, and provide a detailed protocol;
    ii) identify the persons and entities involved in setting up and/or conducting the tests;
    iii) describe and explain the results of the tests, including all observations and conclusions;
    iv) identify the persons and entities involved in evaluating the test results;
f) describe all communications regarding or relating in any way to the listing and/or certification, including the following information:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication;

g) indicate whether and when listing and/or certification was granted, refused, or postponed by the certifying laboratory or institution.

RESPONSE NO. 30: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel; and it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: correspondence from UL and/or FM, listing books, listing documents and cards.

INTERROGATORY NO. 31: Indicate whether approval, listing or certification was ever refused, withdrawn, discontinued or canceled for any Omega sprinkler, sprinkler component part or allegedly assistive operating device (such as the helper spring), and/or whether any certifying laboratory or institution has ever objected to your sale and/or distribution of any Omega sprinkler. If so:

a) identify the Omega and/or Omega component part or allegedly assistive operating device;
b) explain the circumstances and date;
c) identify all persons and/or entities involved;
d) identify and describe all communications regarding or relating in any way to the refusal, withdrawal, discontinuation, cancellation, or objected to sale and/or distribution, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was

directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 31: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: correspondence from UL and/or FM, listing documents.

INTERROGATORY NO. 32: Have you ever advertised, represented, indicated or suggested in any marketing material that Omega sprinklers that are not listed or certified by FM are listed or certified by FM? If so:

a) identify the advertisement or marketing material;

b) indicate whether and when you were notified of the false advertisement, representation, indication or suggestion. If so, indicate:

i) how and from whom you received the notification;

ii) when you received the notification;

iii) describe the contents of the notification;

iv) describe your response to the notification.

RESPONSE NO. 32: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiver of the foregoing objections, Central responds as follows: Central has never knowingly engaged in such actions.

INTERROGATORY NO. 33: Have you ever advertised, indicated or suggested in any marketing material that Omega sprinklers that are not listed or certified by UL are listed or certified by UL? If so:

a) identify the advertisement or marketing material;
b) indicate whether and when you were notified of the false advertisement, representation, indication or suggestion. If so, indicate:
   i) how and from whom you received the notification;
   ii) when you received the notification;
   iii) describe the contents of the notification;
   iv) describe your response to the notification.

RESPONSE NO. 33: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiver of the foregoing objections, Central responds as follows: Central has never knowingly engaged in such actions. Regarding the EC-20A model Omega, at one time, UL had completed the review process for the model and actually had issued a listing card for the corresponding commercial model, but, as an unintentional oversight, the actual listing card for the EC-20A was not issued at the same time. For more detailed information, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 34: Indicate whether you are aware or have ever been notified of an Omega that did not or allegedly did not activate in a fire? If so:

a) identify the Omega;
b) indicate when, where and how the fire occurred;
c) what was the system pressure was (in psig) at the time of the fire and/or nonactivation;
d) indicate whether anyone sustained or allegedly sustained bodily injury as a result of or in association with the fire (including injuries sustained or allegedly sustained in attempting to escape the fire). If so:
    i) identify the injured person;
    ii) indicate how the injury was or was alleged to have been sustained;
    iii) indicate whether a suit, claim, or demand was ever made against you or in which you were implicated relating to the incident or injury; provide details of same;
e) indicate whether anyone died or allegedly died as a result of or in association with the fire (including death incurred or allegedly incurred in attempting to escape the fire). If so:
    i) identify the decedent;
    ii) indicate how and where the death occurred;
    iii) indicate whether a suit, claim, or demand was ever made against you or in which you were implicated relating to the incident or death; provide details of same;
f) indicate whether any property was or allegedly was damaged, lost or destroyed as a result of or in association with the fire (including damage sustained or allegedly sustained in attempting to remove the property from the fire, or in attempting to put out the fire). If so:
    i) identify the owner of the property;
    ii) indicate how the property was or allegedly was damaged;
    iii) indicate the value or alleged value of the property;
    iv) indicate whether a suit, claim, or demand was ever made against you or in which you were implicated relating to the incident or damage; provide details of same;
g) indicate whether the Omega was fitted with a "helper spring;"
h) indicate when and how you became aware of the fire and/or the nonactivation, including from whom you received the notification;
i) identify and describe all communications regarding or relating in any way to the fire and/or nonactivation, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

j) indicate whether you or anyone else tested and/or examined any Omega that failed to activate or allegedly failed to activate in a fire, the sprinkler system in which the Omega was installed, and/or any other sprinkler from the same site?
If so:
   i) identify the sprinkler;
   ii) describe the tests and/or examinations, and provide a detailed protocol;
   iii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;
   iv) describe and explain the results of the tests and/or examinations, including all observations and conclusions;
   v) identify the persons and entities involved in evaluating the test and/or examination results;

k) indicate whether the Omega "o" ring was examined for swelling and/or adhesion.
If so:
   i) indicate whether swelling and/or adhesion was present;
   ii) indicate on what basis and by what criteria it was determined whether the "o" ring was swollen and/or adhered;
   iii) identify all persons and/or entities involved in determining whether the "o" ring was swollen and/or adhered;

l) indicate whether the Omega and/or the system from which it came was tested and/or examined for "stop leak" or any other leakage prevention substance. If so:
   i) indicate whether "stop leak" or any other such substance was present;
   ii) indicate on what basis and by what criteria it was determined whether "stop leak" or any other such substance was present;
   iii) identify all persons and/or entities involved in determining whether "stop leak" or any other such substance was present;

m) indicate whether the Omega was examined for dezincification. If so:
   i) indicate whether dezincification had occurred;
   ii) indicate on what basis and by what criteria it was determined whether dezincification had occurred;
   iii) identify all persons and/or entities involved in determining whether dezincification had occurred;

n) explain why the Omega failed to activate in the fire.

RESPONSE NO. 34: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that

constitute trade secrets or other confidential research, development, or commercial information; and it calls for a legal conclusion.

Subject to and without waiver of the foregoing objections, Central responds as follows: Following is a list of locations regarding which Central has "been notified of an Omega that did not or allegedly did not activate in a fire." By listing the locations below, Central does not concede that any Omega sprinkler involved did not activate properly or that any non-activation was caused by a defect in the sprinkler. To the contrary, for example, certain of the locations listed below involved fires that burned from outside the structure to the inside, systems that were contaminated with prohibited substances (e.g., Stop-Leak), or systems where the water supply may have been shut off or otherwise disabled. Central has not had an opportunity to investigate fully a number of locations listed below, and Central also is in the process of investigating other fires where Omegas were or allegedly were involved. To the extent that any responsive information is discovered during such ongoing investigations, Central will provide supplemental information in response to this interrogatory.

A. Jackson Memorial Hospital, Miami, Florida

B. Marriott Hotel, Romulus, Michigan

C. Veterans' Affairs Building, Lake Canandaqua, New York

D. Crossroads, Ft. Wayne, Indiana

E. Mel's Marina, Gulf Breeze, Florida

F. Kent Manor Inn, Annapolis, Maryland

G. Casa Reale Apartments, Los Angeles, California

H. Escondido Gardens, Escondido, California

I. Joshua Tree Apartments, Scottsdale, Arizona

J. Lorene Lodge, Marietta, Georgia

K. Yorba Residence, Riverside, California

L. Days Inn, Horsham, Pennsylvania

M. Monserrat School of Art, Beverly, Massachusetts

N. Boarding House, Milford, Massachusetts

O. Private Residence, Dallas, Texas

P. The Fairway at Piper Glen, Charlotte, North Carolina

Q. Lockemill Plaza, Concord, North Carolina

For the remainder of the information requested in this interrogatory, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: For information responsive to the remaining questions in this interrogatory, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: customer service department files, return authorizations, diagnostic reports.

INTERROGATORY NO. 35: Indicate whether you are aware or have ever been notified of an Omega sprinkler that, when tested, did not activate or allegedly did not activate at 7 psig or below when exposed to its activation/triggering temperature? If so:

a) identify the Omega;
b) indicate when, how, and from whom you received such notification;
c) describe and explain the circumstances of the nonactivation at 7 psig, including

i) when and where the testing and nonactivation at or below 7 psig took place;
ii) describe the tests and provide a detailed protocol:
iii) identify the persons and entities involved in setting up and/or conducting the tests;
iv) describe and explain the results of the tests, including all observations and conclusions;
v) identify the persons and entities involved in evaluating the test results.

d) indicate at what pressure, if any, the Omega activated (or if it failed to activate together, indicate the highest pressure to which the sprinkler was subjected);

e) describe and explain your response to the notification;

f) did you or anyone else of whom you are aware examine and/or test the Omega that failed to activate (after it failed to activate), the system in which it was installed, and/or any other sprinkler from the same site? If so:
i) identify the sprinkler;
ii) describe the tests and/or examinations
iii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;
iv) describe and explain the results of the tests and/or examinations, including all observations and conclusions;
v) identify the persons and entities involved in evaluating the test and/or examination results;

g) identify and describe all communications regarding or relating in any way to the notification, the sprinkler, the testing and/or examination, and/or the nonactivation at 7 psig or below, including:
i) the date on which the communication took place;
ii) the persons and/or entities to and from whom the communication was directed;
iii) the nature and content of the communication;
iv) identify all persons and/or entities present during the communication.

h) indicate whether the Omega was equipped or fitted with a "helper spring;"

i) indicate whether the Omega "o" ring was examined for swelling and/or adhesion. If so:
i) indicate whether swelling and/or adhesion was present;
ii) indicate on what basis and by what criteria it was determined whether the "o" ring was swollen and/or adhered;
iii) identify all persons and/or entities involved in determining whether the "o" ring was swollen and/or adhered;

j) indicate whether the Omega and/or the system from which it came was tested and/or examined for "stop leak" or any other leakage prevention substance. If so:
i) indicate whether "stop leak" or any other such substance was present;
ii) indicate on what basis and by what criteria it was determined whether "stop leak" or any other such substance was present;

iii) identify all persons and/or entities involved in determining whether stop leak" or any other such substance was present;

k) indicate whether the Omega was examined for dezincification. If so:
   i) indicate whether dezincification had occurred;
   ii) indicate on what basis and by what criteria it was determined whether dezincification had occurred;
   iii) identify all persons and/or entities involved in determining whether dezincification had occurred;

l) explain why each such Omega did not activate at or below 7 psig.

RESPONSE NO. 35: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: return authorizations, diagnostic reports.

INTERROGATORY NO. 36: Indicate whether you are aware or have ever been notified of an Omega sprinkler that, when tested in the field, did not activate or allegedly did not activate when exposed to its activation/triggering temperature? If so:

a) identify the Omega;

b) indicate when, how, and from whom you received such notification;

c) describe and explain the circumstances of the nonactivation, including:
   i) when and where the testing and nonactivation took place;
   ii) describe the tests and provide a detailed protocol;
   iii) identify the persons and entities involved in setting up and/or conducting the tests;
   iv) describe and explain the results of the tests, including all observations and conclusions;
   v) identify the persons and entities involved in evaluating the test results.

d) indicate what the pressure of the system (in which the Omega was installed) was at the time of the field test;

e) describe and explain your response to the notification;

f) did you or anyone else of whom you are aware examine and/or test the Omega that failed to activate (after it failed to activate), the system in which it was installed, and/or any other sprinkler from the same site? If so:
   i) identify the sprinkler;
   ii) describe the tests and/or examinations, and provide a detailed protocol;
   iii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;
   iv) describe and explain the results of the tests and/or examinations, including all observations and conclusions;
   v) identify the persons and entities involved in evaluating the test and/or examination results;

g) identify and describe all communications regarding or relating in any way to the notification, the sprinkler, the testing and/or examination, and/or the nonactivation, including:
   i) the date on which the communication took place;
   ii) the persons and/or entities to and from whom the communication was directed;
   iii) the nature and content of the communication;
   iv) identify all persons and/or entities present during the communication.

h) indicate whether the Omega was equipped or fitted with a "helper spring;"

i) indicate whether the Omega "o" ring was examined for swelling and/or adhesion. If so:
   i) indicate whether swelling and/or adhesion was present;
   ii) indicate on what basis and by what criteria it was determined whether the "o" ring was swollen and/or adhered;
   iii) identify all persons and/or entities involved in determining whether the "o" ring was swollen and/or adhered;

j) indicate whether the Omega and/or the system from which it came was tested and/or examined for "stop leak" or any other leakage prevention substance. If so:
   i) indicate whether "stop leak" or any other such substance was present;
   ii) indicate on what basis and by what criteria it was determined whether "stop leak" or any other such substance was present;

iii) identify all persons and/or entities involved in determining whether "stop leak" or any other such substance was present;

k) indicate whether the Omega was examined for dezincification. If so:
   i) indicate whether dezincification had occurred;
   ii) indicate on what basis and by what criteria it was determined whether dezincification had occurred;
   iii) identify all persons and/or entities involved in determining whether dezincification had occurred;

l) explain why each such Omega did not activate when field tested.

RESPONSE NO. 36: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: return authorizations, diagnostic reports.

INTERROGATORY NO. 37: Do you contend that an Omega that is installed into a sprinkler system containing water at a pressure of at least 7 psig, that does not activate upon being exposed to its activation triggering temperature for long enough for its fusible like [sic] to melt, will activate if fitted with the "helper spring" (that Central has proposed for use with the Omega)? If so:

a) explain the basis for your contention;
b) describe in detail the method of operation of the "helper spring;"
c) describe in detail the specifications for the "helper spring;"
d) identify the manufacturer of the "helper spring;"

e) identify all persons and/or entities involved in the design and/or development of the "helper spring."

f) describe and any tests performed by you or anyone else to assess whether and/or how the "helper spring" affects the operation of an Omega sprinkler or any Omega component part, providing the following information:
   i) describe the tests and provide a detailed protocol;
   ii) identify the persons and entities involved in setting up and/or conducting the tests;
   iii) describe and explain the results of the tests, including all observations and conclusions;
   iv) identify the persons and entities involved in evaluating the test results.

g) indicate whether you have communicated with any persons and/or entities (including your employees, agents, and consultants) regarding the operation and/or efficacy of the helper spring. If so, provide the following information:
   i) identify all such persons and/or entities;
   ii) state the date of the communication;
   iii) describe the content of the communication;
   iv) identify all persons and/or entities present during the communication;

h) if you allege that an Omega sprinkler fitted with a helper spring will activate at a lower system pressure than an Omega without a helper spring, please indicate:
   i) how much lower the pressure required to activate the helper-spring fitted Omega is than the pressure required to activate an Omega not fitted with the helper spring; and
   ii) explain the basis for your allegation;
   iii) indicate what evidence supports your allegation.

RESPONSE NO. 37: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: Omegas fitted with "helper springs" will activate at the appropriate

hydraulically calculated operating pressure specific to the particular installed system in each building. For the remainder of the information requested by this interrogatory, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: return authorizations, diagnostic reports, activity reports, purchase orders, engineering reports, listing documents.

INTERROGATORY NO. 38: Have you ever been aware or been notified of an Omega sprinkler or component that has cracked or broken? If so:

a) identify the Omega and, if applicable, its component part;
b) describe the circumstances of the cracking and/or breakage, including the date on which it occurred;
c) identify the person and/or entity (including your employees and/or consultants) who notified you of the cracking and/or breakage;
d) detail when and how you became aware or received notification of the cracking and/or breakage;
e) describe and explain your response to the notification;
f) indicate whether you or anyone of whom you are aware examined and/or tested the affected sprinkler, its component part (if applicable), and/or other sprinklers from that site. If so:
    i) describe all such tests and/or examinations, and provide a detailed protocol;
    ii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;
    iii) describe and explain the results of each test and/or examination, including all observations and conclusions;
    iv) identify the persons and entities involved in evaluating the test and/or examination results;
g) identify and describe all communications regarding or relating in any way to the affected sprinkler, the cracking and/or breakage, and/or tests and/or examinations relating thereto, indicating:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication;
h) explain in full detail why the cracking and/or breakage occurred.

RESPONSE NO. 38: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: return authorizations, diagnostic reports.

INTERROGATORY NO. 39: Have you ever been aware or been notified of an Omega sprinkler or any sprinkler component that has exhibited corrosion? If so:

a) identify the Omega and, if applicable, its component part;
b) describe the circumstances of the corrosion, including the date on which it occurred;
c) identify the person and/or entity (including your employees and/or consultants) who notified you of the corrosion;
d) detail when and how you became aware or received notification of the corrosion;
e) describe and explain your response to the notification;
f) indicate whether you or anyone of whom you are aware examined and/or tested the affected sprinkler, its component part (if applicable), and/or other sprinklers from that site. If so:
    i) describe all such tests and/or examinations, and provide a detailed protocol;
    ii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;
    iii) describe and explain the results of each test and/or examination, including all observations and conclusions;
    iv) identify the persons and entities involved in evaluating the test or examination results;

g) identify and describe all communications regarding or relating in any way to the affected sprinkler, the corrosion, and/or tests and/or examinations relating thereto, indicating:
   i) the date on which the communication took place;
   ii) the persons and/or entities to and from whom the communication was directed;
   iii) the nature and content of the communication;
   iv) identify all persons and/or entities present during the communication;

h) explain in full detail how and why the corrosion occurred.

RESPONSE NO. 39: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: return authorizations, diagnostic reports.

INTERROGATORY NO. 40: Indicate whether you are aware or have ever been notified of an Omega sprinkler that leaked and/or weeped when tested or in a fire? If so:

a) identify the Omega;
b) indicate when, how, and from whom you received notification or became aware of the leakage and/or weeping;
c) describe and explain the circumstances of the leaking and/or weeping, including when and where the leakage and/or weeping took place. If the leakage and/or weeping took place in testing:
   i) describe the tests and provide a detailed protocol;

ii) identify the persons and entities involved in setting up and/or conducting the tests;
iii) describe and explain the results of the tests, including all observations and conclusions (and including at what pressure the sprinkler leaked and/or wept);
iv) identify the persons and entities involved in evaluating the test and/or examination results.

d) indicate whether you or anyone else of whom you are aware tested and/or examined the Omega (after it leaked and/or wept), and/or any other sprinkler from the same site. If so:
i) identify the sprinkler;
ii) describe the tests and/or examinations, and provide a detailed protocol;
iii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;
iv) describe and explain the results of the tests and/or examinations, including all observations and conclusions;
v) identify the persons and entities involved in evaluating the test and/or examination results.

e) describe and explain your response to the notification;

f) identify and describe all communications regarding or relating in any way to the notification, the sprinkler, the testing, and/or the leakage and/or weeping, including:
i) the date on which the communication took place;
ii) the persons and/or entities to and from whom the communication was directed;
iii) the nature and content of the communication;
iv) identify all persons and/or entities present during the communication.

g) indicate whether the Omega that leaked or wept was equipped or fitted with a "helper spring;"

h) indicate whether the "o" ring of the Omega that leaked or wept was examined for swelling and/or adhesion. If so:
i) indicate whether swelling and/or adhesion was present;
ii) indicate on what basis and by what criteria it was determined whether the "o" ring was swollen and/or adhered;
iii) identify all persons and/or entities involved in determining whether the "o" ring was swollen and/or adhered;

i) explain why the Omega leaked and/or wept.

RESPONSE NO. 40: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of

admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: return authorizations, diagnostic reports.

INTERROGATORY NO. 41: Indicate whether you are aware or have ever been notified of an Omega sprinkler that activated unnecessarily or prematurely (either without or before being exposed to its activation/triggering temperature) when tested or in a fire? If so:

a) identify the Omega;
b) indicate when, how, and from whom you received notification or became aware of the unnecessary or premature activation;
c) describe and explain the circumstances of the unnecessary and/or premature activation; including when and where the activation took place. If during testing:
    i) describe the tests and provide a detailed protocol;
    ii) identify the persons and entities involved in setting up and/or conducting the tests;
    iii) describe and explain the results of the tests, including all observations and conclusions (and including at what temperature and pressure the sprinkler activated);
    iv) identify the persons and entities involved in evaluating the test results.
d) indicate whether you or anyone else of which you are aware tested and/or examined the Omega (after it activated prematurely and/or unnecessarily), and/or any other sprinkler from the same site. If so:
    i) identify the sprinkler;
    ii) describe the tests and/or examinations, and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;

iv) describe and explain the results of the tests and/or examinations, including all observations and conclusions;
v) identify the persons and entities involved in evaluating the test and/or examination results.

e) describe and explain your response to the notification;
f) identify and describe all communications regarding or relating in any way to the notification, the sprinkler, the testing, and/or the premature and/or unnecessary activation, including:
i) the date on which the communication took place;
ii) the persons and/or entities to and from whom the communication was directed;
iii) the nature and content of the communication;
iv) identify all persons and/or entities present during the communication-
g) indicate whether the Omega that activated prematurely and/or unnecessarily was equipped or fitted with a "helper spring;"
h) indicate whether the "o" ring of the Omega that activated prematurely and/or unnecessarily was examined for swelling and/or adhesion. If so:
i) indicate whether swelling and/or adhesion was or was not present;
ii) indicate on what basis and by what criteria it was determined whether the "o" ring was swollen and/or adhered;
iii) identify all persons and/or entities involved in determining whether the ,lo" ring was swollen and/or adhered;
i) explain why the Omega activated prematurely and/or unnecessarily.

RESPONSE NO. 41: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. §

1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 42: Do you contend that dezincification may cause an Omega to:

a) leak and/or weep;
b) activate prematurely and/or unnecessarily;
c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or
d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or
e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature). If so:
    i) explain the basis for your contention;
    ii) identify the Omegas in which dezincification causes or may cause (a), (b), (c), and/or (d), above;
    iii) identify the systems in which dezincification causes or may cause (a), (b), (c) and/or (d), above;
    iv) describe the circumstances under which dezincification causes or may cause (a), (b), (c) and/or (d), above.

RESPONSE NO. 42: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 43: Have you or anyone of whom you are aware ever determined or alleged that an Omega with a plunger housing made of an alloy other than CDA 35330, from a plastic or copper piping system, exhibits dezincification? If so:

a) identify the Omega;
b) identify the person and/or entity that made the determination or allegation;
c) indicate the date on which the determination or allegation was made;
d) describe the methods and criteria used to determine and confirm the existence of dezincification;
e) identify the person and/or entity (including your employees or consultants) who notified you of the alleged dezincification;
f) indicate how and when you were notified of the alleged dezincification;
g) detail your response to the notification or awareness;
h) did you or anyone else of whom you are aware test and/or examine the Omega, the system in which it was installed and/or any other sprinkler from the same site? If so:
    i) identify the Omega;
    ii) describe all such tests and/or examinations, and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;
    iv) describe and explain the results of each test and/or examination, including all observations and conclusions;
    v) identify the persons and entities involved in evaluating the test and/or examination results;
i) identify and describe all communications regarding or relating in any way to the Omega, the alleged dezincification, the examination and/or conclusion, and any tests and/or examinations relating thereto, indicating:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.
j) With respect to each such Omega, indicate whether you contend that the dezincification caused the Omega to:
    i) leak and/or weep;
    ii) prematurely and/or unnecessarily activate;
    iii) fail to activate at 7 psig or below in testing (when exposed to its activation/triggering temperature;
    iv) fail to activate in field testing (when exposed to its activation/triggering temperature);
    v) fail to activate in a fire (when exposed to its activation/triggering temperature).

    If so, explain fully the basis for your contention.

RESPONSE NO. 43: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 44: Have you or anyone of whom you are aware ever determined or alleged that an Omega with a plunger housing made of CDA 35330 alloy, from a plastic or copper piping system, exhibits dezincification? If so:

a) identify the Omega;
b) identify the person and/or entity that made the determination or allegation;
c) indicate the date on which the determination or allegation was made;
d) describe the methods and criteria used to determine and confirm the existence of dezincification;
e) identify the person and/or entity (including your employees or consultants) who notified you of the alleged dezincification;
f) indicate how and when you were notified of the alleged dezincification;
g) detail your response to the notification or awareness;
h) did you or anyone else of whom you are aware test and/or examine the Omega and/or any other sprinkler from the same site? If so:
    i) identify the Omega;
    ii) describe all such tests and/or examinations, and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;
    iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test and/or examination results;

i) identify and describe all communications regarding or relating in any way to the Omega, the alleged dezincification, the examination and/or conclusion, and any tests and/or examinations relating thereto, indicating:
   i) the date on which the communication took place;
   ii) the persons and/or entities to and from whom the communication was directed;
   iii) the nature and content of the communication;
   iv) identify all persons and/or entities present during the communication.

j) With respect to each such Omega, indicate whether you or anyone else of whom you are aware contend that the dezincification caused the Omega to:
   i) leak and/or weep;
   ii) prematurely and/or unnecessarily activate;
   iii) fail to activate at 7 psig or below in testing (when exposed to its activation/triggering temperature;
   iv) fail to activate in field testing (when exposed to its activation/triggering temperature);
   v) fail to activate in a fire (when exposed to its activation/triggering temperature).

If so, explain fully the basis for your contention or, if not your contention, identify the person and/or entity who so contended, and explain your understanding of the basis for their contention.

RESPONSE NO. 44: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence ; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. §

1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 45: Have you or anyone of whom you are aware ever determined or alleged that an Omega from a piping system that is neither copper or plastic exhibits dezincification? If so:

a) identify the Omega;
b) identify the person and/or entity that made the determination or allegation;
c) indicate the date on which the determination or allegation was made;
d) describe the methods and criteria used to determine and confirm the existence of dezincification;
e) identify the person and/or entity (including your employees or consultants) who notified you of the alleged dezincification;
f) indicate how and when you were notified of the alleged dezincification;
g) detail your response to the notification or awareness;
h) did you or anyone else of whom you are aware test and/or examine the Omega and/or any other sprinkler from the same site? If so:
    i) identify the Omega;
    ii) describe all such tests and/or examinations, and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;
    iv) describe and explain the results of each test and/or examination, including all observations and conclusions;
    v) identify the persons and entities involved in evaluating the test and/or examination results;
i) identify and describe all communications regarding or relating in any way to the Omega, the alleged dezincification, the examination and/or conclusion, and any tests and/or examinations relating thereto, indicating:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 45: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential

research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 46: Are you aware or have you ever been notified of an Omega sprinkler from a copper or plastic piping system that did not exhibit dezincification, and that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire? If so:

a) identify the Omega;
b) describe the circumstances under which the Omega did not activate;
c) indicate at what pressure, if any, the Omega activated (or if it failed to activate altogether, indicate the highest pressure to which the Omega was subjected);
d) identify the person and/or entity (including your employees and/or consultants) who notified you of the Omega and/or its nonactivation under the circumstances above;
e) indicate how and when you became aware or received notification of the nonactivation under the circumstances described above;
f) indicate on what basis and by what criteria it was determined whether dezincification was present;
g) detail your response to the notification or awareness;
h) indicate whether you or anyone else of whom you are aware examined and/or tested the affected sprinkler and/or other sprinklers from that site. If so:
    i) identify the Omega;
    ii) describe all such tests and/or examinations, and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;
    iv) describe and explain the results of each test and/or examination, including all observations and conclusions;
    v) identify the persons and entities involved in evaluating the test results;
i) identify and describe all communications regarding or relating in any way to the Omega and/or its nonactivation, and/or tests and/or examinations relating thereto, indicating:
    i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;
iii) the nature and content of the communication;
iv) identify all persons and/or entities present during the communication.

j) explain in full detail why the Omega did not activate.

RESPONSE NO. 46: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: return authorizations, diagnostic reports.

INTERROGATORY NO. 47: Do you allege that any change in the manufacturing process and/or component parts, including any tools, substances or chemicals used in the manufacturing process, renders the Omegas manufactured after a certain date unsusceptible to dezincification? If so:

a) describe the alleged change, and indicate which Omega makes and models were changed;
b) indicate the date on which the change was effected;
c) identify all persons and/or entities involved in effecting the change, describing each such person's role in effecting the change;

d) indicate whether you or anyone else of whom you are aware has tested and/or examined an Omega manufactured after the change to determine whether it exhibits dezincification? If so:
   i) identify the Omega;
   ii) describe all such tests and/or examinations, and provide a detailed protocol;
   iii) identify the persons and entities involved in setting up and/or conducting each test or examination;
   iv) describe and explain the results of each test and/or examination, including all observations and conclusions;
   v) identify the persons and entities involved in evaluating the test and/or examination results;

e) identify and describe all communications regarding or relating in any way to the change and/or tests and/or examinations relating thereto, indicating:
   i) the date on which the communication took place;
   ii) the persons and/or entities to and from whom the communication was directed;
   iii) the nature and content of the communication;
   iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 47: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: There is no brass material which is totally "unsusceptible to dezincification," as they all contain some percentage of zinc. This is an industry-wide issue. However, changes made to the Omega sprinklers during 1990 make for a more stable and resistive sprinkler when the brass alloy is exposed to conditions which promote dezincification. For the remainder of the information requested by this interrogatory, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents:

engineering change notices, bills of materials, diagnostic reports, return authorizations, project proposals, first article reports, vendor certifications, material review board minutes.

INTERROGATORY NO. 48: Do you contend that the use of stop leak or other sealant, leakage prevention substance or pipe cement by sprinkler installers/contractors, plumbers and/or others directly involved in installation and/or maintenance of sprinkler systems may cause an Omega to:

a) leak and/or weep;
b) activate prematurely and/or unnecessarily;
c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or
d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or
e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature). If so:
    i) explain the basis for your contention;
    ii) identify the Omegas in which the use of stop leak or other sealant, leakage prevention substance or pipe cement causes or may cause (a), (b), (c), and/or (d), above;
    iii) identify the systems in which the use of stop leak or other sealant, leakage prevention substance or pipe cement causes or may cause (a), (b), (c) and/or (d), above;
    iv) identify the substances you contend are used;
    v) describe the circumstances under which the use of stop leak or other sealant, leakage prevention substance or pipe cement causes or may cause (a), (b), (c) and/or (d), above.

RESPONSE NO. 48: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: the use of "Stop-Leak" or other sealant materials, which are prohibited from use in sprinkler systems, may cause activation problems for Omegas. For the remainder of the information requested by this

interrogatory, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: return authorizations, diagnostic reports.

INTERROGATORY NO. 49: Have you or anyone of whom you are aware ever determined or alleged that an Omega sprinkler was exposed to stop leak or any other sealant, leakage prevention substance or pipe cement? If so:

a) identify the Omega;
b) identify the substance to which the Omega was allegedly exposed, including the manufacturer, chemical name, brand name, and chemical composition;
c) identify the person and/or entity that made the determination or allegation;
d) indicate the date on which the determination or allegation was made;
e) describe the methods and criteria used to determine and confirm the existence of the stop leak or the other sealant, leak prevention substance or pipe cement;
f) identify the person and/or entity (including your employees or consultants) who notified you of the alleged exposure to stop leak or any other sealant, leakage prevention substance or pipe cement;
g) indicate how and when you were notified of the alleged exposure to stop leak or any other sealant, leakage prevention substance or pipe cement;
h) detail your response to the notification or awareness;
i) did you or anyone else of whom you are aware test and/or examine the Omega and/or any other sprinkler from the same site? If so:
    i) identify the Omega;
    ii) describe all such tests and/or examinations, and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;
    iv) describe and explain the results of each test and/or examination, including all observations and conclusions;
    v) identify the persons and entities involved in evaluating the test and/or examination results;
j) identify and describe all communications regarding or relating in any way to the Omega, the alleged exposure to stop leak or any other sealant, leakage prevention substance or pipe cement, the examination and/or conclusion, and any tests and/or examinations relating thereto, indicating:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

k) With respect to each such Omega, indicate whether you contend that the exposure to stop leak or any other sealant, leakage prevention substance or pipe cement caused the Omega to:

i) leak and/or weep;

ii) prematurely and/or unnecessarily activate;

iii) fail to activate at 7 psig or below in testing (when exposed to its activation/triggering temperature;

iv) fail to activate in field testing (when exposed to its activation/triggering temperature);

v) fail to activate in a fire (when exposed to its activation/triggering temperature);

If so, explain fully the basis for your contention.

RESPONSE NO. 49: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: Yes. For the remainder of the information requested by this interrogatory, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: return authorizations, diagnostic reports.

INTERROGATORY NO. 50: Are you aware or have you ever been notified of an Omega sprinkler that was not exposed to stop leak or any other sealant, leakage prevention substance or pipe cement, and that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire? If so:

a) identify the Omega;

b) describe the circumstances under which the Omega did not activate;

c) indicate at what pressure, if any, the Omega activated (or if it failed to activate altogether, indicate the highest pressure to which the Omega was subjected);

d) identify the person and/or entity (including your employees and/or consultants) who notified you of the Omega and/or its nonactivation under the circumstances above;
e) indicate how and when you became aware or received notification of the nonactivation under the circumstances described above;
f) indicate on what basis and by what criteria it was determined whether stop leak or any other sealant, leakage prevention substance or pipe cement was present;
g) detail your response to the notification or awareness;
h) indicate whether you or anyone else of whom you are aware examined and/or tested the affected sprinkler and/or other sprinklers from that site. If so:
    i) identify the Omega;
    ii) describe all such tests and/or examinations, and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;
    iv) describe and explain the results of each test and/or examination, including all observations and conclusions;
    v) identify the persons and entities involved in evaluating the test results;
i) identify and describe all communications regarding or relating in any way to the Omega and/or its nonactivation, and/or tests and/or examinations relating thereto, indicating:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication;
j) explain in full detail why the Omega did not activate.

RESPONSE NO. 50: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and

without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: return authorizations, diagnostic reports.

INTERROGATORY NO. 51: Do you allege that any change in the manufacturing process and/or component parts, including any tools, substances or chemicals used in the manufacturing process, renders the Omegas manufactured after a certain date unsusceptible to the effects that you allege in your response to Interrogatory No. 48 are caused or may be caused by the use of stop leak or any other sealant, leakage prevention substance or pipe cement? If so, for each such substance (stop leak or any other sealant, leakage prevention substance or pipe cement):

a) identify the substance;
b) describe the alleged change, and identify the Omega makes and models to which the change applies;
c) indicate the date on which the change was effected;
d) identify all persons and/or entities involved in effecting the change, describing each such person's role in effecting the change;
e) indicate whether you or anyone else of whom you are aware has tested and/or examined an Omega manufactured after the change to determine whether it exhibits the effects that you allege in your response to Interrogatory No. 48 are caused or may be caused by the use of stop leak or any other sealant, leakage prevention substance or pipe cement? If so:
    i) identify the Omega;
    ii) describe all such tests and/or examinations, and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting each test or examination;
    iv) describe and explain the results of each test and/or examination, including all observations and conclusions;
    v) identify the persons and entities involved in evaluating the test and/or examination results;
e) identify and describe all communications regarding or relating in any way to the change and/or tests and/or examinations relating thereto, indicating:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 51: Central Sprinkler responds as follows: to the best of its knowledge, there are no changes in the manufacturing process that would render Omegas "unsusceptible" to the effects of "Stop-Leak" and similar materials expressly forbidden for use in sprinkler systems.

INTERROGATORY NO. 52: Do you contend that the use of cutting oil or other substances used by sprinkler installers/contractors, plumbers and/or others directly involved in installation and/or maintenance of sprinkler systems to cut pipe may cause an Omega to:

a) leak and/or weep;
b) activate prematurely and/or unnecessarily;
c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or
d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or
e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature). If so:
    i) explain the basis for your contention;
    ii) identify the Omegas in which the use of cutting oils or other substances used to cut pipe causes or may cause (a), (b), (c), and/or (d), above;
    iii) identify the systems in which the use of cutting oils or other substances used to cut pipe causes or may cause (a), (b), (c) and/or (d), above;
    iv) identify the substances you contend are used;
    v) describe the circumstances under which the use of cutting oils or other substances used to cut pipe causes or may cause (a), (b), (c) and/or (d), above.

RESPONSE NO. 52: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: Central contends that the use of cutting oils does not cause any of the stated effects in

currently manufactured Omegas, which use silicone o-rings. Testing of the sprinklers using silicone o-rings is ongoing. Cutting oils used by sprinkler installers may have some effect on activation of Omegas that use EPDM o-rings; any such effect may be ascertained through appropriate testing. For the rest of the information requested by this interrogatory, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 53: Have you or anyone of whom you are aware ever determined or alleged that an Omega sprinkler was exposed to cutting oils or other substances used to cut pipe? If so:

a) identify the Omega;
b) identify the substance to which the Omega was allegedly exposed, including the manufacturer, chemical name, brand name, and chemical composition;
c) identify the person and/or entity that made the determination or allegation;
d) indicate the date on which the determination or allegation was made;
e) describe the methods and criteria used to determine and confirm the existence of the cutting oil or other substance used to cut pipe;
f) identify the person and/or entity (including your employees or consultants) who notified you of the alleged exposure to cutting oil or other substance to cut pipe;
g) indicate how and when you were notified of the alleged exposure to cutting oil or other substance to cut pipe;
h) detail your response to the notification or awareness;
i) did you or anyone else of whom you are aware test and/or examine the Omega and/or any other sprinkler from the same sites If so:
    i) identify the Omega;
    ii) describe all such tests and/or examinations, and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;
    iv) describe and explain the results of each test and/or examination, including all observations and conclusions;
    v) identify the persons and entities involved in evaluating the test and/or examination results;
j) identify and describe all communications regarding or relating in any way to the Omega, the alleged exposure to cutting oil or other substance to cut pipe, the examination and/or conclusion, and any tests and/or examinations relating thereto, indicating:
    i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;
iii) the nature and content of the communication;
iv) identify all persons and/or entities present during the communication;

k) With respect to each such Omega, indicate whether you contend that the exposure to cutting oil or other substance to cut pipe caused the Omega to:
i) leak and/or weep;
ii) prematurely and/or unnecessarily activate;
iii) fail to activate at 7 psig or below in testing (when exposed to its activation/triggering temperature;
iv) fail to activate in field testing (when exposed to its activation/triggering temperature);
v) fail to activate in a fire (when exposed to its activation/triggering temperature).
If so, explain fully the basis for your contention.

RESPONSE NO. 53: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: Yes. For the remainder of the information requested by this interrogatory, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: return authorizations, diagnostic reports.

INTERROGATORY NO. 54: Are you aware or have you ever been notified of an Omega sprinkler that was not exposed to cutting oil or other substance used to cut pipe, and that when

exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire? If so:

a) identify the Omega;
b) describe the circumstances under which the Omega did not activate;
c) indicate at what pressure, if any, the Omega activated (or if it failed to activate altogether, indicate the highest pressure to which the Omega was subjected);
d) identify the person and/or entity (including your employees and/or consultants)who notified you of the Omega and/or its nonactivation under the circumstances above;
e) indicate how and when you became aware or received notification of the nonactivation under the circumstances described above;
f) indicate on what basis and by what criteria it was determined whether cutting oil or other substance to cut pipe was present;
g) detail your response to the notification or awareness;
h) indicate whether you or anyone else of whom you are aware examined and/or tested the affected sprinkler and/or other sprinklers from that site. If so:
    i) identify the Omega;
    ii) describe all such tests and/or examinations, and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;
    iv) describe and explain the results of each test and/or examination, including all observations and conclusions;
    v) identify the persons and entities involved in evaluating the test results;
i) identify and describe all communications regarding or relating in any way to the Omega and/or its nonactivation, and/or tests and/or examinations relating thereto, indicating:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication;
j) explain in full detail why the Omega did not activate.

RESPONSE NO. 54: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that

constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: return authorizations, diagnostic reports.

INTERROGATORY NO. 55: Do you allege that any change in the manufacturing process and/or component parts, including any tools, substances or chemicals used in the manufacturing process, renders the Omegas manufactured after a certain date unsusceptible to the effects that you allege in your response to Interrogatory No. 52 are caused or may be caused by the use of cutting oil or other substance used to cut pipe? If so, for each such substance (cutting oil or other substance used to cut pipe):

a) identify the substance;
b) describe the alleged change, and identify the Omega makes and models to which the change applies;
c) indicate the date on which the change was effected;
d) identify all persons and/or entities involved in effecting the change, describing each such person's role in effecting the change;
e) indicate whether you or anyone else of whom you are aware has tested and/or examined an Omega manufactured after the change to determine whether it exhibits the effects that you allege in your response to Interrogatory No. 52 are caused or may be caused by the use of cutting oil or other substance used to cut pipe? If so:
    i) identify the Omega;
    ii) describe all such tests and/or examinations, and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting each test or examination;
    iv) describe and explain the results of each test and/or examination, including all observations and conclusions;
    v) identify the persons and entities involved in evaluating the test and/or examination results;
f) identify and describe all communications regarding or relating in any way to the change and/or tests and/or examinations relating thereto, indicating:

i) the date on which the communication took place;
ii) the persons and/or entities to and from whom the communication was directed;
iii) the nature and content of the communication;
iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 55: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: Central contends that the use of cutting oils does not cause any of the stated effects in currently manufactured Omegas, which use silicone o-rings. Testing of the sprinklers using silicone o-rings is ongoing. For the rest of the information requested by this interrogatory, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 56: Do you contend that swelling of the "o" ring in an Omega sprinkler may cause the Omega to:

a) leak and/or weep;
b) activate prematurely and/or unnecessarily;
c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature), and/or
d) fall to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or
e) fail to activate in a Fire (when the Omega is exposed to its activation/triggering temperature). If so:
    i) explain the basis for your contention;
    ii) identify the Omegas in which "o" ring swelling causes or may cause (a), (b), (1c), and/or (d), above, indicating what type of "o" ring (EPDM, silicone, or other) is used in that Omega;
    iii) identify the systems in which "o" ring swelling causes or may cause (a), (b), (c) and/or (d), above;

iv) describe the circumstances under which "o" ring swelling causes or may cause (a), (b), (c) and/or (d), above.

RESPONSE NO. 56: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 57: Have you or anyone of whom you are aware ever determined or alleged that an Omega containing an EPDM "o" ring, from a steel piping system, exhibits "o" ring swelling? If so:

a) identify the Omega;
b) identify the person and/or entity that made the determination or allegation;
c) indicate the date on which the determination or allegation was made;
d) describe the methods and criteria used to determine and confirm the existence of "o" ring swelling;
e) identify the person and/or entity (including your employees or consultants) who notified you of the alleged "o" ring swelling;
f) indicate how and when you were notified of the alleged "o" ring swelling;
g) detail your response to the notification or awareness;
h) did you or anyone else of whom you are aware test and/or examine the Omega and/or any other sprinkler from the same site? If so:
    i) identify the Omega;
    ii) describe all such tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination,
iv) describe and explain the results of each test and/or examination, including all observations and conclusions;
v) identify the persons and entities involved in evaluating the test and/or examination results;

i) identify and describe all communications regarding or relating in any way to the Omega, the alleged "o" ring swelling, the examination and/or conclusion, and any tests and/or examinations relating thereto, indicating:
i) the date on which the communication took place;
ii) the persons and/or entities to and from whom the communication was directed;
iii) the nature and content of the communication;
iv) identify all persons and/or entities present during the communication;

j) With respect to each such Omega, indicate whether you contend that the "o" ring swelling caused the Omega to:
i) leak and/or weep;
ii) prematurely and/or unnecessarily activate;
iii) fail to activate at 7 psig or below in testing (when exposed to its activation/triggering temperature;
iv) fail to activate in field testing (when exposed to its activation/triggering temperature);
v) fail to activate in a fire (when exposed to its activation/triggering temperature).

If so, explain fully the basis for your contention.

RESPONSE NO. 57: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. §

1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: return authorizations, diagnostic reports.

INTERROGATORY NO. 58: Have you or anyone of whom you are aware ever determined or alleged that an Omega containing a silicone "o" ring, from a steel piping system, exhibits "o" ring swelling? If so:

a) identify the Omega;
b) identify the person and/or entity that made the determination or allegation;
c) indicate the date on which the determination or allegation was made;
d) describe the methods and criteria used to determine and confirm the existence of "o" ring swelling;
e) identify the person and/or entity (including your employees or consultants) who notified you of the alleged "o" ring swelling;
f) indicate how and when you were notified of the alleged "o" ring swelling;
g) detail your response to the notification or awareness;
h) did you or anyone else of whom you are aware test and/or examine the Omega and/or any other sprinkler from the same site? If so:
    i) identify the Omega;
    ii) describe all such tests and/or examinations, and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;
    iv) describe and explain the results of each test and/or examination, including all observations and conclusions;
    v) identify the persons and entities involved in evaluating the test and/or examination results;
i) identify and describe all communications regarding or relating in any way to the Omega, the alleged "o" ring swelling, the examination and/or conclusion, and any tests and/or examinations relating thereto, indicating:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication;
j) With respect to each such Omega, indicate whether you or anyone else of whom you are aware contend that the "o" ring swelling caused the Omega to:
    i) leak and/or weep;
    ii) prematurely and/or unnecessarily activate;

iii) fall to activate at 7 psig or below in testing (when exposed to its activation/triggering temperature;
iv) fail to activate in field testing (when exposed to its activation/triggering temperature),
v) fail to activate in a fire (when exposed to its activation/triggering temperature).

If so, explain f-ally the basis for your contention or, if not your contention, identify the person and/or entity who so contends, and explain your understanding of their basis for that contention.

RESPONSE NO. 58: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: return authorizations, diagnostic reports.

INTERROGATORY NO. 59: Have you or anyone of whom you are aware ever determined or alleged that an Omega from a piping system that is not steel exhibits "o" ring swelling? If so:

a) identify the Omega;
b) indicate what type of "o" ring the Omega contained (EPDM, silicone, or other type of "o" ring);
c) identify the person and/or entity that made the determination or allegation;

d) indicate the date on which the determination or allegation was made;
e) describe the methods and criteria used to determine and confirm the existence of "o" ring swelling;
f) identify the person and/or entity (including your employees or consultants) who notified you of the alleged "o" ring swelling;
g) indicate how and when you were notified of the alleged "o" ring swelling;
h) detail your response to the notification or awareness;
i) did you or anyone else of whom you are aware test and/or examine the Omega and/or any other sprinkler from the same site? If so:
    i) identify the Omega;
    ii) describe all such tests and/or examinations, and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;
    iv) describe and explain the results of each test and/or examination, including all observations and conclusions;
    v) identify the persons and entities involved in evaluating the test and/or examination results;
j) identify and describe all communications regarding or relating in any way to the Omega, the alleged "o" ring swelling, the examination and/or conclusion, and any tests and/or examinations relating thereto, indicating:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 59: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. §

1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: return authorizations, diagnostic reports.

INTERROGATORY NO. 60: Are you aware or have you ever been notified of an Omega sprinkler from a steel piping system that did not exhibit "o" ring swelling, and that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire? If so:

a) identify the Omega and indicate what type of "o" ring it contained;
b) describe the circumstances under which the Omega did not activate;
c) indicate at what pressure, if any, the Omega activated (or if it failed to activate altogether, indicate the highest pressure to which the Omega was subjected);
d) identify the person and/or entity (including your employees and/or consultants) who notified you of the Omega and/or its nonactivation under the circumstances above;
e) indicate how and when you became aware or received notification of the nonactivation under the circumstances described above;
f) indicate on what basis and by what criteria it was determined whether "o" ring swelling was present;
g) detail your response to the notification or awareness;
h) indicate whether you or anyone else of whom you are aware examined and/or tested the affected sprinkler and/or other sprinklers from that site. If so:
    i) identify the Omega;
    ii) describe all such tests and/or examinations, and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;
    iv) describe and explain the results of each test and/or examination, including all observations and conclusions;
    v) identify the persons and entities involved in evaluating the test results;
i) identify and describe all communications regarding or relating in any way to the Omega and/or its nonactivation, and/or tests and/or examinations relating thereto, indicating:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication;
j) explain in full detail why the Omega did not activate.

RESPONSE NO. 60: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: return authorizations, diagnostic reports.

INTERROGATORY NO. 61: Do you allege that any change in the manufacturing process and/or component parts, including any tools, substances or chemicals used in the manufacturing process, renders the Omegas manufactured after a certain date unsusceptible to "o" ring swelling? If so:

a) describe the alleged change, and identify the Omega makes and models to which the change applies;
b) indicate the date on which the change was effected;
c) identify all persons and/or entities involved in effecting the change, describing each such person's role in effecting the change;
d) indicate whether you or anyone else of whom you are aware has tested and/or examined an Omega manufactured after the change to determine whether it exhibits "o" ring swelling; If so:
    i) identify the Omega;
    ii) describe all such tests and/or examinations, and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting each test or examination;

iv) describe and explain the results of each test and/or examination, including all observations and conclusions;
v) identify the persons and entities involved in evaluating the test and/or examination results;

e) identify and describe all communications regarding or relating in any way to the change and/or tests and/or examinations relating thereto, indicating:
i) the date on which the communication took place;
ii) the persons and/or entities to and from whom the communication was directed;
iii) the nature and content of the communication;
iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 61: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: Central contends that the silicone o-rings currently used in Omegas render them "unsusceptible" to o-ring swelling. Testing of sprinklers using the silicone o-rings is ongoing. For the remainder of the information requested in this interrogatory, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: engineering change notices, bills of materials, project proposals, first article reports, vendor certifications, testing documents.

INTERROGATORY NO. 62: Do you contend that adhesion of an Omega sprinkler's "o" ring to the plunger housing or main housing of the Omega may cause the Omega to:

a) leak and/or weep;
b) activate prematurely and/or unnecessarily;
c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or

d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or

e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature). If so:

i) explain the basis for your contention;

ii) identify the Omegas in which "o" ring adhesion causes or may cause (a), (b), (c), and/or (d), above;

iii) identify the systems in which "o" ring adhesion causes or may cause (a), (b), (c) and/or (d), above;

iv) identify the Omegas in which "o" ring adhesion causes or may cause (a), (b), (c) and/or (d), above;

v) describe the circumstances under which "o" ring adhesion causes or may cause (a), b), (c) and/or (d), above.

RESPONSE NO. 62: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 63: Have you or anyone of whom you are aware ever determined or alleged that an Omega exhibits "o" ring adhesion? If so:

a) identify the Omega, and indicate what type of "o" ring it contained (EPDM, silicone, or other);

b) identify the person and/or entity that made the determination or allegation;

c) indicate the date on which the determination or allegation was made;

d) describe the methods and criteria used to determine and confirm the existence of "o" ring adhesion;

e) identify the person and/or entity (including your employees or consultants) ,who notified vou of the alleged "o" ring adhesion;

f) indicate how and when you were notified of the alleged "o" ring adhesion;

g) detail your response to the notification or awareness;

h) did you or anyone else of whom you are aware test and/or examine the Omega and/or any other sprinkler from the same site? If so:

   i) identify the Omega;

   ii) describe all such tests and/or examinations, and provide a detailed protocol;

   iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;

   iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

   v) identify the persons and entities involved in evaluating the test and/or examination results;

i) identify and describe all communications regarding or relating in any way to the Omega, the alleged "o" ring adhesion, the examination and/or conclusion, and any tests and/or examinations relating thereto, indicating:

   i) the date on which the communication took place;

   ii) the persons and/or entities to and from whom the communication was directed;

   iii) the nature and content of the communication;

   iv) identify all persons and/or entities present during the communication;

j) With respect to each such Omega, indicate whether you or anyone of whom you are aware contend that the "o" ring adhesion caused the Omega to:

   i) leak and/or weep;

   ii) prematurely and/or unnecessarily activate;

   iii) fail to activate at 7 psig or below in testing (when exposed to its activation/triggering temperature;

   iv) fail to activate in field testing (when exposed to its activation/triggering temperature);

   v) fail to activate in a fire (when exposed to its activation/triggering temperature).

   If so, explain fully the basis for your contention or, if not your contention, identify the person and/or entity who so contended, and explain your understanding of the basis for that contention.

RESPONSE NO. 63: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of

admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: return authorizations, diagnostic reports.

INTERROGATORY NO. 64: Do you allege that any change in the manufacturing process and/or component parts, including any tools, substances or chemicals used in the manufacturing process, renders the Omegas manufactured after a certain date unsusceptible to "o" ring adhesion? If so:

a) describe the alleged change, and identify the Omega makes and models to which the change applies;
b) indicate the date on which the change was effected;
c) identify all persons and/or entities involved in effecting the change, describing each such person's role in effecting the change;
d) indicate whether vou or anyone else of whom you are aware has tested and/or examined an Omega manufactured after the change to determine whether it exhibits "o" ring adhesion; If so:
    i) identify the Omega;
    ii) describe all such tests and/or examinations, and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting each test or examination;
    iv) describe and explain the results of each test and/or examination, including all observations and conclusions;
    v) identify the persons and entities involved in evaluating the test and/or examination results;
e) identify and describe all communications regarding or relating in any way to the change and/or tests and/or examinations relating thereto, indicating:
    i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;
iii) the nature and content of the communication;
iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 64: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: Central contends that the silicone o-rings currently used in the Omegas may render them "unsusceptible" to o-ring adhesion. Testing of sprinklers using the silicone o-rings is ongoing. For the remainder of the information requested in this interrogatory, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: engineering change notices, bills of materials, project proposals, first article reports, vendor certifications, testing documents.

INTERROGATORY NO. 65: Do you contend or are you aware of any fires in which all Omegas exposed to temperatures at or in excess of their activation/triggering temperature activated? If so:

a) identify each Omega;
b) indicate when, where and how the fire occurred;
c) what was the system pressure was (in psig) at the time of the fire and/or activation;
d) indicate how long after the Omega was first exposed to its activation/triggering temperature it activated;
e) indicate whether anyone sustained or allegedly sustained bodily injury as a result of or in association with the fire (including injuries sustained or allegedly sustained in attempting to escape the fire). If so:
    i) identify the injured person;
    ii) indicate how the injury was or was alleged to have been sustained;

iii) indicate whether a suit, claim, or demand was ever made against you or in which you were implicated relating to the incident or injury; provide details of same;

f) indicate whether anyone died or allegedly died as a result of or in association with the fire (including death incurred or allegedly incurred in attempting to escape the fire). If so:
   i) identify the decedent;
   ii) indicate how and where the death occurred;
   iii) indicate whether a suit, claim, or demand was ever made against you or in which you were implicated relating to the incident or death; provide details of same;

g) indicate whether any property was or allegedly was damaged, lost or destroyed as a result of or in association with the fire (including damage sustained or allegedly sustained in attempting to remove the property from the fire, or in attempting to put out the fire). If so:
   i) identify the owner of the property;
   ii) indicate how the property was or allegedly was damaged;
   iii) indicate the value or alleged value of the property;
   iv) indicate whether a suit, claim, or demand was ever made against you or in which you were implicated relating to the incident or damage; provide details of same;

h) indicate whether the Omega was fitted with a "helper spring;"

i) indicate when and how you became aware of the fire and/or the activation, including from whom you received the notification;

j) identify and describe all communications regarding or relating in any way to the fire and/or activation, including:
   i) the date on which the communication took place;
   ii) the persons and/or entities to and from whom the communication was directed;
   iii) the nature and content of the communication;
   iv) identify all persons and/or entities present during the communication;

k) indicate whether you or anyone else tested and/or examined any Omega that allegedly activated in a fire, or any other sprinkler from the same site? If so:
   i) identify the sprinkler;
   ii) describe the tests and/or examinations, and provide a detailed protocol-,
   iii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;
   iv) describe and explain the results of the tests and/or examinations, including all observations and conclusions;
   v) identify the persons and entities involved in evaluating the test and/or examination results;

l) indicate whether the Omega "o" ring was examined for swelling and/or adhesion. If so:

i) indicate whether swelling and/or adhesion was present;
ii) indicate on what basis and by what criteria it was determined whether the "o" ring was swollen or adhered;
iii) identify all persons and/or entities involved in determining whether the "o" ring was swollen or adhered;

m) indicate whether the Omega and/or the system from which it came was tested and/or examined for "stop leak" or any other leakage prevention substance. If so:
i) indicate whether "stop leak" or any other such substance was present;
ii) indicate on what basis and by what criteria it was determined whether "stop leak" or any other such substance was present;
iii) identify all persons and/or entities involved in determining whether "stop leak" or any other such substance was present;

n) indicate whether the Omega was examined for dezincification. If so:
i) indicate whether dezincification had occurred;
ii) indicate on what basis and by what criteria it was determined whether dezincification had occurred;
iii) identify all persons and/or entities involved in determining whether dezincification had occurred.

RESPONSE NO. 65: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: Over the course of the fifteen-plus years that the Omegas have been used, the Omegas have successfully activated and controlled many fires. Central is not in possession of all of the documentation regarding every fire in which Omegas activated and controlled a fire. For the remainder of the information requested in this interrogatory, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the

business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 66: Identify and describe all tests and/or examinations conducted by you or anyone on your behalf on Omega sprinklers. For each test:

a) identify the sprinklers tested;
b) describe the tests and provide a detailed protocol and the date on which each test was conducted;
c) identify the persons and entities involved in:
    i) drafting and/or conceiving the protocol;
    ii) setting up and/or conducting the tests;
d) describe and explain the results of the tests, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test results;
f) identify and describe all communications relating in any way to any such tests and/or test results, indicating:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 66: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 67: Have-you or anyone of whom you are aware ever performed the "load on heat responsive element test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 67: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 68: Have you or anyone of whom you are aware ever performed the "strength of heat responsive element test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
i) the date on which the communication took place;
ii) the persons and/or entities to and from whom the communication was directed;
iii) the nature and content of the communication;
iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 68: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 69: Have you or anyone of whom you are aware ever performed the "leakage test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:
a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;
ii) the persons and/or entities to and from whom the communication was directed;
iii) the nature and content of the communication;
iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 69: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 70: Have you or anyone of whom you are aware ever performed the "hydrostatic strength test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 70: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 71: Have you or anyone of whom you are aware ever performed the "30-day leakage test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 71: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 72: Have you or anyone of whom you are aware ever performed the "water hammer test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 72: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to

and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 73: Have you or anyone of whom you are aware ever performed the "operating temperature (bath) test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 73: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel

is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 74: Have you or anyone of whom you are aware ever performed the "sensitivity tests" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 74: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 75: Have you or anyone of whom you are aware ever performed the "operation - lodgement test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega,
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 75: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 76: Have you or anyone of whom you are aware ever performed the "flow endurance test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 76: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 77: Have you or anyone of whom you are aware ever performed the "operation - cold soldering test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:
a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;
ii) the persons and/or entities to and from whom the communication was directed;
iii) the nature and content of the communication;
iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 77: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 78: Have you or anyone of whom you are aware ever performed the "high temperature test for uncoated sprinklers" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega,
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 78: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 79: Have you or anyone of whom you are aware ever performed the "high temperature test for coated sprinklers" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 79: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute

trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 80: Have you or anyone of whom you are aware ever performed the "strength of frame test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested. including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 80: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by

Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 81: Have you or anyone of whom you are aware ever performed the "impact resistance test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 81: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 82: Have you or anyone of whom you are aware ever performed the "rough usage test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 82: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 83: Have you or anyone of whom you are aware ever performed the "vibration test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 83: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 84: Have you or anyone of whom you are aware ever performed the "calibration test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:
a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test,
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;
iii) the nature and content of the communication;
iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 84: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 85: Have you or anyone of whom you are aware ever performed the "10 pan distribution test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 85: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 86: Have you or anyone of whom you are aware ever performed the "16 pan distribution test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place,
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 86: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute

trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 87: Have you or anyone of whom you are aware ever performed the "water distribution test - conventional (old style) sprinklers" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 87: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by

Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 88: Have you or anyone of whom you are aware ever performed the "100 pan distribution test - sidewall sprinklers" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 88: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 89: Have you or anyone of whom you are aware ever performed the "350 pound wood crib fire test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 89: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 90: Have you or anyone of whom you are aware ever performed the "10-day corrosion test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 90: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 91: Have you or anyone of whom you are aware ever performed the "30-day corrosion test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
   i) the date on which the communication took place;
   ii) the persons and/or entities to and from whom the communication was directed;
   iii) the nature and content of the communication;
   iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 91: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 92: Have you or anyone of whom you are aware ever performed the "90-day moist air test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the omega tested, including:
   i) the date on which the communication took place;
   ii) the persons and/or entities to and from whom the communication was directed;
   iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 92: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 93: Have you or anyone of whom you are aware ever performed the "stress-corrosion cracking of brass sprinkler parts test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 93: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client

privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 94: Have you or anyone of whom you are aware ever performed the "stress-corrosion cracking of stainless sprinkler parts test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place:
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 94: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16

C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 95: Have you or anyone of whom you are aware ever performed the "operational tests on sprinklers incorporating gaskets or "o" ring seals" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 95: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel

is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 96: Have you or anyone of whom you are aware ever performed the "vacuum test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 96: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 97: Have you or anyone of whom you are aware ever performed the "elastomeric parts test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 97: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 98: Have you or anyone of whom you are aware ever performed the "freezing test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 98: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 99: Have you or anyone of whom you are aware ever performed the "fire test for extended coverage sprinklers intended for light hazard occupancies" according to the testing protocol in UL 199 on an Omega sprinkler? If so:
a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;
ii) the persons and/or entities to and from whom the communication was directed;
iii) the nature and content of the communication;
iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 99: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 100: Have you or anyone of whom you are aware ever performed the "wall wetting test for extended coverage sprinklers intended for light hazard occupancies" according to the testing protocol in UL 199 on an Omega sprinklers If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 100: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 101: Have you or anyone of whom you are aware ever performed the "evaporation test for sprinkler coatings" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 101: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute

trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 102: Have you or anyone of whom you are aware ever performed the "cycling tests for flow control (FC) sprinklers" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 102: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by

Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 103: Have you or anyone of whom you are aware ever performed the "piled stock fire test for flow control (FC) sprinklers" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 103: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 104: Have you or anyone of whom you are aware ever performed the "piled stock fire test for extended coverage sprinklers intended for ordinary hazard occupancies" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 104: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 105: Have you or anyone of whom you are aware ever performed the "distribution tests for extended coverage sprinklers intended for ordinary hazard occupancies" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 105: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 106: Have you or anyone of whom you are aware ever performed the "high temperature exposure test for flow control (FC) sprinklers" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
   i) the date on which the communication took place;
   ii) the persons and/or entities to and from whom the communication was directed;
   iii) the nature and content of the communication;
   iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 106: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 107: Have you or anyone of whom you are aware ever performed the "production leakage test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega,
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
   i) the date on which the communication took place;
   ii) the persons and/or entities to and from whom the communication was directed;
   iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 107: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 108: Have you ever tested an Omega that, upon being exposed to its activation/triggering temperature, did not activate within 5 seconds at a pressure at or below 7 psig pressure? If so:

a) identify the Omega;
b) explain why it failed to activate;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 108: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents

protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: return authorizations, diagnostic reports, quality control reports.

INTERROGATORY NO. 109: Indicate whether you have attended or been present at any meetings or discussions, or issued or received any communications, in which the following were discussed:

a) failure of Omega sprinklers to activate in testing or in a fire;
b) dezincification as a cause or possible cause of Omega non-activation in testing or in a fire;
c) stop leak or other leak prevention substance as a cause or possible cause of Omega non-activation in testing or in a fire;
d) "o" ring swelling as a cause or possible cause of Omega non-activation in testing or in a fire;
e) "o" ring adhesion as a cause or possible cause of Omega non-activation in testing or in a fire;
f) excessive hydrocarbons as a cause or possible cause of Omega non-activation in testing or in a fire;
g) improper system design as a cause or possible cause of Omega non-activation in testing or in a fire;
h) UL listing or certification of any Omega sprinkler or sprinkler assistive device such as the "helper spring;"
i) FM listing or certification of any Omega sprinkler or sprinkler assistive device such as the "helper spring;"
j) NFPA 13 requirements or applicability with respect to fire sprinklers or sprinkler systems;
k) NFPA 25 requirements or applicability with respect to fire sprinklers or sprinkler systems;
l) UL 199 requirements or applicability with respect to fire sprinklers or sprinkler systems;
m) UL 1626 requirements or applicability with respect to fire sprinklers or sprinkler systems. if so, for each such meeting, discussion, and communication, provide:

i) the date on which the meeting, discussion or communication took place;
ii) the persons and/or entities to and from whom the communication was directed or, if a meeting or discussion, identify all persons who were present and/or participated;
iii) the nature and content of the communication;

RESPONSE NO. 109: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 110: Have you ever been notified of any problem, potential problem, complaint or concern (including any reports of nonactivation or possibility of nonactivation) regarding or in any way relating to an Omega sprinkler? If so:

a) identify who notified you;
b) indicate how and when you were notified;
c) describe and explain the contents of the notification;
d) identify all persons who have knowledge of the notification and/or the problem, potential problem, complaint or concern;
e) describe and explain your response to the notification;
f) did you or anyone else of whom you are aware examine and/or test the Omega about which you were notified of any problem, potential problem, complaint or concern, the system in which it was installed, and/or any other sprinkler from the same site? If so:
    i) identify the sprinkler;
    ii) describe the tests and/or examinations, and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;

iv) describe and explain the results of the tests and/or examinations, including all observations and conclusions;
v) identify the persons and entities involved in evaluating the test and/or examination results,

g) identify and describe all communications regarding or relating in any way to the notification, the sprinkler, and/or any the testing and/or examination in part f), including:
i) the date on which the communication took place;
ii) the persons and/or entities to and from whom the communication was directed;
iii) the nature and content of the communication;
iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 110: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel; and it calls for a legal conclusion. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: customer service department files, return authorizations, diagnostic reports.

INTERROGATORY NO. 111: Have you notified any person and/or entity of any problem, potential problem, complaint or concern (including any reports of nonactivation or possibility of nonactivation) regarding or in any way relating to an Omega sprinkler? If so:

a) identify who you notified, and all persons and/or entities who received the notification or copies thereof,
b) indicate how and when you notified the persons and/or entities identified in your response to part (a) above;
c) describe and explain the contents of the notification;
d) identify all persons who have knowledge of the notification and/or the problem, potential problem, complaint or concern, including who drafted, reviewed and/or approved the notification;
e) did you receive any response to the notification? If so:
    i) identify the person and/or entity from whom you received a response;
    ii) indicate how and when you received the response;
    iii) describe and explain the contents of the response;
f) identify and describe all communications regarding or relating in any way to the notification and/or response, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 111: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel; and it calls for a legal conclusion. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

Complaint Counsel is specifically referred to the following categories of documents: customer service department files, return authorizations, diagnostic reports.

INTERROGATORY NO. 112: Indicate whether you ever requested any information from any sprinkler contractor or sprinkler owner regarding any Omega sprinkler. If so:

a) identify the persons and/or entities from whom you requested information;
b) indicate how and when you requested the information;
c) describe and explain what information you requested-,
d) identify all persons who have knowledge of the request for information, including those who drafted. reviewed and/or approved the request for information;
e) did you receive any response to the request for information? If so:
    i) identify the person and/or entity from whom you received a response;
    ii) indicate how and when you received the response;
    iii) describe and explain the contents of the response;
f) identify and describe all communications regarding or relating in any way to the request for information and/or the response to that request, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 112: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: customer service department files, return authorizations, diagnostic reports.

INTERROGATORY NO. 113: Have you or anyone on your behalf provided (either by sale or without charge) sprinklers to anyone to replace some or all of the Omegas installed in a particular location? If so, indicate the total number of Omegas replaced, and the total value of the replacement (labor plus cost of sprinklers, and any other associated expenses).

RESPONSE NO. 113: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: customer service department files, return authorizations, diagnostic reports.

INTERROGATORY NO. 114: With respect to each location in which you provided (either by sale or without charge) sprinklers to anyone to replace some or all of the Omegas that were installed there:

a) identify the location;
b) indicate what make and/or model Omegas were replaced, and the quantity of each replaced;
c) indicate what make and/or model sprinkler were provided as a replacement, and the quantity of each provided;
d) identify the person and/or entity to whom you provided the replacements;
e) describe and explain the circumstances under which you provided the replacements;
f) identify the person and/or entity who paid the cost of the replacement;
g) indicate the cost of the replacement;
h) describe and explain what the replacement involved;

i) did you or anyone else of whom you are aware examine and/or test the Omega that was replaced, the system in which it was installed, and/or any other sprinkler from the same site? If so:
   i) identify the sprinkler;
   ii) describe the tests and/or examinations, and provide a detailed protocol;
   iii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;
   iv) describe and explain the results of the tests and/or examinations, including all observations and conclusions;
   v) identify the persons and entities involved in evaluating the test and/or examination results;

j) identify and describe all communications regarding or relating in any way to the replacement of the sprinklers, the sprinkler that was replaced, the replacement sprinkler, and/or any the testing and/or examination the replaced sprinkler, including:
   i) the date on which the communication took place;
   ii) the persons and/or entities to and from whom the communication was directed;
   iii) the nature and content of the communication;
   iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 114: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: customer service department files, return authorizations, diagnostic reports.

INTERROGATORY NO. 115: Have you ever tested Omega sprinklers from a building or structure and indicated to the building owner/operator or anyone else that all Omegas activated properly? If so:

a) identify each Omega you tested;
b) identify the location in which the Omega had been installed;
c) for each location, indicate how many Omegas were installed there prior to testing, and how many were tested;
d) describe the tests and/or examinations, and provide a detailed protocol;
e) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;
f) describe and explain the results of the tests and/or examinations, including all observations and conclusions;
g) identify the persons and entities involved in evaluating the test and/or examination results;
h) did you or anyone else of whom you are aware examine and/or test the system in which it was installed? If so:
    i) describe the tests and/or examinations, and provide a detailed protocol;
    ii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations,
    iii) describe and explain the results of the tests and/or examinations, including all observations and conclusions;
    iv) identify the persons and entities involved in evaluating the test and/or examination results;
i) did any person or entity other than you examine and/or test sprinklers from the same site? If so:
    i) identify the sprinkler;
    ii) describe the tests and/or examinations, and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;
    iv) describe and explain the results of the tests and/or examinations, including all observations and conclusions;
    v) identify the persons and entities involved in evaluating the test and/or examination results;
j) identify and describe all communications regarding or relating in any way to the sprinklers, the testing and/or the results, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 115: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: customer service department files, return authorizations, diagnostic reports.

INTERROGATORY NO. 116: Identify each person whom you expect to call as an expert witness at trial or hearing in this matter, and provide the following information:

a) the subject matter on which the expert is expected to testify;
b) the substance of the facts and opinions to which the expert is expected to testify;
c) provide a summary of the grounds for each opinion to which the expert is expected to testify.

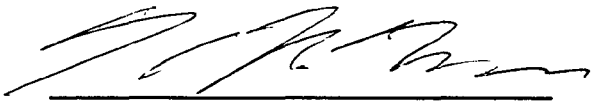
RESPONSE NO. 116: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it is premature. Subject to and without waiver of the foregoing objections, Central responds as follows: Central has not yet determined which witnesses it will call at trial. Central will provide supplemental information on a timely basis pursuant to the applicable rules of practice.

INTERROGATORY NO. 117: Identify each person whom you expect to call as a fact witness at trial or hearing in this matter, and provide the following information:

a) the subject matter on which the witness is expected to testify;
b) the substance of the facts to which the witness is expected to testify.

RESPONSE NO. 117: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it is premature. Subject to and without waiver of the foregoing objections, Central responds as follows: Central has not yet determined which witnesses it will call at trial. Central will provide supplemental information on a timely basis pursuant to the applicable rules of practice.

Dated: May 26, 1998



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Attorneys for Respondents
CENTRAL SPRINKLER CORP. and
CENTRAL SPRINKLER COMPANY

CERTIFICATE OF SERVICE

I, Thomas P. Hogan, Jr., hereby certify that on this date a true and correct copy of the foregoing Respondents' Responses and Objections to Complaint Counsel's First Set of Interrogatories was served via regular mail upon the following:

Eric H. Singer
Howard Tarnoff
Deborah S. Orlove
Complaint Counsel
U.S. Consumer Product Safety Commission
4430 East West Highway
Bethesda, MD 20814

Alan H. Schoem
Assistant Executive Director
Office of Compliance
U.S. Consumer Product Safety Commission
4430 East West Highway
Bethesda, MD 20814

The Hon. William B. Moran
United States Administrative Law Judge
Office of Administrative Law Judges
401 M Street, S.W.
Mail Code 1900L
Washington, DC 20460

Dated: May 26, 1998

Thomas P. Hogan, Jr.

VERIFICATION

I, Carmine Schiavone, pursuant to 16 C.F.R. § 1025.32(b), hereby verify that the responses provided in Respondents' Responses and Objections to Complaint Counsel's First Set of Interrogatories are true and correct, to the best of my knowledge, information, and belief.

Dated: May 26, 1998

Carmine Schiavone
Vice President of Customer Services
Central Sprinkler Company
451 North Cannon Avenue
Lansdale, PA 19446

Privilege Log of Central Sprinkler Corporation and Central Sprinkler Company

Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
1	M. Fries	M. Fries	None	Internal memorandum re: Omega heads at VA medical centers, testing of same	3/1/96	4	WP
2	C. Schiavone	R.C. Hobbs	N.A. Hollahan G.G. Meyer W.J. Pardue G.S. Polan	Memorandum re: Omega litigation, prepared at request of counsel	6/24/92	2	A/C, WP
3	R. Cullen, Esq.	C. Schiavone	Bill Pardue Rich Hobbs	Letter re: Omega O-rings litigation	5/20/92	3	A/C
4	J. Jamieson, Esq.	G. Polan	None	Letter re: U.S. Patent		2	A/C
5	G. Meyer	M. Abbott, Esq.	None	Letter re: U.S. Patent	12/23/85	2	A/C
6	G. Meyer	G. Lavorgna, Esq.	None	Letter re: Patent assignment	10/25/85	3	A/C
7	G. Lavorgna, Esq.	G. Meyer	G. Pieczykolan	Letter re: Patent application	9/4/85	3	A/C
8	G. Meyer	G. Lavorgna, Esq.	G. Pieczykolan	Letter re: Patent application	8/30/85	1	A/C
9	G. Lavorgna, Esq.	G. Meyer	G. Pieczykolan	Letter re: Patent application	6/24/85	1	A/C
10	G. Meyer	G. Lavorgna, Esq.	G. Pieczykolan	Letter re: U.S. Patent	5/23/85	1	A/C
11	G. Lavorgna, Esq.	G. Meyer	G. Pieczykolan	Letter re: U.S. Patent application	4/3/85	1	A/C
12	G. Meyer	G. Lavorgna, Esq.	G. Pieczykolan	Letter re: U.S. Patent application	3/26/85	1	A/C
13	W. Pardue	E. Gonda, Esq.	None	Letter re: U.S. Patent application	6/13/84	1	A/C
14	G. Pieczykolan	Z. Woebensmith, Esq.	None	Letter re: Patent	2/18/83	2	A/C
15	Z. Woebensmith, Esq.	G. Pieczykolan	None	Letter re: Patent application	1/26/83	3	A/C
16	G. Pieczykolan	Z. Woebensmith, Esq.	None	Application for Letters Patent	1/18/83	1	A/C

A/C = Attorney/Client privilege
WP = Work Product

6/08/98

Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
17	Z. Woebensmith, Esq.	G. Pieczykolan	None	Letter re: automatic on-off sprinkler	12/30/82	1	A/C
18	G. Pieczykolan	Z. Woebensmith, Esq.	None	Letter re: automatic on-off sprinkler	12/17/82	1	A/C
19	Z. Woebensmith, Esq.	G. Pieczykolan	None	Letter re: automatic on-off sprinkler	12/17/82	1	A/C
20	Z. Woebensmith, Esq.	G. Pieczykolan	None	Letter re: automatic on-off sprinkler head application papers	11/30/82	21	A/C
21	G. Pieczykolan	Z. Woebensmith, Esq.	None	Letter re: automatic on-off sprinkler head	11/18/82	4	A/C
22	G. Meyer	G. Lavorgna, Esq.	G. Pieczykolan	Letter re: Patent application	6/18/85	4	A/C
23	G. Pieczykolan	Z. Woebensmith, Esq.	None	Letter re: automatic on-off sprinkler head	11/15/82	1	A/C
24	Z. Woebensmith, Esq.	G. Pieczykolan	None	Letter re: on-off sprinkler additions and refinements	10/20/82	2	A/C
25	W. Pardue	J. Fenningham, Esq.	None	Letter re: La Maconnerie Homeowners Association	11/2/88	1	A/C
26	W. Pardue	J. Fenningham, Esq.	None	Letter re: La Maconnerie Homeowners Association	9/9/88	1	A/C
27	W. Pardue	J. Fenningham, Esq.	None	Letter re: La Maconnerie Homeowners Association	7/18/88	1	A/C
28	G. Meyer W. Pardue B. Buchanan	J. Fenningham, Esq.	None	Faxed letters re: Hammer v. Central Sprinkler Corp.	11/2/90	11	A/C
29	W. Pardue	J. Fenningham, Esq.	None	Letter and attachments re: La Maconerie Homeowners Association	7/18/88	13	A/C
30	W. Pardue	C. Printon, Legal Assistant	None	Letter re: Minneapolis Club v. Central Sprinkler Corporation with handwritten notations	7/5/89	1	WP

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
31	W. Pardue	C. Printon, Legal Assistant	S. Richter, Esq.	Letter re: Minneapolis Club v. Central Sprinkler Corporation	7/2/89	1	A/C
32	C. Schiavone	F. Mazzeo, Esq.	None	Fax with draft of Appendix re: Embarcadero Center	9/30/97	2	A/C, WP
33	G. Meyer	K. Hamel, Esq.	None	Fax and attachments re: Senju America Inc. v. Central Sprinkler Corporation		22	A/C, WP
34	C. Schiavone	F. Mazzeo, Esq.	None	Fax and attachments re: Embarcadero Center		3	A/C, WP
35	J. Fenningham, Esq. C. Schiavone	F. Mazzeo, Esq.	None	Memo re: Embarcadero contract	8/29/97	6	A/C, WP
36	C. Schiavone	F. Mazzeo, Esq.	None	Fax re: Embarcadero Centers	10/3/97	3	A/C, WP
37	Carmine	Frank (Mazzeo, Esq.)	None	Blind PS re: contracts	?	1	A/C
38	C. Schiavone	F. Mazzeo, Esq.	None	Memorandum re: Embarcadero Contract	9/02/97	20	A/C, WP
39	C. Schiavone	G. Dempster, Esq.	None	Faxed letter re: Embarcadero Contract	7/11/97	3	A/C, WP
40	G. Meyer	G. Dempster, Esq.	C. Schiavone	Embarcadero Contract	7/18/97	2	A/C, WP
41	C. Schiavone	G. Dempster, Esq.	None	Fax and attachments re: Embarcadero Contract	7/11/97	22	A/C, WP
42	C. Schiavone	G. Dempster, Esq.	None	Letter and attachments re: Embarcadero contract	5/21/97	5	A/C, WP
43	V. Same	G. Dempster, Esq.	None	Letter in draft re: Embarcadero Installer contract	8/04/97	10	A/C, WP
44	C. Schiavone	J. Fenningham, Esq.	None	Fax re: Installer Agreement	1/27/97	7	A/C, WP
45	C. Schiavone	J. Fenningham, Esq.	None	Letter re: Shaw v. Central Sprinkler Corporation	5/29/96	4	A/C, WP

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
46	J. Fenningham, Esq.	C. Schiavone	None	Fax and attachments re: Shaw v. Central Sprinkler Corporation	4/02/96	32	A/C
47	C. Schiavone	J. Fenningham, Esq.	None	Fax and attachments re: contract examination of Omega Sprinklers	6/07/96	25	A/C, WP
48	J. Fenningham, Esq.	C. Schiavone	None	Fax re: Draft letter concerning Omega Sprinkler Change Out	4/11/96	3	A/C
49	C. Schiavone	J. Fenningham, Esq.	None	Fax re: Omega Sprinkler Testing and Change out	4/09/96	3	A/C
50	K. Bell	C. Schiavone	G. Meyer J. Golinveaux K. Dolan J. Fenningham, Esq.	Letter re: alleged defects in EPDM O-Rings	9/24/97	1	A/C, WP
51	J. McHugh	G. Dempster, Esq.	W. Pardue J. Fenningham, Esq.	Letter re: Qualicast Manufacturing	11/21/95	3	A/C, WP
52	C. Sellers, C. Daymon	M. Fries	K. Dolan C. Schiavone	Confidential memorandum re: testing, engineering reports and Fairfax County order	10/13/97	1	A/C, WP
53	J. Fenningham, Esq.	R. Campbell	None	Fax and memo re: preliminary test report on effect of jig direction	9/09/97	5	A/C
54	C. Schiavone	J. Fenningham, Esq.	None	Central Sprinkler Installer Agreement (Omega Change outs) with handwritten edits, as discussed with counsel	?	3	A/C
55	C. Schiavone	J. Fenningham, Esq.	None	Central Sprinkler Installer Agreement (Omega Change outs) with handwritten edits and markups, as discussed with counsel	?	6	A/C

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
56	D. Eglsaer	C. Schiavone	J. Fenningham, Esq. A. Post V. Same	Letter re: waiver of subrogation, hold harmless and indemnification agreement re: Metcalfe Building matter	7/08/97	2	A/C
57	C. Schiavone	F. Mazzeo, Esq.	None	Letter re: Charlotte Fire Department Report	7/08/97	2	A/C
58	D. Baskerville	J. Fenningham, Esq.	D. Meyer C. Schiavone	Letter re: information regarding Omega Sprinklers	7/10/97	4	A/C, WP
59	D. Bobzien, Esq.	J. Fenningham, Esq.	G. Meyer J. Golinveaux C. Schiavone A. Stephenson, Esq. K. Sanzo, Esq. J. O'Neill G. Babcock	Letter re: Omega review	6/18/97	4	A/C, WP
60	D. Eglsaer	C. Schiavone	G. Meyer J. Fenningham, Esq. A. Post	Letter re: Ralph Metcalf Federal Building matter, waiver of subrogation and indemnification	6/02/97	3	A/C, WP
61	W. Dowling, Esq.	C. Schiavone	G. Meyer A. Post J. Fenningham, Esq.	Letter re: Omega Sprinklers in Monroe Community Hospital	5/19/97	5	A/C, WP
62	T. Strange	C. Schiavone	G. Meyer A. Post E. Weigand A. Hoff J. Fenningham, Esq	Letter re: telephone conversation regarding Omega Sprinklers, investigation and testing	5/19/97	2	A/C, WP
63	J. Hart	C. Schiavone	G. Meyer J. Fenningham, Esq. V. Same	Letter re: Central Sprinkler work crews and discussions with corporate counsel regarding work access	5/15/97	6	A/C, WP

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
64	C. Schiavone	E. Budnick	None	Fax re: expert support for pending litigation and discussion with counsel regarding same	2/05/97	2	A/C, WP
65	C. Schiavone	C. Schiavone	None	Spreadsheet re: insurance reserve/products liability claims	1/13/97	1	WP
66	D. Namyst	C. Schiavone	G. Meyer A. Post K. Bilo L. Wambold J. Fenningham, Esq.	Letter re: Omega Products at Intel Corporation, cooperative solution, and acceptance of liability	1/09/97	2	A/C, WP
67	Building Owners	K. Bilo	None	Draft letter with written edits and markups re: Omega Sprinklers, company's position regarding liability	10/28/96	9	WP
68	G. Meyer C. Schiavone	J. Fenningham, Esq.	None	Fax and draft letter with written edits and markups re: Omega Sprinklers and Steel Pipe Systems	4/17/96	2	A/C, WP
69	C. Schiavone	J. Fenningham, Esq.	None	Fax and attached chart re: Omega matters	7/15/97	7	A/C, WP
70	Zone Managers Regional Sales Managers	C. Schiavone	G. Meyer B. Buchanan J. Golinveaux M. Thomas D. Rice K. Maughan J. Brunetti V. Sundseth J. Fenningham, Esq.	Memorandum re: Omega Sprinkler field questions, testing and activation, as drafted by counsel for internal use	4/01/96	1	A/C, WP
71	G. Golinveaux	J. Fenningham, Esq.	None	Fax re: Allied Signal/Murray Cappers	6/05/96	3	A/C, WP

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
72	G. Meyers C. Schiavone J. Fenningham, Esq.	K. Sanzo, Esq.	None	Fax and attached draft of letter to CPSC	7/21/97	9	A/C, WP
73	J. Fenningham, Esq.	C. Schiavone	File	Letter re: Omega building contracts	12/19/96	1	A/C, WP
74	C. Schiavone	J. Fenningham, Esq.	None	Fax and letter re: Omega Sprinklers	12/03/96	2	A/C, WP
75	C. Schiavone	G. Dempster, Esq.	None	Fax re: First Interstate Tower replacement agreement	6/05/97	6	A/C, WP
76	C. Schiavone	G. Dempster, Esq.	None	Letter re: First Interstate Tower replacement agreement	6/09/97	6	A/C, WP
77	Carmine	J. Fenningham, Esq.	None	Letter re: Pacific Freeholds	8/05/97	1	A/C, WP
78	C. Schiavone	G. Dempster, Esq.	None	Letter re: CSC/Great Lakes	10/31/96	1	A/C, WP
79	C. Schiavone	G. Dempster, Esq.	None	Fax and attached letter re: CSC/Great Lakes	10/28/96	6	A/C, WP
80	C. Schiavone	G. Dempster, Esq.	None	Fax and attached letter re: CSC/Great Lakes	10/29/96	15	A/C, WP
81	C. Schiavone	G. Dempster, Esq.	None	Letter re: CSC/Great Lakes installer agreement	10/24/96	2	A/C, WP
82	C. Schiavone	G. Dempster, Esq.	None	Letter re: CSC/Great Lakes installer agreement	10/15/96	2	A/C, WP
83	C. Schiavone	J. Fenningham, Esq.	None	Letter re: Massingale v. Central Sprinkler	10/22/96	1	A/C, WP
84	J. Fenningham, Esq.	Carmine	None	Fax and attached letter re: replacement of sprinkler heads	10/10/96	9	A/C, WP
85	C. Schiavone	J. Fenningham, Esq.	None	Fax re: CSC/Omega Sprinklers	8/27/96	1	A/C, WP

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
86	C. Schiavone	J. Fenningham, Esq.	None	Fax and letter re: draft of Hotel Nikko letter	4/19/96	3	A/C, WP
87	K. Faulstich	C. Schiavone	G. Meyer A. Post J. Fenningham, Esq.	Draft of letter re: replacement of sprinklers at VA Medical Centers, with handwritten markups, as provided by counsel	8/27/96	4	A/C, WP
88	B. Pardue J. Kerin, Jr. A. Post K. Bilo	C. Schiavone	G. Meyer	Memorandum re: installer agreement and attached installer agreement as prepared with J. Fenningham, Esq.	9/16/96	7	A/C, WP
89	G. Meyer	J. Fenningham, Esq.	None	Faxed markup of draft letter re: Marriott	8/16/96	9	A/C, WP
90	C. Schiavone	J. Fenningham, Esq.	None	Fax and attached memorandum re: admissibility of mitigation of damages evidence	7/12/96	12	A/C, WP
91	E. Budnick	C. Schiavone	J. Fenningham, Esq.	Letter re: acting as expert witness in Massingale v. Central Sprinkler	1/17/97	1	WP
92	C. Schiavone	J. Fenningham, Esq.	None	Faxed letter re: Beacon Management/Rowe's Wharf	10/30/96	2	A/C
93	T. Sartory, Esq.	J. Fenningham, Esq.	Central Sprinkler	Draft settlement and release with handwritten notations from Central Sprinkler's counsel to Central Sprinkler	3/19/97	7	A/C, WP
94	C. Schiavone	J. Fenningham, Esq.	None	Faxed letter and red-line changes to reinstallation agreement	12/17/96	9	A/C, WP
95	C. Schiavone	J. Fenningham, Esq.	None	Faxed letter and draft of audit opinion letter	12/11/96	5	A/C, WP
96	C. Schiavone	J. Fenningham, Esq.	None	Fax and red-line draft of reinstallation agreement, with handwritten notation	12/06/96	9	A/C, WP

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
97	C. Schiavone	J. Fenningham, Esq.	None	Faxed and draft reinstallation agreement re: Polk and Taylor Buildings	11/22/96	7	A/C, WP
98	C. Schiavone	J. Fenningham, Esq.	None	Fax and attached letter re: Polk and Taylor	11/22/96	2	A/C, WP
99	C. Schiavone	J. Fenningham, Esq.	None	Faxed draft of reinstallation agreement re: Polk and Taylor Buildings, with attorney comment	11/21/96	6	A/C, WP
100	C. Schiavone	G. Dempster, Esq.	None	Letter and draft agreement re: CSC/Polk and Taylor	11/06/96	13	A/C, WP
101	C. Schiavone	Corr, Stevens & Fenningham	None	Draft reinstallation agreement re: Polk and Taylor Buildings, with handwritten changes and markups, from counsel	8/29/96	6	WP
102	C. Schiavone	C. Schiavone	None	Draft agreement between owner and contractor, with handwritten notations regarding limited exposure	?	17	WP
103	G. Meyer C. Schiavone	J. Fenningham, Esq.	None	Fax and letters re: Rowes Wharf/Beacon Polk and Taylor facility	9/11/96	5	A/C, WP
104	C. Schiavone	J. Fenningham, Esq.	None	Fax and draft agreement re: Rowes Wharf	7/16/96	20	A/C, WP
105	C. Schiavone	J. Fenningham, Esq.	None	Fax and letter re: Beacon Management/Rowes Wharf	7/16/93	3	A/C, WP
106	S. Ravitz	C. Schiavone	J. Fenningham, Esq.	Draft letter to counsel with handwritten notations re: Rowes Wharf Omega Change Out Agreement, requesting counsel's review	6/05/96	14	A/C, WP
107	J. Fenningham, Esq.	G. Dempster	None	Draft agreement re: Rowes Wharf	7/1/96	21	A/C, WP

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
108	J. Fenningham, Esq.	C. Schiavone	None	Draft letter agreement re: Rowes Wharf Omega Change Out	5/21/96	6	A/C, WP
109	C. Schiavone	J. Fenningham, Esq.	None	Draft reply to Allied Signal; draft of letter to S. Ravitz with handwritten revisions regarding remedies	5/21/96	15	A/C, WP
110	S. Ravitz	Central Sprinkler	A. Post L. Wambold D. Carli J. Fenningham, Esq.	Draft letter of Rowes Wharf Omega Change Out agreement, with handwritten revisions regarding remedies	5/21/96	6	A/C, WP
111	C. Schiavone	C. Schiavone	None	Draft of agreement for construction projects of limited scope, with handwritten revisions regarding contracts, warranty, waiver of liens	5/6/96	19	WP
112	C. Schiavone	J. Fenningham, Esq.	None	Faxed letter to Grinnell Corporation re: Rowes Wharf	4/9/96	3	A/C, WP
113	J. Pepi	J. Golinveaux	G. Meyer	Draft letter re: Rowes Wharf, with handwritten revisions and edits regarding fault	4/96	1	WP
114	W. Pardue	W. Pardue	None	Handwritten note re: Letter from attorney	7/10/?	1	A/C, WP
115	R. Hagar	R. Powers, Esquire	None	Letter re: Document responses in Agbobu v. Fire Sprinklers, et al.	2/24/92	2	A/C, WP
116	Bob	D. Powers, Esquire	None	Telephone message	1/28/92	1	A/C, WP
117	Fire Chief Inc.	D. Goad	R. Powers, Esq. Hull and Company, Inc. Marsh & McLennan, Inc.	Letter re: Insurance coverage and defense	12/5/91	2	A/C, WP

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
118	B. Hagar	R. Powers, Esq.	None	Letter re: Agbobu v. Fire Sprinklers, et al.	2/12/92	1	A/C
119	W. Pardue	W. Pardue	None	Handwritten diary re: Changes prior to signing agreement		1	WP
120	C. Schiavone	J. Fenningham, Esq.	None	Faxed letter re: Continental Casualty Company v. Central Sprinkler	8/21/96	3	A/C, WP
121	J. Fenningham, Esq.	C. Schiavone	S. Seltzer	Letter re: Continental Casualty Company v. Central Sprinkler	6/7/96	1	A/C, WP
122	W. Pardue	A. Kindig	None	Letter and memos re: Burnsley Hotel claim	1/7/87	7	WP
123	W. Meyer	R. Miller, Esq.	None	Letter re: Century Capital Inc. v. Central Sprinkler	9/22/83	4	A/C, WP
124	W. Pardue	J. Fenningham, Esq.	None	Letter re: Century Capital Inc. v. Central Sprinkler	11/11/83	1	A/C, WP
125	W. Pardue	J. Fenningham, Esq.	None	Letter re: Century Capital Inc. v. Central Sprinkler	2/24/84	1	A/C, WP
126	W. Pardue	C. Fischer	M. Fried	Letter re: Expert report, avoiding default	7/14/88	2	A/C, WP
127	B. Clone	A. Kindig	W. Pardue	Letter re: potential litigation in Church v. Central Sprinkler, information from law firm	12/29/86	1	A/C, WP
128	B. Clone	A. Kindig	W. Pardue	Letter re: St. Michael's Church v. Central Sprinkler	3/2/87	1	A/C, WP
129	B. Crone	A. Kindig	W. Pardue	Letter re: Possible pre-litigation disposition in St. Michael's Episcopal Church v. Central Sprinkler	12/17/86	1	A/C, WP

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
130	A. Kindig	W. Pardue	None	Letter re: Possible pre-litigation settlement of lawsuit	12/11/86	1	A/C, WP
131	W. Pardue	D. Rogers, Esq.	J. Crumpton	Letter re: Possible settlement in Church Insurance Company v. Crumpton Sprinkler Company Inc. and Central Sprinkler	12/1/86	2	A/C, WP
132	W. Pardue	D. Rogers, Esq.	J. Crumpton	Letter re: Potential claim of Episcopal Church of St. Michael and possibility of settlement	11/14/86	8	A/C, WP
133	A. Kindig	W. Pardue	None	Letter re: Correspondence from law firm regarding claim of Episcopal Church of St. Michael	11/18/86	1	A/C, WP
134	W. Pardue	J. Bisset, Esq.	T. Farrell	Letter re: Plaintiff's damages	5/29/90	2	A/C, WP
135	T. Nelson	J. Bisset, Esq.	W. Pardue	Letter re: Request for expert's evaluation	4/10/90	2	A/C, WP
136	W. Pardue	G. Polan	None	Handwritten professional biography	4/3/90	2	WP
137	D. Arnold	W. Pardue	None	Draft letter with handwritten changes regarding sprinkler replacement	2/24/85	2	WP
138	W. Pardue	A. McMahan, Esq.	G. Derragon	Letter re: Church Insurance Company matter	12/17/87	5	A/C, WP
139	W. Pardue	A. McMahan, Esq.	G. Derragon	Letter re: Church Insurance Company matter	9/1/87	2	A/C, WP
140	G. Derragon	A. McMahan, Esq.	W. Pardue	Letter re: Church Insurance Company matter	11/25/87	7	A/C, WP
141	W. Pardue	A. McMahan, Esq.	G. Derragon	Letter re: Church Insurance Company matter	11/12/87	1	A/C, WP

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WP = Work Product

Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
142	G. Derragon	A. McMahan, Esq.	W. Pardue	Letter re: Church Insurance Company matter	11/12/87	2	A/C, WP
143	W. Pardue	A. McMahan, Esq.	G. Derragon	Letter re: Church Insurance Company matter	11/12/87	2	A/C, WP
144	A. McMahan, Esq.	B. Rogers, Esq.	J. Crumpton	Letter re: Church Insurance Company matter	11/2/87	3	A/C, WP
145	W. Pardue	A. McMahan, Esq.	G. Derragon	Letter re: Church Insurance Company matter	11/25/87	2	A/C, WP
146	G. Derragon	A. McMahan, Esq.	W. Pardue	Letter re: Church Insurance Company matter	11/25/87	2	A/C, WP
147	G. Derragon	A. McMahan, Esq.	W. Pardue	Letter re: Church Insurance Company matter	12/18/87	7	A/C, WP
148	W. Pardue	W. Pardue	None	Notes re: Conversation with A. McMahan, Esq; handwritten notes re: St. Michael's Church litigation; information regarding strategy	10/11/87	23	A/C, WP
149	W. Pardue	A. McMahan, Esq.	G. Derragon	Letter re: Draft of Central's Answers to Interrogatories	10/2/87	8	A/C, WP
150	A. McMahan, Esq.	W. Pardue	None	Handwritten Answers to remaining Interrogatories	9/25/87	52	A/C, WP
151	B. Rogers, Esq.	D. Groth, Esq.	None	Letter re: Church Insurance Company matter, with handwritten markings and notations of W. Pardue	8/13/86	26	A/C, WP
152	A. Kindig	W. Pardue	None	Summons and Complaint in Church Insurance Company matter, with handwritten markings and notations	3/2/87	17	WP

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
153	J. Crumpton	D. Groth, Esq.	D. Hanke J. Norton	Letter re: Church Insurance Company matter, with handwritten markings	7/14/86	2	WP
154	Central Sprinkler Corporation	A. McMahan, Esq.	G. Derragon	Letter re: Church Insurance Company matter	3/12/87	4	A/C, WP
155	W. Pardue	A. McMahan, Esq.	None	Letter re: Insurance company matter	8/3/86	1	A/C, WP
156	W. Pardue	A. McMahan, Esq.	G. Derragon	Letter re: Central's draft response to Interrogatories	5/29/87	6	A/C, WP
157	G. Derragon	A. McMahan, Esq.	Central Sprinkler	Letter re: Hearing on Motion to Dismiss in Church Insurance Company matter	3/30/87	1	A/C, WP
158	G. Derragon	W. Pardue	None	Letter re: Information requested in Episcopal Church of St. Michael project	3/17/87	5	WP
159	A. McMahan, Esq.	W. Pardue	G. Derragon A. Kindig	Letter re: Request for production of documents in Church Insurance Company matter	3/13/87	1	A/C, WP
160	G. Derragon	H. Grooms, Jr., Esq.	Central Sprinkler	Letter re: Retention of attorneys in Church Insurance Company matter	3/10/87	1	A/C, WP
161	W. Pardue	G. Dempster, Esq.	None	Letter re: Church Insurance Company matter	3/13/87	2	A/C, WP
162	W. Pardue	J. Fenningham, Esq.	None	Documents re: Freedman matter	3/9/88	5	A/C, WP
163	W. Pardue	J. Fenningham, Esq.	None	Letter re: Freedman matter	1/4/88	1	A/C, WP
164	W. Pardue	J. Fenningham, Esq.	None	Letter re: Freedman matter	11/20/87	1	A/C, WP
165	W. Pardue	J. Fenningham, Esq.	None	Letter re: Freedman matter	12/15/87	1	A/C, WP
166	W. Pardue	J. Fenningham, Esq.	None	Letter and enclosures re: Freedman matter	11/20/87	9	A/C, WP

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167	W. Pardue	J. Fenningham, Esq.	None	Telephone message slip re: Freedman letter	9/8/87	1	A/C, WP
168	W. Pardue	J. Fenningham, Esq.	None	Letter re: Freedman matter	9/1/87	2	A/C, WP
169	M. Fries	C. Schiavone	S. Torstensen, A. Post, J. Fenningham, Esq.	Memorandum re: Language of Omega Diagnostic Report as approved by counsel	7/18/96	2	A/C, WP
170	G. Polan	R. Hammer, Esq.	None	Letter and attachments re: U.S. Patent	8/7/86	5	A/C
172	G. Meyer, S. Meyer, A. Sabol, W. Pardue, J. Golinveaux, G. Polan, D. Rice, R. Hobbs, D. Yuhas, K. Dolan, A. Post, K. Bilo	C. Schiavone, J. Fenningham, Esq.	J. Fenningham, Esq.	Memorandum re: Document request in Hart et al. v. Central Sprinkler Corporation	10/31/97	1	AC, WP
171	W. Pardue	P. Andersen, Esq.	None	Letter re: Settlement Conference in L&D Construction v. Plumbers Plus	5/28/92	1	A/C
173	D. Rice	C. Schiavone, J. Fenningham, Esq.	None	Memorandum re: Document requests in Hart et al. v. Central Sprinkler Corporation	10/28/97	2	A/C, WP
174	Technical Services & Marketing Employees	D. Rice	None	Memorandum re: Document production distributed at request of counsel	11/3/97	1	A/C, WP
175	K. Richardson, Esq.	Central Sprinkler Corporation	J. Rath, SGVC	Letter re: Disposition of Truck Insurance Exchange v. Central Sprinkler Corporation	12/19/85	1	A/C
176	Central Sprinkler Corporation	K. Richardson, Esq.	T. Woodard	Letter re: Representation in Truck Insurance Exchange v. Central Sprinkler Corporation	1/21/85	1	A/C
177	W. Pardue	J. Fenningham, Esq.	None	Letter re: Settlement of Hudec lawsuit	10/1/87	1	A/C

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178	W. Pardue	J. Fenningham, Esq.	None	Letter with attachments re: Settlement of Hudec lawsuit	9/10/87	7	A/C
179	W. Pardue	J. Fenningham, Esq.	None	Telephone message slip re: Hudec and Friedman matters	8/20/87	1	A/C, WP
180	W. Pardue	J. Fenningham, Esq.	None	Letter re: Settlement and release of Hudec, Gahimer and Friedman matters	8/21/87	2	A/C, WP
181	R. McGreevy, Esq.	G. Polan	W. Pardue	Letter and attachment re: Omega diagnostic reports	11/25/92	2	A/C
182	W. Pardue	R. McGreevy, Esq.	None	Letter re: Status of Hartford Insurance Company v. Central Sprinkler	6/11/93	2	A/C
183	K. Luther	R. McGreevy, Esq.	W. Pardue	Letter to co-defendant re: Settlement of Hartford Insurance Company v. Central Sprinkler	7/24/92	2	A/C, WP
184	N. Duvall	R. McGreevy, Esq.	W. Pardue	Letter re: Summary of deposition testimony in Hartford Insurance Company v. Central Sprinkler	4/1/93	3	A/C, WP
185	C. Schiavone	R. Cullen, Esq.	None	Letter re: Sisters of Notre Dame matter	6/10/94	1	A/C
186	Central Sprinkler	Leach, McGreevy & Eliassen	None	Billing records for Hartford Insurance Company v. Central Sprinkler	2/28/93	9	A/C, WP
187	Integrated Fire and Failure Technologies Inc.	R. McGreevy, Esq.	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	7/2/93	2	A/C, WP
188	Integrated Fire and Failure Technologies Inc.	R. McGreevy, Esq.	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	6/4/93	2	A/C, WP
189	Central Sprinkler Corporation	Leach, McGreevy & Eliassen	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	6/30/92	9	A/C, WP
190	Central Sprinkler	Leach, McGreevy & Eliassen	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	2/20/93	9	A/C, WP

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191	Central Sprinkler	Leach, McGreevy & Eliassen	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	6/30/93	11	A/C, WP
192	Central Sprinkler	Leach, McGreevy & Eliassen	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	3/31/92	8	A/C, WP
193	Central Sprinkler	Leach, McGreevy & Eliassen	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	3/31/92	8	A/C, WP
194	Central Sprinkler	Leach, McGreevy & Eliassen	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	6/30/92	9	A/C, WP
195	Central Sprinkler	B. Lazar	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	3/30/92	5	A/C, WP
196	Central Sprinkler	Leach, McGreevy & Eliassen	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	12/15/93	7	A/C, WP
197	Central Sprinkler	Leach, McGreevy & Eliassen	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	6/30/93	10	A/C, WP
198	Integrated Fire and Failure Technologies Inc.	R. McGreevy	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	4/2/93	2	A/C, WP
199	R. McGreevy	Integrated Fire and Failure Technologies, Inc.	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	3/4/93	1	A/C, WP
200	Central Sprinkler	Leach, McGreevy & Eliassen	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	8/15/91	5	A/C, WP
201	Central Sprinkler	Leach, McGreevy & Eliassen	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	5/9/91	4	A/C, WP
202	Central Sprinkler	Leach, McGreevy & Eliassen	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	12/31/91	11	A/C, WP
203	Central Sprinkler	Leach, McGreevy & Eliassen	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	6/30/93	10	A/C, WP

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204	Central Sprinkler	Leach, McGreevy & Eliassen	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	12/15/93	7	A/C, WP
205	Central Sprinkler	Leach, McGreevy & Eliassen	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	2/28/93	9	A/C, WP
206	W. Pardue	M. P. Fried, Esq.	S. Evans, Esq., D. Keenan, G. Furtivo	Letter re: Defense of Sisters of Notre Dame matter	1/31/89	2	A/C
207	W. Pardue	S. Evans, Esq.	M. P. Fried, Esq.	Letter re: Defense of Hartford Insurance Company Insurance Company v. Central Sprinkler	1/30/89	3	A/C
208	M. P. Fried, Esq.	S. Evans, Esq.	D. Keenan, W. Pardue	Letter re: Analysis of Hartford Insurance Company Insurance Company v. Central Sprinkler	11/28/88	8	A/C, WP
209	W. Pardue	R. Eliassen, Esq.	None	Letter re: Document production in Hartford Insurance Company Insurance Company v. Central Sprinkler	4/11/91	1	A/C
210	None	None	None	Hand written notes re: Attorneys instructions concerning document production in Hartford Insurance Company Insurance Company v. Central Sprinkler	4/23/91	1	A/C, WP
211	R. McGreevy, Esq.	W. Pardue	None	Letter re: Discovery in Hartford Insurance Company v. Central Sprinkler	9/10/91	1	A/C
212	B. Riley	R. McGreevy, Esq.	None	Letter re: Discovery in Hartford Insurance Company v. Central Sprinkler	7/3/91	2	A/C
213	W. Pardue	M. Harper	None	Letter with attachments re: Discovery responses in Hartford Insurance Company v. Central Sprinkler	9/7/89	7	A/C

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214	Eliassen, Postel, Eliassen & Johnson	W. Pardue	None	Fax and handwritten responses to Discovery Requests in Hartford Insurance Company v. Central Sprinkler	9/5/89	12	A/C
215	W. Pardue	S. Evans, Esq.	None	Letter re: Response to Discovery Requests in Hartford Insurance Company v. Central Sprinkler	3/28/89	1	A/C
216	W. Pardue	S. Evans, Esq.	M. Fried, Esq.	Letter re: Response to Discovery Requests in Hartford Insurance Company v. Central Sprinkler	2/17/89	3	A/C
217	W. Pardue	R. Eliassen, Esq.	None	Letter re: Response to Discovery Requests in Hartford Insurance Company v. Central Sprinkler	11/7/90	1	A/C
218	W. Pardue	R. Eliassen, Esq.	None	Letter re: Depositions in Hartford Insurance Company v. Central Sprinkler	3/2/90	1	A/C
219	W. Pardue	G. Costa	None	Letter re: Depositions in Hartford Insurance Company v. Central Sprinkler	9/18/90	1	A/C
220	W. Pardue	R. Eliassen, Esq.	None	Letter re: Depositions in Hartford Insurance Company v. Central Sprinkler	10/31/90	1	A/C
221	R. Eliassen, Esq.	W. Pardue	None	Letter w/attachments re: Documents in Hartford Insurance Company v. Central Sprinkler	10/9/89	3	A/C
222	M. P. Fried, Esq.	W. Pardue	None	Letter re: Status of Notre Dame and Mistic matters	8/10/90	1	A/C
223	W. Pardue	M. P. Fried, Esq.	J. Achtipes, R. Eliassen, Esq., G. Furtivo	Letter re: Notre Dame and Mistic cases	7/25/90	2	A/C
224	W. Pardue	R. Eliassen, Esq.	None	Letter re: Hartford Insurance Company Insurance Company v. Central Sprinkler	9/29/89	2	A/C

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225	W. Pardue	S. Evans, Esq.	None	Letter re: Discovery Requests in Hartford Insurance Company Insurance v. Central Sprinkler	8/10/89	1	A/C
226	W. Pardue	S. Evans, Esq.	M. Urbani	Letter re: Discovery Requests in Hartford Insurance Company v. Central Sprinkler	8/10/89	1	A/C
227	W. Pardue	M. Harper	None	Letter re: Hartford Insurance Company Insurance Company v. Central Sprinkler	8/11/89	1	A/C
228	W. Pardue	S. Evans, Esq.	None	Letter re: Depositions in Hartford Insurance Company v. Central Sprinkler	7/26/89	1	A/C
229	W. Pardue	S. Evans, Esq.	None	Letter w/attachments re: Discovery Requests in Hartford Insurance Company v. Central Sprinkler	6/7/89	5	A/C
230	W. Pardue	D. Quintana	N. Tallas	Letter w/attachments re: Discovery Requests in Hartford Insurance Company v. Central Sprinkler	5/24/89	2	A/C
231	W. Pardue	R. McGreevy, Esq.	None	Letter re: Discovery Requests in Hartford Insurance Company v. Central Sprinkler	9/4/91	1	A/C
232	W. Pardue	R. McGreevy, Esq.	None	Letter re: Status of Hartford Insurance Company v. Central Sprinkler	8/23/91	1	A/C
233	R. McGreevy, Esq.	I. Weil	W. Pardue	Letter re: Status of Hartford Insurance Company Insurance v. Central Sprinkler	8/29/91	2	A/C
234	B. Riley	R. McGreevy, Esq.	None	Letter re: Document Requests in Hartford Insurance Company v. Central Sprinkler	7/3/91	2	A/C

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235	W. Pardue	S. Evans, Esq.	None	Letter re: Discovery Requests in Hartford Insurance Company v. Central Sprinkler	5/22/89	1	A/C
236	S. Evans, Esq.	W. Pardue	None	Fax with attachments re: Discovery Requests in Hartford Insurance Company v. Central Sprinkler	5/15/89	5	A/C
237	Central Sprinkler Corp.	S. Evans, Esq.	None	Fax re: Discovery Requests in Hartford Insurance Company v. Central Sprinkler	4/14/89	5	A/C
238	W. Pardue	M. P. Fried, Esq.	S. Evans, Esq.	Letter re: Discovery Requests in Sisters of Notre Dame matter	3/14/89	2	A/C
239	None	W. Pardue	None	Hand written notes re: Discovery Responses in Hartford Insurance Company v. Central Sprinkler	2/17/89	10	A/C, WP
240	W. Pardue	R. McGreevy, Esq.	None	Discovery in Hartford Insurance Company Insurance v. Central Sprinkler	9/27/91	3	A/C
241	I. Weil	R. McGreevy, Esq.	W. Pardue	Letter re: Discovery in Hartford Insurance Company v. Central Sprinkler	9/17/91	2	A/C
242	W. Pardue	I. Weil	P. Andersen, Esq.	Status of L&D Construction Co. matter	7/26/91	2	A/C
243	R. Eliassen, Esq.	I. Weil	W. Pardue, G. Furtivo	Letter re: Status of Hartford Insurance Company v. Central Sprinkler	7/8/91	3	A/C
244	W. Pardue	R. Eliassen, Esq.	None	Letter re: Document Requests in Hartford Insurance Company v. Central Sprinkler	2/11/91	2	A/C
245	None	None	None	Hand written notes re: Discovery Requests in Hartford Insurance Company v. Central Sprinkler		5	A/C, WP

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246	W. Pardue	R. McGreevy, Esq.	None	Letter re: Document Requests in Hartford Insurance Company v. Central Sprinkler	9/17/91	1	A/C
247	None	None	None	Hand written notes re: Discovery Requests in Hartford Insurance Company v. Central Sprinkler		2	WP, A/C
248	W. Pardue	M. P. Fried, Esq.	None	Letter re: Defense of Minneapolis Club claim	5/18/89	1	A/C
249	W. Pardue	M. P. Fried, Esq.	None	Letter re: Defense of Minneapolis Club claim	4/4/89	1	A/C
250	S. Richter, Esq.	W. Pardue	None	Fax with attachments re: Discovery in Hartford Insurance Company Insurance v. Central Sprinkler	9/22/89	7	A/C
251	W. Pardue	S. Richter, Esq.	None	Letter w/attachments re: Settlement of Minneapolis Club v. Central Sprinkler	12/12/90	6	A/C
252	W. Pardue	S. Richter, Esq.	None	Billing records re: Minneapolis Club v. Central Sprinkler	4/12/90	5	A/C, WP
253	W. Pardue	S. Richter, Esq.	None	Billing records re: Minneapolis Club v. Central Sprinkler	1/9/91	2	A/C, WP
254	W. Pardue	S. Richter, Esq.	None	Billing records re: Minneapolis Club v. Central Sprinkler	12/26/90	3	A/C, WP
255	W. Pardue	S. Richter, Esq.	None	Letter re: Settlement of Minneapolis Club v. Central Sprinkler	11/7/90	3	A/C
256	W. Pardue	S. Richter, Esq.	None	Billing records re: Minneapolis Club v. Central Sprinkler	3/13/90	4	A/C, WP
257	W. Pardue	S. Richter, Esq.	P. O'Leary	Letter re: Defense of Minneapolis Club v. Central Sprinkler	7/6/90	1	A/C, WP

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
258	W. Pardue	P. O'Leary	M. P. Fried, Esq.	Letter re: Investigation of Minneapolis Club v. Central Sprinkler	3/19/90	3	WP
259	W. Pardue	S. Richter, Esq.	None	Settlement of Minneapolis Club v. Central Sprinkler	11/27/90	1	A/C
260	W. Pardue	S. Richter, Esq.	None	Letter re: Settlement of Minneapolis Club v. Central Sprinkler	8/16/90	2	A/C
261	W. Pardue	P. O'Leary	None	Letter re: Investigation of Minneapolis Club v. Central Sprinkler	3/30/90	3	WP
262	W. Pardue	Popham, Haik, Schnobrich & Kaufman, Ltd.	None	Billing records re: Minneapolis Club v. Central Sprinkler	10/13/89	8	A/C, WP
263	W. Pardue	S. Richter, Esq.	None	Letter with attached billing records re: Minneapolis Club v. Central Sprinkler Corp.	6/12/89	2	A/C, WP
264	W. Pardue	S. Richter, Esq.	None	Letter with attached billing records re: Minneapolis Club v. Central Sprinkler	11/9/89	3	A/C, WP
265	W. Pardue	S. Richter, Esq.	None	Letter with attached billing records re: Minneapolis Club v. Central Sprinkler	1/10/89	4	A/C, WP
266	W. Pardue	Popham, Haik, Schnobrich & Kaufman, Ltd.	None	Billing records re: Minneapolis Club v. Central Sprinkler	2/12/90	4	A/C, WP
267	W. Pardue	S. Richter, Esq.	None	Letter re: Defense of Minneapolis Club v. Central Sprinkler Corporation	2/9/90	1	A/C
268	M.P. Fried, Esq.	S. Richter, Esq.	W. Pardue	Letter re: Defense of Minneapolis Club v. Central Sprinkler	2/9/90	1	A/C

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269	W. Pardue	P. O'Leary	M. P. Fried, Esq.	Letter with attachments re: Investigation of Minneapolis Club v. Central Sprinkler	2/15/90	10	WP
270	S. Richter, Esq.	N. Tallos	W. Pardue	Letter with attachments re: Discovery Requests in Minneapolis Club v. Central Sprinkler	12/19/89	3	A/C
271	W. Pardue	S. Richter, Esq.	M. P. Fried, Esq.	Letter with attachment re: Discovery in Minneapolis Club v. Central Sprinkler	11/16/89	4	A/C
272	W. Pardue	S. Richter, Esq.	None	Letter re: Discovery in Minneapolis Club v. Central Sprinkler	11/3/89	1	A/C
273	W. Pardue	S. Richter, Esq.	None	Letter re: Status of Minneapolis Club v. Central Sprinkler	11/1/89	1	A/C, WP
274	W. Pardue	S. Richter, Esq.	None	Letter re: Discovery in Minneapolis Club v. Central Sprinkler	10/2/89	2	A/C
275	W. Pardue	C. Printon	None	Letter re: Discovery in Minneapolis Club v. Central Sprinkler	7/5/89	1	A/C
276	W. Pardue	C. Printon	S. Richter, Esq.	Letter re: Discovery in Minneapolis Club v. Central Sprinkler	6/2/89	1	A/C
277	W. Pardue	S. Richter, Esq.	None	Letter with attachments re: Defense of Minneapolis Club v. Central Sprinkler Corporation	5/10/89	5	A/C, WP
278	W. Pardue	S. Richter, Esq.	None	Letter with attachments re: Discovery Requests in Minneapolis Club v. Central Sprinkler	8/24/89	5	A/C
279	W. Pardue	S. Richter, Esq.	None	Letter with attachments re: Status of Minneapolis Club v. Central Sprinkler	7/6/89	5	A/C, WP

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280	W. Pardue	J. Fenningham, Esq.	None	Letter re: Defense of Minneapolis Club v. Central Sprinkler	5/4/89	1	A/C, WP
281	S. Richter, Esq.	W. Pardue	None	Fax with attachments re: Defense of Minneapolis Club v. Central Sprinkler	5/5/89	8	A/C, WP
282	M. Abbott, Esq.	G. Polan	None	Letter re: Patent application	6/1/89		A/C
283	R. Hobbs	C. Polymeropoulos	None	Letter with attachments re: Expert testimony in trademark case	11/1/94	5	WP
284	None	R. Hobbs	None	Hand written notes re: Expert testimony in trademark case	10/31/94		WP
285	C. Polymeropoulos	R. Hobbs	J. Golinveaux, G. Meyer, G. Polan	Letter with attachments re: Expert testimony in trademark case	10/20/94	3	WP
286	R. Hobbs	C. Polymeropoulos	None	Telephone slip re: Expert testimony in trademark case	10/12/94	1	WP
287	None	R. DiDomizio	None	Letter re: Expert testimony in trademark case	10/11/94	5	WP
288	R. Jacobs-Meadway, Esq.	R. Hobbs	J. Golinveaux, G. Meyer, G. Polan	Letter re: Expert testimony in Omega trademark case	9/23/94	2	A/C, WP
289	R. Hobbs	C. Polymeropoulos	None	Letter with attachments re: Expert testimony in Omega trademark case		4	WP
290	None	R. Hobbs	None	Hand written notes re: Expert witness in Omega trademark case	9/12/94	1	WP
291	R. Jacobs-Meadway, Esq.	R. Hobbs	R. Bandura, J. Golinveaux, G. Meyer, G. Polan	Letter with attachments re: Omega trademark case	9/23/94	18	A/C
292	R. Hobbs	C. Polymeropoulos	None	Letter with attachments re: Expert testimony in Omega trademark case	9/22/94	7	WP

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
293	None	R. Hobbs	None	Hand written notes re: Expert testimony in Omega trademark case	9/13/94	1	WP
294	M. Abbott, Esq.	B. Hoening	None	Letter re: Patent application	3/26/86	1	A/C
295	A. Seidel, Esq.	G. Pieczykolan	None	Letter re: U.S. Patent application	1/17/86	1	A/C
296	G. Meyer	M. Abbott	B. Hoening	Letter re: U.S. Patent application	5/18/85	2	A/C
297	G. Meyer	E. Gonda, Esq.	None	Letter with attachments re: U.S. Patent application	9/19/84	16	A/C
298	E. Gonda, Esq.	B. Hoening	None	Letter re: U.S. Patent application	8/23/84	3	A/C
299	E. Gonda, Esq.	B. Hoening	None	Letter re: U.S. Patent application	10/12/84	2	A/C
300	M. Abbott, Esq.	G. Meyer	B. Hoening	Letter with attachment re: U.S. Patent application	2/19/85	3	A/C
301	M. Abbott, Esq.	G. Meyer	B. Hoening	Letter with attachment re: U.S. Patent application	2/8/85	2	A/C
302	G. Meyer	M. Abbott, Esq.	B. Hoening	Letter with attachments re: U.S. Patent application	5/29/85	3	A/C
303	G. Meyer, J. Kavanagh	D. Monaco	R. Anderson, W. Tarpley, Phd	Letter with attachments re: U. S. Patent application	8/5/85	15	A/C
304	L. Mims	E. Freedus, Esq.	W. Pardue	Letter re: Settlement of San Ysidro Landmark Fire Protection matter	12/20/88	2	A/C
305	W. Pardue	C. Medendorp	None	Fax re: San Ysidro Landmark Fire Protection Company claim	1/18/88	1	A/C
306	W. Pardue	A. Kindig	J. Noyes, C. Whitehead, J. Misselwitz	Letter re: Investigation of San Ysidro Landmark Fire Protection v. Central Sprinkler	5/18/88	9	A/C, WP

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
307	W. Pardue	P. Lynch	None	Letter re: Discovery in San Ysidro Landmark Fire Protection v. Central Sprinkler Company	3/7/88	1	A/C
308	W. Pardue	E. Freedus, Esq.	None	Letter re: Discovery in San Ysidro Landmark Fire Protection v. Central Sprinkler	2/12/88	2	A/C
309	W. Pardue	T. Sharbaugh, Esq.	None	Letter re: San Ysidro Landmark Fire Protection v. Central Sprinkler	1/6/88	1	A/C
310	E. McKelvey	T. Sharbaugh, Esq.	None	Letter re: San Ysidro Landmark Fire Protection v. Central Sprinkler		1	A/C
311	W. Pardue	J. Fenningham, Esq.	None	Letter re: Draft Contract Language	11/17/89	2	A/C
312	W. Pardue	J. Fenningham, Esq.	None	Letter re: Plumbing Contractors Inc. v. Central Sprinkler	9/27/89	1	A/C
313	W. Pardue	J. Fenningham, Esq.	None	Letter re: Plumbing Contractors Inc. v. Central Sprinkler	9/27/91	2	A/C
314	R. Derragon	M. Reynolds	W. Pardue	Letter re: Settlement of Superior Fire v. Central Sprinkler	8/13/87	1	A/C
315	G. Derragon	J. Westwood, Esq.	None	Letter re: Defense of PP&L v. Central Sprinkler	4/29/87	2	A/C
316	W. Pardue	P. Andersen, Esq.	None	Letter with attachments re: Defense of L& D Construction v. Plumbers Plus	10/8/91	6	A/C
317	W. Pardue	Ropers, Majeski, Kohn, Bentley, Wagner & Kane	None	Billing records re: L&D Construction v. Plumbers Plus	7/21/92		A/C, WP
318	W. Pardue	P. Andersen, Esq.	None	Letter with attachments re: Settlement of L&D Construction v. Plumbers Plus	5/28/92	3	A/C, WP

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
319	W. Pardue	Ropers, Majeski, Kohn, Bentley, Wagner & Kane	None	Billing records re: L&D Construction v. Plumbers Plus	1/28/92	4	A/C, WP
320	N. Duvall	R. McGreevy, Esq.	None	Letter re: Defense of Hartford Insurance Company Insurance v. Central Sprinkler	2/23/93	3	A/C
321	W. Pardue	P. Andersen, Esq.	None	Fax with attachments re: Defense of L&D Construction v. Plumbers Plus	6/5/92	22	A/C
322	W. Pardue	P. Andersen, Esq.	None	Letter with attachments re: Deposition testimony in L&D Construction v. Plumbers Plus	6/3/92	8	A/C, WP
323	P. Andersen, Esq.	J. Widman, Esq.	R. Stroud	Letter with hand written notes re: Settlement of L&D Construction v. Central Sprinkler	6/9/92	2	WP
324	B. Roder	J. Brezzo	None	Draft letter with handwritten notes re: Miriam Park Apartments	5/8/92	3	WP
325	W. Pardue	P. Andersen, Esq.	None	Letter re: Settlement of L&D Construction v. Plumbers Plus	7/29/92	1	A/C
326	W. Pardue	I. Weil	None	Letter re: Settlement of L&D Construction v. Plumbers Plus	12/13/91	1	A/C
327	W. Pardue	P. Andersen, Esq.	None	Letter with attachments re: Discovery and Settlement of L&D Construction v. Plumbers Plus with hand written notations	6/22/92	28	A/C, WP
328	W. Pardue	P. Andersen, Esq.	M. Fried, Esq.	Letter with attachments re: Settlement Conference in L&D Construction	10/18/90	8	A/C
329	W. Pardue	P. Andersen, Esq.	None	Letter with attachments re: Settlement of L&D Construction v. Plumbers Plus	4/6/92		A/C

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
330	P. Andersen, Esq.	J. Widman, Esq.	W. Shoftstall, R. Stroud, W. Fitzgerald, Esq.	Letter re: Proposed settlement of L&D Construction v. Plumbers Plus with handwritten notes	3/4/92	2	A/C, WP
331	W. Pardue	P. Andersen, Esq.	I. Weil	Letter with attachments re: Arbitration of L&D Construction v. Plumbers Plus	1/30/92	4	A/C
332	I. Weil	P. Andersen, Esq.	W. Pardue	Letter with attachments re: Arbitration of L&D Construction v. Plumbers Plus	1/9/92	14	A/C
333	M. Fried, Esq.	P. Andersen, Esq.	Central Sprinkler Corporation	Letter re: Defense of L&D Construction v. Central Sprinkler and Summary of Claims	11/3/89	4	A/C, WP
334	None	W. Pardue	None	Hand written notes re: Discovery of L&D Construction v. Plumbers Plus		1	A/C, WP
335	W. Pardue	P. Andersen, Esq.	M. Fried, Esq.	Letter re: Discovery in L&D Construction v. Plumbers Plus	12/4/90	1	A/C
336	R. Hobbs	P. Andersen, Esq.	W. Pardue	Letter with attachment re: Discovery in L&D Construction v. Plumbers Plus	5/18/92	2	A/C
337	P. Andersen, Esq.	W. Pardue	None	Fax with attachments re: Responses to Discovery Requests in L&D Construction v. Plumbers Plus	2/20/91	9	A/C
338	W. Pardue	P. Andersen, Esq.	None	Letter with attachments re: Discovery Requests in L&D Construction v. Plumbers Plus	11/6/90	10	A/C
339	W. Pardue	P. Andersen, Esq.	M. Fried, Esq.	Letter with attachments re: Plaintiffs' claims in L&D Construction v. Plumbers Plus	1/14/91	3	A/C
342	W. Pardue	P. Andersen, Esq.	M. Fried, Esq.	Letter re: Expert testimony in L&D Construction v. Plumbers Plus	1/15/91	3	A/C

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341	W. Pardue	P. Andersen, Esq.	None	Letter re: Status of L&D Construction v. Plumbers Plus	6/28/91	3	A/C, WP
342	W. Pardue	P. Andersen, Esq.	I. Weil	Letter re: Status of L&D Construction v. Plumbers Plus	8/20/91	3	A/C, WP
343	W. Pardue	P. Andersen, Esq.	None	Letter re: Summary of Deposition taken in L&D Construction v. Plumbers Plus	11/4/91	7	A/C, WP
344	W. Pardue	P. Andersen, Esq.	None	Letter re: Summary of Deposition taken in L&D Construction v. Plumbers Plus	11/15/91	3	A/C, WP
345	W. Pardue	P. Andersen, Esq.	N. Duvall	Letter re: Settlement of L&D Construction v. Plumbers Plus	6/12/92	3	A/C
346	W. Pardue	P. Andersen, Esq.	None	Letter with attachment re: Expert witness in L&D Construction v. Plumbers Plus	6/11/92	3	A/C
347	W. Pardue	P. Andersen, Esq.	None	Letter with attachments re: Status of L&D Construction v. Plumbers Plus	2/20/92	4	A/C, WP
348	P. Andersen, Esq.	W. Pardue	None	Letter with attachment re: Expert Witness in L&D Construction v. Plumbers Plus	4/10/92	4	A/C
349	W. Pardue	P. Andersen, Esq.	None	Letter with attachment re: Discovery in L&D Construction v. Plumbers Plus	4/30/92	2	A/C
350	N. Duvall	P. Andersen, Esq.	None	Letter re: L&D Construction v. Plumbers Plus	4/30/92	1	A/C
351	W. Pardue	Ropers, Majeski, Kohn, Bentley, Wagner & Kane	None	Billing records re: L&D Construction v. Plumbers Plus	4/15/92	4	A/C, WP

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352	P. Andersen, Esq.	W. Pardue	None	Letter with attachments re: Discovery Requests in L&D Construction v. Plumbers Plus	11/21/91	2	A/C
353	W. Pardue	P. Andersen, Esq.	None	Letter with attachment re: Discovery in L&D Construction v. Plumbers Plus	10/18/91	2	A/C, WP
354	W. Pardue	P. Andersen, Esq.	None	Letter re: Status of L&D Construction v. Plumbers Plus	9/11/91	1	A/C, WP
355	W. Pardue	P. Andersen, Esq.	None	Letter with attachments re: Discovery in L&D Construction v. Plumbers Plus	8/6/91	5	A/C, WP
356	W. Pardue	Ropers, Majeski, Kohn, Bentley, Wagner & Kane	None	Billing records re: L&D Construction v. Plumbers Plus	7/9/91	3	A/C, WP
357	W. Pardue	Ropers, Majeski, Kohn, Bentley, Wagner & Kane	None	Billing records re: L&D Construction v. Plumbers Plus	4/24/91	4	A/C, WP
358	W. Pardue	Ropers, Majeski, Kohn, Bentley, Wagner & Kane	None	Billing records re: L&D Construction v. Plumbers Plus	1/15/91	3	A/C, WP
359	W. Pardue	Ropers, Majeski, Kohn, Bentley, Wagner & Kane	None	Billing records re: L&D Construction v. Plumbers Plus	10/16/90	3	A/C, WP
360	W. Pardue	Ropers, Majeski, Kohn, Bentley, Wagner & Kane	None	Billing records re: L&D Construction v. Plumbers Plus	4/16/90	3	A/C, WP
361	W. Pardue	Ropers, Majeski, Kohn, Bentley, Wagner & Kane	None	Billing records re: L&D Construction v. Plumbers Plus	1/18/90	5	A/C, WP

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362	W. Pardue	P. Andersen, Esq.	M. P. Fried, Esq.	Letter re: L&D Construction v. Plumbers Plus	4/26/90	2	A/C, WP
363	P. Andersen, Esq.	W. Pardue	None	Fax with attachments re: Discovery in L&D Construction v. Plumbers Plus	2/25/91	5	A/C
364	W. Pardue	P. Andersen, Esq.	M. P. Fried, Esq.	Letter re: Discovery in L&D Construction v. Plumbers Plus	8/8/90	1	A/C
365	W. Pardue	P. Andersen, Esq.	M.P. Fried, Esq.	Letter re: Defense of L&D Construction v. Plumbers Plus	8/8/90	3	WP, A/C
366	W. Pardue	P. Andersen, Esq.	M.P. Fried, Esq.	Letter with attachments re: Defense of L&D Construction v. Plumbers Plus	6/1/90	7	A/C
367	W. Pardue	P. Andersen, Esq.	Home Insurance Company	Letter re: Defense of L&D Construction v. Plumbers Plus	12/4/89	1	A/C
368	W. Pardue	P. Andersen, Esq.	None	Letter re: Settlement of L&D Construction v. Plumbers Plus	2/26/90	1	A/C
369	W. Pardue	P. Andersen, Esq.	None	Fax with attachments re: Settlement of L&D Construction v. Plumbers Plus		5	A/C
370	W. Pardue	P. Andersen, Esq.	Home Insurance	Letter re: Settlement of L&D Construction v. Plumbers Plus	2/9/90	2	A/C, WP
371	W. Glover	A. Martini, Esq.	W. Pardue	Letter re: Defense of L&D Construction v. Plumbers Plus	10/16/89	2	A/C
372	N. Bestow	P. Andersen, Esq.	None	Fax with phone message slip and attachments re: Discovery in L&D Construction v. Plumbers Plus	5/20/90	4	A/C
373	W. Pardue	P. Andersen, Esq.	None	Letter re: Defense of L&D Construction v. Plumbers Plus	11/3/89	2	A/C

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374	C. Schiavone	J. B. Habegger, Esq.	J. Fenningham, Esq. R. E. Cullen, Esq.	Letter re: Defense of Johns v. Central Sprinkler and Hammer v. Central Sprinkler	12/3/92	3	A/C
375	C. Schiavone	R. Cullen, Esq.	None	Letter with attachments re: Billing records in Johns v. Central Sprinkler	11/19/92	5	A/C, WP
376	J. B. Habegger, Esq.	J. Fenningham, Esq.	Central Sprinkler Company	Letter re: Defense of Johns v. Central Sprinkler	9/30/92	2	A/C, WP
377	C. Schiavone	J. Fenningham, Esq.	G. Meyer	Letter with attachments re: Defense of Johns v. Central Sprinkler Company	10/20/92	32	A/C
378	J. Fenningham, Esq.	J. B. Habegger, Esq.	None	Letter re: Defense of Johns v. Central Sprinkler Corp.	9/23/92	2	A/C, WP
379	C. Schiavone	R. Eiseman	None	Telephone slip re: Johns v. Central Sprinkler	7/28/92	1	A/C
380	M. Lawless, Esq.	J. Fenningham, Esq.	Central Sprinkler Co.	Letter re: Defense of Johns v. Central Sprinkler Co.	8/27/92	1	A/C
381	J. Baker	C. Schiavone	G. Meyer, W. Pardue & R. Cullen, Esq.	Letter re: Defense counsel in Johns and Hammer cases	7/16/92	1	A/C
382	C. Schiavone	R. Cullen, Esq.	None	Letter with attachments re: Defense of Johns v. Central Sprinkler Co.	7/10/92	4	A/C
383	J.B. Habegger, Esq.	R. Cullen, Esq.	C. Schiavone	Letter re: Defense of Johns v. Central Sprinkler Co.	7/7/92	1	A/C
384	J.B. Habegger, Esq.	R. Cullen, Esq.	C. Schiavone	Letter re: Defense of Johns v. Central Sprinkler Co.	7/17/92		A/C
385	R. Cullen, Esq.	C. Schiavone	None	Fax re: Defense of Johns v. Central Sprinkler Co.	7/2/92	1	A/C
386	J. Baker	C. Schiavone	G. Meyer, W. Pardue & R. Cullen, Esq.	Letter re: Defense counsel in Johns and Hammer cases	7/16/92	1	A/C

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387	J. Baker	C. Schiavone	G. Meyer, W. Pardue & R. Cullen, Esq.	Letter re: Defense counsel in Johns and Hammer cases	7/16/92	1	A/C
388	C. Schiavone	A. Sabol	None	Hand written note re: Defense of Johns v. Central Sprinkler Co.	6/25/92	1	A/C, WP
389	W. Pardue	J. Fenningham, Esq.	R. Strong Associates	Letter re: Defense of Associated Indemnity Corporation v. Central Sprinkler Co.	5/17/88	1	A/C
390	W. Pardue	J. Fenningham, Esq.	None	Fax with attachments re: Draft letter concerning Clarion Hotel	10/31/89	3	A/C, WP
391	W. Pardue	P. Shields	None	Letter re: Burbank Housing Development matter	1/30/90	1	A/C
392	W. Pardue	R. Rubin, Esq.	None	Letter with attachments re: Defense of Sanal v. Central Sprinkler Corp.	4/10/86	38	A/C, WP
393	R. Rubin, Esq.	G. Pieczykolan	M. Csom	Letter with attachments re: Sanal Claim	12/27/85	4	A/C
394	W. Pardue	M. Csom	G. Pieczykolan, J. Hart	Letter with attachments re: Defense of Sanal claim	12/17/85	3	A/C, WP
395	W. Meyer	T. Sharbaugh, Esq.	None	Letter re: Sanal lawsuit	9/4/85	1	A/C
396	C. Schiavone	R. Cullen, Esq.	None	Letter with attachments re: Defense of Agbobu v. Central Sprinkler Co.	8/31/93	4	A/C
397	R. Cullen, Esq.	A. Salinas, Esq.	N. Duvall	Letter re: Defense of Agbobu v. Central Sprinkler	3/29/93	1	A/C
398	G. Meyer	C. Schiavone	None	Letter re: Settlement of Agbobu v. Central Sprinkler	3/17/93	1	A/C, WP
399	B. Wilson, Esq.	N. Duvall	C. Schiavone	Letter re: Status of Agbobu v. Central Sprinkler	2/11/91	1	A/C, WP

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400	R. Wilson, Esq.	R. Cullen, Esq.	Central Sprinkler Co.	Letter re: Defense of Agbobu v. Central Sprinkler Co.	2/5/93	2	A/C, WP
401	C. Schiavone	R. Cullen, Esq.	None	Fax with attachments re: Defense of Agbobu v. Central Sprinkler Co.	12/18/92	4	A/C
402	C. Schiavone	R. Cullen, Esq.	None	Fax with attachments re: Defense of Agbobu v. Central Sprinkler Co.	12/18/92	4	A/C, WP
403	A. Salinas, Esq.	R. Cullen, Esq.	C. Schiavone	Letter re: Defense of Agbobu v. Central Sprinkler	10/6/92	1	A/C
404	R. Cullen, Esq.	Wilson, Kenna & Borys	None	Billing records re: Defense of Agbobu v. Central Sprinkler	9/11/92	2	A/C, WP
405	C. Schiavone	R. Cullen, Esq.	None	Letter re: Defense of Agbobu v. Central Sprinkler	9/22/92	1	A/C
406	R. Cullen, Esq.	Wilson, Kenna & Borys	None	Billing records re: Defense of Agbobu v. Central Sprinkler	9/11/92	2	A/C, WP
407	R. Wilson, Esq.	R. Cullen, Esq.	C. Schiavone	Letter re: Defense of Agbobu v. Central Sprinkler	8/19/92	1	A/C
408	R. Cullen, Esq.	C. Schiavone	None	Letter re: Defense of Agbobu v. Central Sprinkler Co.	8/17/92	1	A/C
409	C. Schiavone	R. Cullen, Esq.	None	Letter with attachments re: Defense of Agbobu v. Central Sprinkler	8/11/92	18	A/C
410	C. Schiavone	R. Cullen, Esq.	None	Fax with attachments re: Defense of Agbobu v. Central Sprinkler	7/23/92	3	A/C
411	R. Cullen, Esq.	C. Schiavone	None	Fax with attachments re: Defense of Agbobu v. Central Sprinkler	7/16/92	5	A/C
412	B. Wilson, Esq.	N. Duvall	C. Schiavone	Letter re: Defense of Agbobu v. Central Sprinkler	7/15/92	2	A/C

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413	R. Wilson, Esq.	R. Cullen, Esq.	None	Letter re: Defense of Agbobu v. Central Sprinkler	7/19/92		A/C
414	R. Wilson, Esq.	R. Cullen, Esq.	C. Schiavone	Letter re: Defense of Agbobu v. Central Sprinkler	6/19/92	2	A/C
415	C. Schiavone	N. Duvall	None	Phone slips re: Agbobu v. Central Sprinkler	6/25/92	2	A/C
416	J. Baker	R. Cullen, Esq.	C. Schiavone	Letter re: Defense of Agbobu v. Central Sprinkler	6/19/92	1	A/C
417	R. Cullen, Esq.	C. Schiavone	None	Fax with attachments re: Agbobu matter	6/18/92	8	A/C
418	G. Meyer	J. Bisset, Esq.	None	Letter with attachments re: Settlement of Sherrelwood claim	11/26/90	4	A/C
419	W. Pardue	J. Bisset, Esq.	T. Farrel	Letter with attachment re: Defense of Sherrelwood claim	9/21/90	9	A/C
420	J. Bisset, Esq.	C. Schiavone	None	Fax with attachments re: Defense of Sherrelwood matter	5/18/90	5	A/C
421	W. Pardue	J. Bisset, Esq.	T. Farrel	Letter re: Defense of Sherrelwood matter	6/12/89	1	A/C
422	W. Pardue	J. Bisset, Esq.	None	Fax with attachments re: Sherrelwood matter	3/23/90	7	A/C
423	J. Bisset, Esq.	W. Pardue	None	Hand written note with attachments re: Defense documents in Sherrelwood matter	4/3/90	25	A/C, WP
424	W. Pardue	P. Dupont	None	Letter with attachment re: Defense of Sherrelwood matter	4/5/90	7	A/C
425	None	None	None	Complaint with hand written notes in Sherrelwood v. Central Sprinkler		7	WP

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426	W. Pardue	J. Bisset, Esq.	T. Farrel	Letter with attachments re: Defense of Sherrelwood matter	3/13/90	68	A/C
427	W. Pardue	J. Bisset, Esq.	None	Letter re: Discovery in Sherrelwood matter	3/2/90	1	A/C
428	W. Pardue	J. Bisset, Esq.	None	Telephone message slip re: Defense of Sherrelwood matter	6/13/90	1	A/C
429	T. Farrel	J. Bisset, Esq.	W. Pardue	Letter re: Defense of Sherrelwood matter	8/2/89	2	A/C
430	W. Pardue	J. Fenningham, Esq.	B. Buchanan	Letter with attachments re: Hammer Services v. Central Sprinkler	9/5/91	14	A/C
431	C. Schiavone	R. Cullen, Esq.	None	Fax with attachments re: Settlement of Great Lakes Plumbing v. Central Sprinkler	5/30/91	3	A/C
432	C. Schiavone	R. Cullen, Esq.	None	Fax with attachment re: Settlement of Great Lakes Plumbing matter		3	A/C
433	C. Schiavone	J. Fenningham, Esq.	None	Fax with attachments re: Great Lakes Plumbing matter	4/24/91	3	A/C
434	None	W. Pardue	None	Hand written notes re: Defense of Great Lakes Plumbing matter	None	2	A/C, WP
435	R. Cullen, Esq.	C. Schiavone	None	Fax with attachments re: Great Lakes Plumbing matter	4/22/91	14	A/C

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436	G.G. Meyer J.R. Buchanan M. Graham E.J. McKelvey J. Walhof W.J. Pardue G.S. Polan R. Hobbs	A.T. Sabol	None	Memorandum re: Instructions from defense counsel re: McCormick Litigation	4/9/92	1	A/C, WP
437	G.G. Meyer	A.T. Sabol	None	Memorandum re: development of defense to McCormick claims	2/4/92	6	WP
438	G. Meyer	D.J. Bradley, Esq.	None	Letter re: attorney's assessment of McCormick claims	4/9/92	3	A/C, WP
439	D. McCormick E.J. McKelvey	G.G. Meyer	None	Exhibit for preparation of defense of McCormick claims	4/5/90	2	WP
440	G. Myer, Esq.	D.J. Bradley, Esq.	None	Letter with attachments and handwritten notes re: preparation of defense response to McCormick Statement of Claim	1/10/92	288	A/C, WP
441	None	None	None	Handwritten notes of meeting re: McCormick claims	?	1	WP
442	W. Pardue	D. McCormick	S. Meyer	Letter: Exhibit for preparation of defense to McCormick claims	3/26/87	2	WP
443	D. McCormick	G. Polan	W. Pardue A. Schoenberger	Letter: Exhibit for preparation of defense to McCormick claims	8/14/87	1	WP
444	A. Sabol W. Pardue	E. McKelvey	None	Exhibit: Letter with attached correspondence from counsel for use in preparation of defense to McCormick claims	4/9/90	4	WP
445	D. McCormick	G.R. Bembridge	None	Letter from counsel re: draft contract for purchase of land	3/28/90	2	A/C, WP

A/C = Attorney/Client privilege
WP = Work Product

Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
446	None	None	None	Draft contract for sale of land with handwritten notes	1990	7	A/C, WP
447	A. Stimpson	I.S. Harrison	None	Letter from counsel re: Patent Application	11/28/86	3	A/C
448	None	None	G. Meyer W. Pardue A. Sabol J. Curran, Jr. V. Weigand R. Hobbs S. Sack	Memorandum re: claims against Central Sprinkler	9/17/91	7	A/C, WP
449	None	None	G. Meyer W. Pardue A. Sabol J. Curran, Jr. V. Weigand R. Hobbs S. Sack	Memorandum re: claims against Central Sprinkler	9/13/91	7	A/C, WP
450	R. Miller, Esq.	W. Pardue	None	Letter with attachment re: Sarano v. Central Sprinkler	10/24/79	6	A/C
451	R. Miller, Esq.	W. Pardue	None	Letter with attachment re: annual audit	11/21/79	2	A/C
452	R. Miller, Esq.	W. Pardue	None	Letter re: annual audit	2/26/80	1	A/C
453-458	R. Miller, Esq.	W. Pardue	None	Letter with (separately numbered) attachments re: draft purchase order language	3/21/80	6	A/C, WP
459	R. Miller, Esq.	W. Pardue	None	Letter re: draft purchase order language	4/8/80	1	A/C/W
460	None	T. O'Reilly, Esq.	None	Memorandum from counsel re: labor investigation	?	6	A/C, WP

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WP = Work Product

Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
461	T. O'Reilly, Esq.	C. Whitney	None	Letter with attachment re: draft labor agreement	10/29/93	26	A/C, WP
462	T. O'Reilly, Esq. G.G. Meyer A.T. Sabol J.F. McHugh	C. Whitney	W. Pardue A. Schoenberger	Memorandum with attachment re: labor negotiations	10/11/93	7	A/C, WP
463	C. Whitney	T. O'Reilly, Esq.	T. Sharbaugh, Esq.	Letter with attachments re: labor negotiations	9/8/93	3	A/C, WP
464	W. Pardue	T. O'Reilly, Esq.	None	Fax with attachment re: labor negotiations	1/14/94	2	A/C, WP
465	None	None	None	Memorandum re: labor negotiations	?	2	A/C, WP
466	None	None	None	Draft labor agreement	11/09/90	31	A/C, WP
467	None	None	None	Draft labor agreement	10/26/90	29	A/C, WP
468	None	None	None	Excerpt of draft labor agreement with handwritten notes	?	1	A/C, WP
469	W. Pardue	Pelino & Lentz	None	Memorandum with handwritten notes re: status of labor negotiations	10/12/90	4	A/C, WP
470	W. Pardue	M. Lentz, Esq.	None	Fax with attachment re: status of labor negotiations	10/12/90	5	A/C, WP
471	W. Pardue	Pelino & Lentz	None	Memorandum with handwritten notes re: status of labor negotiations	10/8/90	7	A/C, WP
472	W. Pardue	Pelino & Lentz	None	Memorandum with handwritten notes re: status of labor negotiations	10/8/90	8	A/C, WP
473	W. Pardue	Pelino & Lentz	None	Fax with attachment re: status of labor negotiations	10/12/90	6	A/C, WP

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
474	W. Pardue	M. Lentz, Esq.	None	Letter re: status of labor negotiations	3/27/90	2	A/C, WP
475-476	W. Pardue	R. Miller, Esq.	None	Letter with (separately numbered) attachment re: corporate stock	4/7/80	1	A/C
477	R. Miller, Esq.	W. Pardue	None	Letter re: lease	10/29/80	1	A/C
478	J. Rosen, Esq.	W. Pardue	None	Letter re: settlement of claims	12/12/80	1	A/C, WP
479	R. Miller, Esq.	W. Pardue	None	Letter re: Hager Hinge Co. v. Central Sprinkler	2/12/80	1	A/C, WP
480	R. Miller, Esq.	W. Pardue	None	Letter re: OSHA	5/13/81	1	A/C
481	M. Berman, Esq.	W. Pardue	None	Letter re: labor agreement	11/9/81	1	A/C
482	R. Miller, Esq.	W. Pardue	None	Letter re: settlement of claims	11/20/81	1	A/C, WP
483-485	E.C. Scofield, III., Esq.	W. Pardue	None	Letter with (separately numbered) attachments re: defense of Hager Hinge Co. v. Central Sprinkler	11/18/81	3	A/C, WP
486	T.J. Stevens, Esq.	W. Pardue	None	Letter re: sale agreement	12/30/81	1	A/C
487	E.C. Gonda, Esq.	W. Pardue	None	Letter re: patent application	4/19/83	1	A/C
488	E.C. Gonda, Esq.	W. Pardue	None	Letter re: patent application	10/25/83	3	A/C
489	E.C. Gonda, Esq.	W. Pardue	None	Letter re: patent infringement claim	10/25/83	2	A/C
490	J.C. Fenningham, Esq.	W. Pardue	None	Letter re: settlement of claims	12/13/83	1	A/C, WP
491	S. Hamilton, Esq.	W. Pardue	None	Letter re: defense of claims	11/2/88	1	A/C, WP
492	A. Nishimura, Esq.	W. Pardue	None	Letter with attachment re: Chiu v. Central Sprinkler	6/6/88	2	A/C, WP
493	W. Pardue	M. Lentz, Esq.	None	Letter with attachment re: labor negotiations	11/10/87	3	A/C, WP

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
494	W. Pardue	M. Lentz, Esq.	None	Letter with attachments re: labor negotiations	10/22/87	50	A/C, WP
495	D. Chmelko	M. Lentz, Esq.	W. Pardue	Letter re: labor negotiations	9/2/87	1	WP
496	None	None	None	Handwritten notes re: labor negotiations	?	2	WP
497	None	E. Shaller	None	Memorandum with attachments and handwritten notes re: labor negotiations	?	33	A/C, WP
498	None	None	None	Draft labor agreement with notes	?	21	A/C, WP
499	W. Pardue	M. Berman, Esq.		Letter re: labor negotiations	7/22/85	3	A/C, WP
500	None	None	None	Handwritten notes re: labor negotiations	?	3	WP
501	T. Woodward	W. Pardue	None	Letter re: settlement of claim against insurance policy	10/21/80	1	WP
502	P. De Camara	R. Miller, Esq.	C. Palmer	Letter with attachment re: patent	4/3/78	2	A/C, WP
503	P. Camara	R. Miller, Esq.	W. Meyer C. Palmer	Letter with attachment re: patent	5/22/78	3	A/C, WP
504	W. Pardue	R. Miller, Esq.	None	Letter with attachments re: purchase order language	5/1/80	13	A/C, WP
505	Central Sprinkler	Noyes Services	None	Memorandum re: claims against product liability insurance policy	11/10/87	22	WP
506	Central Sprinkler	Noyes Services	None	Letter with attached memoranda re: claims against insurance policies	7/31/85	81	WP

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507	G. Meyer S. Meyer J. Golinveaux W. Pardue A. Sabol K. Dolan D. Yuhas A. Post K. Bilo	C. Schiavone J.C. Fenningham, Esq.	None	Memorandum with attachments re: Hart v. Central Sprinkler	10/28/97	17	A/C, WP
508	Central Sprinkler	Morgan, Lewis & Bockius and Corr, Stevens & Fenningham	None	Memorandum re: Omega Sprinkler litigation document production	3/19/98	9	A/C, WP
509	None	J.C. Fenningham, Esq.	None	Memorandum re: product liability claims	3/21/86	17	A/C, WP
510	G. Meyer	J.C. Fenningham, Esq.	None	Draft letter re: Palmer House claim	2/25/86	3	A/C, WP
511	R. Hobbs	J.C. Fenningham, Esq.	None	Letter re: deposition	5/1/97	6	A/C, WP
512	C. Schiavone R. Hobbs	J.C. Fenningham, Esq.	None	Letter with attachment re: deposition	3/5/97	6	A/C, WP
513	W. Custer, Esq.	J.C. Fenningham, Esq.	Central Sprinkler Co.	Letter re: deposition	3/4/97	1	A/C, WP
514	F. Mazzeo, Esq.	C. Schiavone	G. Meyer R. Hobbs J.C. Fenningham, Esq.	Letter with attachments re: Fort Wayne Cross Roads	9/10/97	10	A/C, WP
515	C. Schiavone R. Hobbs	J.C. Fenningham, Esq.	None	Letter re: Mann v. Central Sprinkler	9/18/95	2	A/C, WP
516	J.C. Fenningham, Esq.	K. Yadlosky	T. Mahoney, Esq. R. Mitchell, Esq.	Letter re: Mann v. Central Sprinkler	9/15/95	1	A/C, WP

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
517	G. Meyer S. Meyer A. Sabol B. Pardue J. Golinveaux G. Polan D. Rice R. Hobbs D. Yuhas K. Dolan A. Post K. Bilo	C. Schiavone J.C. Fenningham, Esq.	None	Memorandum re: Hart v. Central Sprinkler	10/31/97	1	A/C, WP
518	R. Hobbs	C. Schiavone J.C. Fenningham, Esq.	None	Memorandum re: Hart v. Central Sprinkler	10/28/97	2	A/C, WP
519	G.G. Meyer	R. Hobbs	J. Golinveaux G. Polan E. Sauers	Memorandum with attached letter from counsel re: trademark application advice from counsel	3/25/94	4	A/C, WP
520	J. Meadway, Esq.	G. Meyer	None	Fax with attachment re: trademark case	3/28/94	3	A/C, WP
521	C. Schiavone	F. Mazzeo, Esq.	None	Mailer re: Autry claim	?	1	A/C
522	R. Hobbs	F. Mazzeo, Esq.	None	Fax with attached draft letter re: Autry claim	2/19/98	5	A/C, WP
523	R. Hobbs	F. Mazzeo, Esq.	None	Letter with attachments re: Autry claim	2/16/98	5	A/C, WP
524	R. Hobbs	F. Mazzeo, Esq.	None	Fax with attachment re: expert	2/13/98	4	A/C, WP
525	R. Hobbs	F. Mazzeo, Esq.	None	Fax with attachment re: expert	2/12/98	22	A/C, WP
526	R. Hobbs	T.P. Stevens, Esq.	None	Case memorandum re: Autry claim	7/7/97	5	A/C, WP
527	R. Hobbs	F. Mazzeo, Esq.	None	Fax with attachment re: expert opinion in Autry claim	2/16/98	2	A/C, WP

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528	R. Hobbs R. Cameron A. Dracos	C. Schiavone	J.C. Fenningham, Esq.	Memorandum re: instructions from counsel re: meeting	10/31/97	1	A/C, WP
529	None	J.C. Fenningham, Esq.	None	Case file re: Mel's Marina	10/09/97	1	A/C, WP
530	None	J.C. Fenningham, Esq.	None	Case file re: Mel's Marina	10/09/97	1	A/C, WP
531	None	J.C. Fenningham, Esq.	None	Case file re: Mel's Marina	10/09/97	1	A/C, WP
532	None	J.C. Fenningham, Esq.	None	Case file re: Mel's Marina	10/09/97	1	A/C, WP
533	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	4/8/98	1	WP
534	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	4/8/98	1	WP
535	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	4/8/98	2	WP
536	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	4/8/98	1	WP
537	File	J.C. Fenningham, Esq.	None	Memorandum re: Mel's Marina	3/6/98	2	WP
538	R. Estes	T.P. Stevens, Esq.	Central Sprinkler Co. J.C. Fenningham, Esq.	Letter re: defense of potential claim at Mel's Marina	1/26/98	2	A/C, WP
539	T.P. Stevens, Esq.	R. Estes	None	Fax with attachment re: defense of potential claim at Mel's Marina	1/20/97	7	A/C, WP
540	J.C. Fenningham, Esq.	R. Estes	None	Telephone message slip and attorney notes re: Mel's Marina	1/19/98	3	A/C, WP
541	J.C. Fenningham, Esq.	R. Estes	None	Letter re: defense of potential claim at Mel's Marina	1/20/98	6	A/C, WP
542	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	1/13/98	1	WP
543	F. Bradley	T.P Stevens, Esq.	None	Fax re: Mel's Marina	1/16/98	1	WP
544	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	1/14/98	1	WP

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
545	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	1/14/98	1	WP
546	S.L. Seltzer	R. Sanders	J.C. Fenningham, Esq. K. Dolan	Letter with attachment re: Mel's Marina	1/14/98	16	A/C, WP
547	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	12/15/97	2	WP
548	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	12/12/97	1	WP
549	G.G. Meyer	T.P. Stevens, Esq.	None	Letter with attachments re: Mel's Marina	12/29/97	43	A/C, WP
550	J.C. Fenningham, Esq. T.P. Stevens, Esq.	K. Dolan	None	Memorandum re: Mel's Marina	12/4/97	19	A/C, WP
551	J.C. Fenningham, Esq. T.P. Stevens, Esq.	K. Dolan	None	Memorandum re: Mel's Marina	12/4/97	19	A/C, WP
552	C. Schiavone	T.P. Stevens, Esq.	None	Letter re: Mel's Marina	12/10/97	2	A/C, WP
553	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	12/4/97	1	WP
554	C. Schiavone	T.P. Stevens, Esq.	None	Letter re: Mel's Marina	12/3/97	1	A/C, WP
555	C. Schiavone	T.P. Stevens, Esq.	None	Letter re: Mel's Marina	12/3/97	3	A/C, WP
556	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	12/4/97	1	WP
557	F. Bradley	T.P. Stevens, Esq.	Central Sprinkler	Letter to expert re: Mel's Marina	12/3/97	5	A/C, WP
558	F. Bradley	T.P. Stevens, Esq.	Central Sprinkler	Fax to expert re: Mel's Marina	12/3/97	2	A/C, WP
559	C. Schiavone	T.P. Stevens, Esq.	None	Fax re: Mel's Marina	12/3/97	2	A/C, WP
560	State Fire Marshall	T.P. Stevens, Esq.	Central Sprinkler J.C. Fenningham, Esq.	Letter with attachment re: Mel's Marina	12/3/97	4	WP
561	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	12/2/97	1	WP

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562	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	12/2/97	1	WP
563	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	12/2/97	1	WP
564	G.G. Meyer	J.C. Fenningham, Esq.	None	Letter re: Mel's Marina	11/26/97	2	A/C
565	C. Schiavone	T.P. Stevens, Esq.	None	Fax with attachment re: Mel's Marina	11/25/97	9	A/C, WP
566	T.P. Stevens, Esq.	F. Bradley	None	Telephone message slip with attached notes re: Mel's Marina	11/24/97	4	A/C, WP
567	C. Schiavone	T.P. Stevens, Esq.	J.C. Fenningham, Esq.	Letter re: Mel's Marina	11/24/97	2	A/C, WP
568	T.P. Stevens, Esq.	D. Hozinec	None	Letter re: Mel's Marina	11/17/97	1	WP
569	F. Bradley	K. Dolan	T. Stevens C. Schiavone	Letter re: Mel's Marina	11/13/97	1	A/C, WP
570	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/31/97	1	WP
571	B. Kerns	T.P. Stevens, Esq.	None	Fax with attachment re: Mel's Marina	10/28/97	2	WP
572	K. Dolan	T.P. Stevens, Esq.	J.C. Fenningham, Esq.	Letter re: Mel's Marina	10/27/97	4	A/C, WP
573	J.C. Fenningham, Esq.	T.P. Stevens, Esq.	None	Memorandum re: Mel's Marina	10/27/97	8	A/C, WP
574-575	J.C. Fenningham, Esq.	T.P. Stevens, Esq.	None	Memorandum with (separately numbered) attachment re: Mel's Marina	10/27/97	5	A/C, WP
576	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/24/97	3	WP
577	S. Seltzer	J.C. Fenningham, Esq.	C. Schiavone	Letter with attachment re: Mel's Marina	10/23/97	9	A/C, WP
578	S. Seltzer	J.C. Fenningham, Esq.	None	Fax re: Mel's Marina	10/23/97	2	A/C, WP
579	C. Schiavone	J.C. Fenningham, Esq.	None	Fax re: Mel's Marina	10/23/97	2	A/C, WP

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580	J.C. Fenningham, Esq.	S. Seltzer	None	Telephone message slip with attorney notes re: Mel's Marina	10/21/97	2	A/C, WP
581	J.C. Fenningham, Esq.	T.P. Stevens, Esq.	None	Memorandum re: Mel's Marina	10/21/97	7	WP
582	J.C. Fenningham, Esq.	T.P. Stevens, Esq.	None	Memorandum re: Mel's Marina	10/21/97	7	WP
583	J.C. Fenningham, Esq.	T.P. Stevens, Esq.	None	Memorandum re: Mel's Marina	10/21/97	7	WP
584	T.P. Stevens, Esq.	J.C. Fenningham, Esq.	None	Memorandum re: Mel's Marina	10/21/97	1	WP
585	K. Dolan	T.P. Stevens, Esq.	None	Fax re: Mel's Marina	10/17/97	2	A/C, WP
586	T.P. Stevens, Esq.	E. Jeager	None	Telephone message slip with attorney notes re: Mel's Marina	10/17/97	2	WP
587	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/17/97	1	WP
588	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/17/97	1	WP
589	T.P. Stevens, Esq.	Central Sprinkler Engineering	None	Fax re: Mel's Marina	10/16/97	2	A/C
590	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/16/97	2	WP
591	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/15/97	4	WP
592	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/15/97	1	WP
593	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/15/97	1	WP
594	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/15/97	1	WP
595	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/15/97	2	WP
596	R. Hobbs	R. Sanders	None	Fax re: Mel's Marina	10/15/97	1	WP
597	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/15/97	1	WP
598	R. Hobbs	J.C. Fenningham, Esq.	None	Fax with attachment re: Mel's Marina	10/14/97	6	A/C, WP

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
599	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/13/97	2	WP
600	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/13/97	1	WP
601	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/13/97	2	WP
602	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/13/97	1	WP
603	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/13/97	1	WP
604	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/13/97	1	WP
605	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/9/97	1	WP
606	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/9/97	2	WP
607	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/7/97	1	WP
608	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/7/97	1	WP
609	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/6/97	1	WP
610	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/6/97	1	WP
611	None	None	None	Corr, Stevens case file re: Mel's Marina	?	1	WP
612	J.C. Fenningham, Esq.	R. Sanders	None	Telephone message slip re: Mel's Marina	10/13/97	1	A/C, WP
613	J.C. Fenningham, Esq.	R. Sanders	None	Telephone message slip re: Mel's Marina	10/13/97	1	A/C, WP
614	J.C. Fenningham, Esq.	M. Churchill	None	Note with attachment re: Mel's Marina	?	4	A/C
615	None	None	None	Corr, Stevens case file re: Mel's Marina	?	1	WP
616	None	None	None	Corr, Stevens case file re: Mel's Marina	?	1	WP
617	None	T.P. Stevens, Esq.	None	Draft Memorandum re: Mel's Marina	10/16/97	19	WP
618	None	T.P. Stevens, Esq.	None	Draft Memorandum re: Mel's Marina	10/16/97	19	WP

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619	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/20/97	4	WP
620	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/21/97	1	WP
621	None	None	None	Corr, Stevens case file re: Mel's Marina	?	1	WP
622	K. Sanzo, Esq.	C. Schiavone	T. Stevens, Esq.	Letter re: Mel's Marina	12/2/97	1	A/C
623	F. Bradley	K. Dolan	C. Schiavone T. Stevens, Esq.	Letter re: Mel's Marina	11/13/97	1	WP
624	None	K. Dolan	None	Notes re: Mel's Marina	11/11/97	2	A/C, WP
625	B. Kerns	K. Dolan	None	Fax with attachment re: Mel's Marina	10/24/97	4	WP
626	B. Kerns	Interested Parties	None	Letter re: Mel's Marina	10/24/97	3	WP
627	K. Dolan	T.P. Stevens, Esq.	J.C. Fenningham, Esq.	Letter re: Mel's Marina	10/27/97	2	A/C, WP
628	K. Dolan	T.P. Stevens, Esq.	None	Fax with attachment re: Mel's Marina	10/27/97	5	A/C, WP
629	K. Dolan	T.P. Stevens, Esq.	None	Fax with attachment re: Mel's Marina	10/7/97	19	A/C, WP
630	None	K. Dolan	None	Memorandum re: Mel's Marina prepared for counsel	10/16/97	18	A/C, WP
631	None	K. Dolan	None	Notes prepared for counsel re: Mel's Marina	?	2	A/C, WP
632	R. Hobbs	J.C. Fenningham, Esq.	None	Notes of voicemail from counsel re: Mel's Marina	10/13/97	7	A/C, WP
633	R. Hobbs	J.C. Fenningham, Esq.	None	Fax re: Mel's Marina	10/14/97	3	A/C, WP
634	None	None	None	Corr, Stevens case file re: Mel's Marina	?	1	WP
635	None	None	None	Corr, Stevens case file re: Mel's Marina	?	1	WP

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
636	None	T.P. Stevens, Esq.	None	Fire Marshall's Report with attorney notes	12/8/97	14	WP
637	None	T.P. Stevens, Esq.	None	Fire Marshall's Report with attorney notes	12/8/97	14	WP
638	None	None	None	Corr, Stevens case file re: Mel's Marina	?	1	WP
639	J.C. Fenningham, Esq.	F. Bradley	None	Memorandum re: Mel's Marina	12/15/97	7	WP
640	J.C. Fenningham, Esq.	F. Bradley	None	Memorandum re: Mel's Marina	12/15/97	7	WP
641	J.C. Fenningham, Esq.	F. Bradley	None	Memorandum re: Mel's Marina	12/15/97	3	WP
642	J.C. Fenningham, Esq.	F. Bradley	None	Memorandum re: Mel's Marina	12/15/97	3	WP
643	J.C. Fenningham, Esq.	F. Bradley	None	Memorandum re: Mel's Marina	12/15/97	4	WP
644	J.C. Fenningham, Esq.	F. Bradley	None	Memorandum re: Mel's Marina	12/15/97	4	WP
645	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	3/20/98	1	WP
646	J.C. Fenningham, Esq. T.P. Stevens, Esq.	F. Bradley	None	Fax with attached memorandum re: Mel's Marina	3/13/98	7	WP
647	T.P. Stevens, Esq.	F. Bradley	None	Fax with attached memorandum re: Mel's Marina	3/16/98	8	WP
648	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	12/22/97	1	WP
649	File	F. Bradley	None	Memorandum re: Mel's Marina	12/15/97	7	WP
650	File	F. Bradley	None	Memorandum re: Mel's Marina	12/15/97	7	WP
651	File	F. Bradley	None	Memorandum re: Mel's Marina	12/15/97	4	WP
652	File	F. Bradley	None	Memorandum re: Mel's Marina	12/15/97	4	WP
653	File	F. Bradley	None	Memorandum re: Mel's Marina	12/15/97	3	WP
654	File	F. Bradley	None	Memorandum re: Mel's Marina	12/15/97	3	WP

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
655	None	T.P. Stevens, Esq.	None	Attorney note with attached memorandum re: Mel's Marina	12/22/97	2	WP
656	J.C. Fenningham, Esq.	J. Foley	None	Memorandum re: Mel's Marina	1/20/98	3	WP
657	None	T.P. Stevens, Esq.	None	Attorney note with attached memorandum re: Mel's Marina	12/22/97	2	WP
658	None	None	None	Corr, Stevens case file re: Mel's Marina	?	1	WP
659	None	None	None	Corr, Stevens case file re: Mel's Marina	?	1	WP
660	J.C. Fenningham, Esq.	T.P. Stevens, Esq.	None	Memorandum re: Mel's Marina	10/21/97	9	WP
661	None	T.P. Stevens, Esq.	None	Attorney note with attached memorandum re: Mel's Marina	11/24/97	4	WP
662	None	None	None	Investigator's materials re: Mel's Marina	10/3/97	23	WP
663	None	None	None	Investigator's materials re: Mel's Marina	11/5/97	10	WP
664	T.P. Stevens, Esq.	F. Bradley	None	Memorandum re: Mel's Marina	12/4/97	1	WP
665	None	None	None	Investigator's materials re: Mel's Marina	10/3/97	18	WP
666	T.P. Stevens, Esq.	K. Pierce	S. Brunette, Esq. H. Glover	Letter and investigator's materials re: Mel's Marina	2/3/98	12	WP
667	J.C. Fenningham, Esq.	Fred Bradley	None	Memorandum and materials re: Mel's Marina	4/2/98	104	WP
668	None	None	None	Corr, Stevens case file re: Mel's Marina	?	1	WP
669	None	None	None	Corr, Stevens case file re: Mel's Marina	?	1	WP
670	None	None	None	Corr, Stevens case file re: Mel's Marina	?	1	WP

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
671	M. Litman, Esq.	P. De Camara	None	Letter re: patent	8/12/77	1	A/C
672	R. Miller, Esq.	P. De Camara	None	Letter re: patent	3/1/78	1	A/C
673	Central Sprinkler	S.C. Eggiman, Esq.	None	Materials re: Fashion Group claim	?	1	A/C
674	S.C. Eggiman, Esq.	W. Pardue	None	Letter re: Fashion Group claim	?	1	A/C
675	W. Pardue	S.C. Eggiman, Esq.	None	Letter re: Fashion Group Claim	8/14/79	1	A/C
676	W. Pardue	S.C. Eggiman, Esq.	None	Letter re: Fashion Group Claim	7/11/79	17	A/C
677	W. Pardue	B. Molhan	None	Letter re: Fashion Group Claim	4/16/79	1	A/C
678	S.C. Eggiman, Esq.	J.R. Anderson	None	Letter re: Fashion Group claim	4/9/79	6	A/C
679	W. Pardue	S.C. Eggiman, Esq.	None	Letter re: Fashion Group Claim	4/13/79	3	A/C
680	W. Pardue	S.C. Eggiman, Esq.	None	Letter re: Fashion Group Claim	4/30/79	1	A/C
681	W. Pardue	S.C. Eggiman, Esq.	None	Letter re: Fashion Group Claim	3/22/79	1	A/C
682	W. Pardue	S.C. Eggiman, Esq.	None	Letter re: Fashion Group Claim	10/4/78	5	A/C
683	S.C. Eggiman, Esq.	W. Pardue	None	Letter re: Fashion Group claim	5/23/79	7	A/C
684	S.C. Eggiman, Esq.	W. Pardue	None	Letter re: Fashion Group claim	5/23/79	7	A/C
685	W. Pardue	S.C. Eggiman, Esq.	None	Letter re: Fashion Group Claim	5/17/79	1	A/C
686	W. Pardue	S.C. Eggiman, Esq.	J.F. Kenney	Letter re: Fashion Group Claim	11/30/78	1	A/C
687	W.D. Flaskamp, Esq.	D.S. Bennett, Jr.	W. Pardue	Letter re: claim against Central Sprinkler	6/8/78	1	A/C
688	W. Pardue	B. Hepler	None	Letter re: Fashion Group claim	5/2/78	1	A/C
689	W. Pardue	B. Hepler	None	Letter re: Fashion Group claim	5/2/78	1	A/C
690	W.D. Flaskamp, Esq.	J. Rose	J. Kenny	Letter re: Fashion Group claim	4/17/78	1	A/C

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
691	W. Pardue	R. Miller, Esq.	None	Letter re: Fashion Group claim	4/24/78	2	A/C
692	C. Noel, Esq.	T. McGrath, Esq.	W. Pardue W.D. Flaskamp	Letter re: Fashion Group claim	4/26/78	2	WP
693	R. Miller, Esq.	W. Pardue	P. De Camara	Letter re: Fashion Group claim	4/12/78	1	A/C
694	A. Sabol	T. DeVita, Esq.	None	Fax with attachment re: financial statement	3/7/95	9	A/C
695	J. Link	G. Pelose, Esq.	T. Sharbaugh, Esq.	Fax re: SEC filing	4/1/96	1	A/C
696	J.C. Fenningham, Esq.	R. Hobbs	B. Bandura C. Schiavone	Letter re: Massingale v. Central Sprinkler	4/2/97	1	A/C
697	J.C. Fenningham, Esq.	R. Hobbs	None	Letter re: Massingale v. Central Sprinkler	4/2/97	1	A/C
698	J.C. Fenningham, Esq.	R. Hobbs	None	Memorandum re: approval of draft language	6/6/96	1	A/C
699	J.C. Fenningham, Esq.	R. Hobbs	None	Memorandum re: approval of draft language	6/6/96	1	A/C
700	J.C. Fenningham, Esq.	R. Hobbs	None	Memorandum re: approval of draft language	5/31/96	1	A/C
701	Central Sprinkler	Morgan, Lewis & Bockius	None	Fax with attachments re: financial statement	3/7/95	5	A/C
702	A. Sabol	G. Pelose, Esq.	None	Fax with attachments re: financial statement	6/11/97	12	A/C
703	J. Link	G. Pelose, Esq.	None	Fax with attachments re: financial statement	6/8/97	2	A/C
704	G. Pelose, Esq.	J. Link	None	Fax re: financial statement	6/6/97	2	A/C

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
705	Central Sprinkler	Morgan, Lewis & Bockius	None	Fax with attachments re: financial statement	3/7/95	2	A/C
706	Central Sprinkler	Morgan, Lewis & Bockius	None	Fax with attachments re: financial statement	3/7/95	2	A/C
707	A. Sabol	G. Pelose, Esq.	None	Fax with attachments re: financial statement	6/11/97	19	A/C
708	A. Sabol	G. Pelose, Esq.	None	Fax with attachments re: financial statement	3/13/97	17	A/C
709	A. Sabol	J. Mirage, Esq.	None	Fax with attachment re: financial statement	1/26/98	21	A/C

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Privilege Log of Central Sprinkler Corporation and Central Sprinkler Company

Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
1	M. Fries	M. Fries	None	Internal memorandum re: Omega heads at VA medical centers, testing of same	3/1/96	4	WP
2	C. Schiavone	R.C. Hobbs	N.A. Hollahan G.G. Meyer W.J. Pardue G.S. Polan	Memorandum re: Omega litigation, prepared at request of counsel	6/24/92	2	A/C, WP
3	R. Cullen, Esq.	C. Schiavone	Bill Pardue Rich Hobbs	Letter re: Omega O-rings litigation	5/20/92	3	A/C
4	J. Jamieson, Esq.	G. Polan	None	Letter re: U.S. Patent		2	A/C
5	G. Meyer	M. Abbott, Esq.	None	Letter re: U.S. Patent	12/23/85	2	A/C
6	G. Meyer	G. Lavorgna, Esq.	None	Letter re: Patent assignment	10/25/85	3	A/C
7	G. Lavorgna, Esq.	G. Meyer	G. Pieczykolan	Letter re: Patent application	9/4/85	3	A/C
8	G. Meyer	G. Lavorgna, Esq.	G. Pieczykolan	Letter re: Patent application	8/30/85	1	A/C
9	G. Lavorgna, Esq.	G. Meyer	G. Pieczykolan	Letter re: Patent application	6/24/85	1	A/C
10	G. Meyer	G. Lavorgna, Esq.	G. Pieczykolan	Letter re: U.S. Patent	5/23/85	1	A/C
11	G. Lavorgna, Esq.	G. Meyer	G. Pieczykolan	Letter re: U.S. Patent application	4/3/85	1	A/C
12	G. Meyer	G. Lavorgna, Esq.	G. Pieczykolan	Letter re: U.S. Patent application	3/26/85	1	A/C
13	W. Pardue	E. Gonda, Esq.	None	Letter re: U.S. Patent application	6/13/84	1	A/C
14	G. Pieczykolan	Z. Woebensmith, Esq.	None	Letter re: Patent	2/18/83	2	A/C
15	Z. Woebensmith, Esq.	G. Pieczykolan	None	Letter re: Patent application	1/26/83	3	A/C
16	G. Pieczykolan	Z. Woebensmith, Esq.	None	Application for Letters Patent	1/18/83	1	A/C

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6/08/98

Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
17	Z. Woebensmith, Esq.	G. Pieczykolan	None	Letter re: automatic on-off sprinkler	12/30/82	1	A/C
18	G. Pieczykolan	Z. Woebensmith, Esq.	None	Letter re: automatic on-off sprinkler	12/17/82	1	A/C
19	Z. Woebensmith, Esq.	G. Pieczykolan	None	Letter re: automatic on-off sprinkler	12/17/82	1	A/C
20	Z. Woebensmith, Esq.	G. Pieczykolan	None	Letter re: automatic on-off sprinkler head application papers	11/30/82	21	A/C
21	G. Pieczykolan	Z. Woebensmith, Esq.	None	Letter re: automatic on-off sprinkler head	11/18/82	4	A/C
22	G. Meyer	G. Lavorgna, Esq.	G. Pieczykolan	Letter re: Patent application	6/18/85	4	A/C
23	G. Pieczykolan	Z. Woebensmith, Esq.	None	Letter re: automatic on-off sprinkler head	11/15/82	1	A/C
24	Z. Woebensmith, Esq.	G. Pieczykolan	None	Letter re: on-off sprinkler additions and refinements	10/20/82	2	A/C
25	W. Pardue	J. Fenningham, Esq.	None	Letter re: La Maconnerie Homeowners Association	11/2/88	1	A/C
26	W. Pardue	J. Fenningham, Esq.	None	Letter re: La Maconnerie Homeowners Association	9/9/88	1	A/C
27	W. Pardue	J. Fenningham, Esq.	None	Letter re: La Maconnerie Homeowners Association	7/18/88	1	A/C
28	G. Meyer W. Pardue B. Buchanan	J. Fenningham, Esq.	None	Faxed letters re: Hammer v. Central Sprinkler Corp.	11/2/90	11	A/C
29	W. Pardue	J. Fenningham, Esq.	None	Letter and attachments re: La Maconerie Homeowners Association	7/18/88	13	A/C
30	W. Pardue	C. Printon, Legal Assistant	None	Letter re: Minneapolis Club v. Central Sprinkler Corporation with handwritten notations	7/5/89	1	WP

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
31	W. Pardue	C. Printon, Legal Assistant	S. Richter, Esq.	Letter re: Minneapolis Club v. Central Sprinkler Corporation	7/2/89	1	A/C
32	C. Schiavone	F. Mazzeo, Esq.	None	Fax with draft of Appendix re: Embarcadero Center	9/30/97	2	A/C, WP
33	G. Meyer	K. Hamel, Esq.	None	Fax and attachments re: Senju America Inc. v. Central Sprinkler Corporation		22	A/C, WP
34	C. Schiavone	F. Mazzeo, Esq.	None	Fax and attachments re: Embarcadero Center		3	A/C, WP
35	J. Fenningham, Esq. C. Schiavone	F. Mazzeo, Esq.	None	Memo re: Embarcadero contract	8/29/97	6	A/C, WP
36	C. Schiavone	F. Mazzeo, Esq.	None	Fax re: Embarcadero Centers	10/3/97	3	A/C, WP
37	Carmine	Frank (Mazzeo, Esq.)	None	Blind PS re: contracts	?	1	A/C
38	C. Schiavone	F. Mazzeo, Esq.	None	Memorandum re: Embarcadero Contract	9/02/97	20	A/C, WP
39	C. Schiavone	G. Dempster, Esq.	None	Faxed letter re: Embarcadero Contract	7/11/97	3	A/C, WP
40	G. Meyer	G. Dempster, Esq.	C. Schiavone	Embarcadero Contract	7/18/97	2	A/C, WP
41	C. Schiavone	G. Dempster, Esq.	None	Fax and attachments re: Embarcadero Contract	7/11/97	22	A/C, WP
42	C. Schiavone	G. Dempster, Esq.	None	Letter and attachments re: Embarcadero contract	5/21/97	5	A/C, WP
43	V. Same	G. Dempster, Esq.	None	Letter in draft re: Embarcadero Installer contract	8/04/97	10	A/C, WP
44	C. Schiavone	J. Fenningham, Esq.	None	Fax re: Installer Agreement	1/27/97	7	A/C, WP
45	C. Schiavone	J. Fenningham, Esq.	None	Letter re: Shaw v. Central Sprinkler Corporation	5/29/96	4	A/C, WP

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
46	J. Fenningham, Esq.	C. Schiavone	None	Fax and attachments re: Shaw v. Central Sprinkler Corporation	4/02/96	32	A/C
47	C. Schiavone	J. Fenningham, Esq.	None	Fax and attachments re: contract examination of Omega Sprinklers	6/07/96	25	A/C, WP
48	J. Fenningham, Esq.	C. Schiavone	None	Fax re: Draft letter concerning Omega Sprinkler Change Out	4/11/96	3	A/C
49	C. Schiavone	J. Fenningham, Esq.	None	Fax re: Omega Sprinkler Testing and Change out	4/09/96	3	A/C
50	K. Bell	C. Schiavone	G. Meyer J. Golinveaux K. Dolan J. Fenningham, Esq.	Letter re: alleged defects in EPDM O-Rings	9/24/97	1	A/C, WP
51	J. McHugh	G. Dempster, Esq.	W. Pardue J. Fenningham, Esq.	Letter re: Qualicast Manufacturing	11/21/95	3	A/C, WP
52	C. Sellers, C. Daymon	M. Fries	K. Dolan C. Schiavone	Confidential memorandum re: testing, engineering reports and Fairfax County order	10/13/97	1	A/C, WP
53	J. Fenningham, Esq.	R. Campbell	None	Fax and memo re: preliminary test report on effect of jig direction	9/09/97	5	A/C
54	C. Schiavone	J. Fenningham, Esq.	None	Central Sprinkler Installer Agreement (Omega Change outs) with handwritten edits, as discussed with counsel	?	3	A/C
55	C. Schiavone	J. Fenningham, Esq.	None	Central Sprinkler Installer Agreement (Omega Change outs) with handwritten edits and markups, as discussed with counsel	?	6	A/C

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
56	D. Eglsaer	C. Schiavone	J. Fenningham, Esq. A. Post V. Same	Letter re: waiver of subrogation, hold harmless and indemnification agreement re: Metcalfe Building matter	7/08/97	2	A/C
57	C. Schiavone	F. Mazzeo, Esq.	None	Letter re: Charlotte Fire Department Report	7/08/97	2	A/C
58	D. Baskerville	J. Fenningham, Esq.	D. Meyer C. Schiavone	Letter re: information regarding Omega Sprinklers	7/10/97	4	A/C, WP
59	D. Bobzien, Esq.	J. Fenningham, Esq.	G. Meyer J. Golinveaux C. Schiavone A. Stephenson, Esq. K. Sanzo, Esq. J. O'Neill G. Babcock	Letter re: Omega review	6/18/97	4	A/C, WP
60	D. Eglsaer	C. Schiavone	G. Meyer J. Fenningham, Esq. A. Post	Letter re: Ralph Metcalf Federal Building matter, waiver of subrogation and indemnification	6/02/97	3	A/C, WP
61	W. Dowling, Esq.	C. Schiavone	G. Meyer A. Post J. Fenningham, Esq.	Letter re: Omega Sprinklers in Monroe Community Hospital	5/19/97	5	A/C, WP
62	T. Strange	C. Schiavone	G. Meyer A. Post E. Weigand A. Hoff J. Fenningham, Esq	Letter re: telephone conversation regarding Omega Sprinklers, investigation and testing	5/19/97	2	A/C, WP
63	J. Hart	C. Schiavone	G. Meyer J. Fenningham, Esq. V. Same	Letter re: Central Sprinkler work crews and discussions with corporate counsel regarding work access	5/15/97	6	A/C, WP

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64	C. Schiavone	E. Budnick	None	Fax re: expert support for pending litigation and discussion with counsel regarding same	2/05/97	2	A/C, WP
65	C. Schiavone	C. Schiavone	None	Spreadsheet re: insurance reserve/products liability claims	1/13/97	1	WP
66	D. Namyst	C. Schiavone	G. Meyer A. Post K. Bilo L. Wambold J. Fenningham, Esq.	Letter re: Omega Products at Intel Corporation, cooperative solution, and acceptance of liability	1/09/97	2	A/C, WP
67	Building Owners	K. Bilo	None	Draft letter with written edits and markups re: Omega Sprinklers, company's position regarding liability	10/28/96	9	WP
68	G. Meyer C. Schiavone	J. Fenningham, Esq.	None	Fax and draft letter with written edits and markups re: Omega Sprinklers and Steel Pipe Systems	4/17/96	2	A/C, WP
69	C. Schiavone	J. Fenningham, Esq.	None	Fax and attached chart re: Omega matters	7/15/97	7	A/C, WP
70	Zone Managers Regional Sales Managers	C. Schiavone	G. Meyer B. Buchanan J. Golinveaux M. Thomas D. Rice K. Maughan J. Brunetti V. Sundseth J. Fenningham, Esq.	Memorandum re: Omega Sprinkler field questions, testing and activation, as drafted by counsel for internal use	4/01/96	1	A/C, WP
71	G. Golinveaux	J. Fenningham, Esq.	None	Fax re: Allied Signal/Murray Cappers	6/05/96	3	A/C, WP

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72	G. Meyers C. Schiavone J. Fenningham, Esq.	K. Sanzo, Esq.	None	Fax and attached draft of letter to CPSC	7/21/97	9	A/C, WP
73	J. Fenningham, Esq.	C. Schiavone	File	Letter re: Omega building contracts	12/19/96	1	A/C, WP
74	C. Schiavone	J. Fenningham, Esq.	None	Fax and letter re: Omega Sprinklers	12/03/96	2	A/C, WP
75	C. Schiavone	G. Dempster, Esq.	None	Fax re: First Interstate Tower replacement agreement	6/05/97	6	A/C, WP
76	C. Schiavone	G. Dempster, Esq.	None	Letter re: First Interstate Tower replacement agreement	6/09/97	6	A/C, WP
77	Carmine	J. Fenningham, Esq.	None	Letter re: Pacific Freeholds	8/05/97	1	A/C, WP
78	C. Schiavone	G. Dempster, Esq.	None	Letter re: CSC/Great Lakes	10/31/96	1	A/C, WP
79	C. Schiavone	G. Dempster, Esq.	None	Fax and attached letter re: CSC/Great Lakes	10/28/96	6	A/C, WP
80	C. Schiavone	G. Dempster, Esq.	None	Fax and attached letter re: CSC/Great Lakes	10/29/96	15	A/C, WP
81	C. Schiavone	G. Dempster, Esq.	None	Letter re: CSC/Great Lakes installer agreement	10/24/96	2	A/C, WP
82	C. Schiavone	G. Dempster, Esq.	None	Letter re: CSC/Great Lakes installer agreement	10/15/96	2	A/C, WP
83	C. Schiavone	J. Fenningham, Esq.	None	Letter re: Massingale v. Central Sprinkler	10/22/96	1	A/C, WP
84	J. Fenningham, Esq.	Carmine	None	Fax and attached letter re: replacement of sprinkler heads	10/10/96	9	A/C, WP
85	C. Schiavone	J. Fenningham, Esq.	None	Fax re: CSC/Omega Sprinklers	8/27/96	1	A/C, WP

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86	C. Schiavone	J. Fenningham, Esq.	None	Fax and letter re: draft of Hotel Nikko letter	4/19/96	3	A/C, WP
87	K. Faulstich	C. Schiavone	G. Meyer A. Post J. Fenningham, Esq.	Draft of letter re: replacement of sprinklers at VA Medical Centers, with handwritten markups, as provided by counsel	8/27/96	4	A/C, WP
88	B. Pardue J. Kerin, Jr. A. Post K. Bilo	C. Schiavone	G. Meyer	Memorandum re: installer agreement and attached installer agreement as prepared with J. Fenningham, Esq.	9/16/96	7	A/C, WP
89	G. Meyer	J. Fenningham, Esq.	None	Faxed markup of draft letter re: Marriott	8/16/96	9	A/C, WP
90	C. Schiavone	J. Fenningham, Esq.	None	Fax and attached memorandum re: admissibility of mitigation of damages evidence	7/12/96	12	A/C, WP
91	E. Budnick	C. Schiavone	J. Fenningham, Esq.	Letter re: acting as expert witness in Massingale v. Central Sprinkler	1/17/97	1	WP
92	C. Schiavone	J. Fenningham, Esq.	None	Faxed letter re: Beacon Management/Rowe's Wharf	10/30/96	2	A/C
93	T. Sartory, Esq.	J. Fenningham, Esq.	Central Sprinkler	Draft settlement and release with handwritten notations from Central Sprinkler's counsel to Central Sprinkler	3/19/97	7	A/C, WP
94	C. Schiavone	J. Fenningham, Esq.	None	Faxed letter and red-line changes to reinstallation agreement	12/17/96	9	A/C, WP
95	C. Schiavone	J. Fenningham, Esq.	None	Faxed letter and draft of audit opinion letter	12/11/96	5	A/C, WP
96	C. Schiavone	J. Fenningham, Esq.	None	Fax and red-line draft of reinstallation agreement, with handwritten notation	12/06/96	9	A/C, WP

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WP = Work Product

Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
97	C. Schiavone	J. Fenningham, Esq.	None	Faxed and draft reinstallation agreement re: Polk and Taylor Buildings	11/22/96	7	A/C, WP
98	C. Schiavone	J. Fenningham, Esq.	None	Fax and attached letter re: Polk and Taylor	11/22/96	2	A/C, WP
99	C. Schiavone	J. Fenningham, Esq.	None	Faxed draft of reinstallation agreement re: Polk and Taylor Buildings, with attorney comment	11/21/96	6	A/C, WP
100	C. Schiavone	G. Dempster, Esq.	None	Letter and draft agreement re: CSC/Polk and Taylor	11/06/96	13	A/C, WP
101	C. Schiavone	Corr, Stevens & Fenningham	None	Draft reinstallation agreement re: Polk and Taylor Buildings, with handwritten changes and markups, from counsel	8/29/96	6	WP
102	C. Schiavone	C. Schiavone	None	Draft agreement between owner and contractor, with handwritten notations regarding limited exposure	?	17	WP
103	G. Meyer C. Schiavone	J. Fenningham, Esq.	None	Fax and letters re: Rowes Wharf/Beacon Polk and Taylor facility	9/11/96	5	A/C, WP
104	C. Schiavone	J. Fenningham, Esq.	None	Fax and draft agreement re: Rowes Wharf	7/16/96	20	A/C, WP
105	C. Schiavone	J. Fenningham, Esq.	None	Fax and letter re: Beacon Management/Rowes Wharf	7/16/93	3	A/C, WP
106	S. Ravitz	C. Schiavone	J. Fenningham, Esq.	Draft letter to counsel with handwritten notations re: Rowes Wharf Omega Change Out Agreement, requesting counsel's review	6/05/96	14	A/C, WP
107	J. Fenningham, Esq.	G. Dempster	None	Draft agreement re: Rowes Wharf	7/1/96	21	A/C, WP

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108	J. Fenningham, Esq.	C. Schiavone	None	Draft letter agreement re: Rowes Wharf Omega Change Out	5/21/96	6	A/C, WP
109	C. Schiavone	J. Fenningham, Esq.	None	Draft reply to Allied Signal; draft of letter to S. Ravitz with handwritten revisions regarding remedies	5/21/96	15	A/C, WP
110	S. Ravitz	Central Sprinkler	A. Post L. Wambold D. Carli J. Fenningham, Esq.	Draft letter of Rowes Wharf Omega Change Out agreement, with handwritten revisions regarding remedies	5/21/96	6	A/C, WP
111	C. Schiavone	C. Schiavone	None	Draft of agreement for construction projects of limited scope, with handwritten revisions regarding contracts, warranty, waiver of liens	5/6/96	19	WP
112	C. Schiavone	J. Fenningham, Esq.	None	Faxed letter to Grinnell Corporation re: Rowes Wharf	4/9/96	3	A/C, WP
113	J. Pepi	J. Golinveaux	G. Meyer	Draft letter re: Rowes Wharf, with handwritten revisions and edits regarding fault	4/96	1	WP
114	W. Pardue	W. Pardue	None	Handwritten note re: Letter from attorney	7/10/?	1	A/C, WP
115	R. Hagar	R. Powers, Esquire	None	Letter re: Document responses in Agbobu v. Fire Sprinklers, et al.	2/24/92	2	A/C, WP
116	Bob	D. Powers, Esquire	None	Telephone message	1/28/92	1	A/C, WP
117	Fire Chief Inc.	D. Goad	R. Powers, Esq. Hull and Company, Inc. Marsh & McLennan, Inc.	Letter re: Insurance coverage and defense	12/5/91	2	A/C, WP

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118	B. Hagar	R. Powers, Esq.	None	Letter re: Agbobu v. Fire Sprinklers, et al.	2/12/92	1	A/C
119	W. Pardue	W. Pardue	None	Handwritten diary re: Changes prior to signing agreement		1	WP
120	C. Schiavone	J. Fenningham, Esq.	None	Faxed letter re: Continental Casualty Company v. Central Sprinkler	8/21/96	3	A/C, WP
121	J. Fenningham, Esq.	C. Schiavone	S. Seltzer	Letter re: Continental Casualty Company v. Central Sprinkler	6/7/96	1	A/C, WP
122	W. Pardue	A. Kindig	None	Letter and memos re: Burnsley Hotel claim	1/7/87	7	WP
123	W. Meyer	R. Miller, Esq.	None	Letter re: Century Capital Inc. v. Central Sprinkler	9/22/83	4	A/C, WP
124	W. Pardue	J. Fenningham, Esq.	None	Letter re: Century Capital Inc. v. Central Sprinkler	11/11/83	1	A/C, WP
125	W. Pardue	J. Fenningham, Esq.	None	Letter re: Century Capital Inc. v. Central Sprinkler	2/24/84	1	A/C, WP
126	W. Pardue	C. Fischer	M. Fried	Letter re: Expert report, avoiding default	7/14/88	2	A/C, WP
127	B. Clone	A. Kindig	W. Pardue	Letter re: potential litigation in Church v. Central Sprinkler, information from law firm	12/29/86	1	A/C, WP
128	B. Clone	A. Kindig	W. Pardue	Letter re: St. Michael's Church v. Central Sprinkler	3/2/87	1	A/C, WP
129	B. Crone	A. Kindig	W. Pardue	Letter re: Possible pre-litigation disposition in St. Michael's Episcopal Church v. Central Sprinkler	12/17/86	1	A/C, WP

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130	A. Kindig	W. Pardue	None	Letter re: Possible pre-litigation settlement of lawsuit	12/11/86	1	A/C, WP
131	W. Pardue	D. Rogers, Esq.	J. Crumpton	Letter re: Possible settlement in Church Insurance Company v. Crumpton Sprinkler Company Inc. and Central Sprinkler	12/1/86	2	A/C, WP
132	W. Pardue	D. Rogers, Esq.	J. Crumpton	Letter re: Potential claim of Episcopal Church of St. Michael and possibility of settlement	11/14/86	8	A/C, WP
133	A. Kindig	W. Pardue	None	Letter re: Correspondence from law firm regarding claim of Episcopal Church of St. Michael	11/18/86	1	A/C, WP
134	W. Pardue	J. Bisset, Esq.	T. Farrell	Letter re: Plaintiff's damages	5/29/90	2	A/C, WP
135	T. Nelson	J. Bisset, Esq.	W. Pardue	Letter re: Request for expert's evaluation	4/10/90	2	A/C, WP
136	W. Pardue	G. Polan	None	Handwritten professional biography	4/3/90	2	WP
137	D. Arnold	W. Pardue	None	Draft letter with handwritten changes regarding sprinkler replacement	2/24/85	2	WP
138	W. Pardue	A. McMahan, Esq.	G. Derragon	Letter re: Church Insurance Company matter	12/17/87	5	A/C, WP
139	W. Pardue	A. McMahan, Esq.	G. Derragon	Letter re: Church Insurance Company matter	9/1/87	2	A/C, WP
140	G. Derragon	A. McMahan, Esq.	W. Pardue	Letter re: Church Insurance Company matter	11/25/87	7	A/C, WP
141	W. Pardue	A. McMahan, Esq.	G. Derragon	Letter re: Church Insurance Company matter	11/12/87	1	A/C, WP

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142	G. Derragon	A. McMahan, Esq.	W. Pardue	Letter re: Church Insurance Company matter	11/12/87	2	A/C, WP
143	W. Pardue	A. McMahan, Esq.	G. Derragon	Letter re: Church Insurance Company matter	11/12/87	2	A/C, WP
144	A. McMahan, Esq.	B. Rogers, Esq.	J. Crumpton	Letter re: Church Insurance Company matter	11/2/87	3	A/C, WP
145	W. Pardue	A. McMahan, Esq.	G. Derragon	Letter re: Church Insurance Company matter	11/25/87	2	A/C, WP
146	G. Derragon	A. McMahan, Esq.	W. Pardue	Letter re: Church Insurance Company matter	11/25/87	2	A/C, WP
147	G. Derragon	A. McMahan, Esq.	W. Pardue	Letter re: Church Insurance Company matter	12/18/87	7	A/C, WP
148	W. Pardue	W. Pardue	None	Notes re: Conversation with A. McMahan, Esq; handwritten notes re: St. Michael's Church litigation; information regarding strategy	10/11/87	23	A/C, WP
149	W. Pardue	A. McMahan, Esq.	G. Derragon	Letter re: Draft of Central's Answers to Interrogatories	10/2/87	8	A/C, WP
150	A. McMahan, Esq.	W. Pardue	None	Handwritten Answers to remaining Interrogatories	9/25/87	52	A/C, WP
151	B. Rogers, Esq.	D. Groth, Esq.	None	Letter re: Church Insurance Company matter, with handwritten markings and notations of W. Pardue	8/13/86	26	A/C, WP
152	A. Kindig	W. Pardue	None	Summons and Complaint in Church Insurance Company matter, with handwritten markings and notations	3/2/87	17	WP

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153	J. Crumpton	D. Groth, Esq.	D. Hanke J. Norton	Letter re: Church Insurance Company matter, with handwritten markings	7/14/86	2	WP
154	Central Sprinkler Corporation	A. McMahan, Esq.	G. Derragon	Letter re: Church Insurance Company matter	3/12/87	4	A/C, WP
155	W. Pardue	A. McMahan, Esq.	None	Letter re: Insurance company matter	8/3/86	1	A/C, WP
156	W. Pardue	A. McMahan, Esq.	G. Derragon	Letter re: Central's draft response to Interrogatories	5/29/87	6	A/C, WP
157	G. Derragon	A. McMahan, Esq.	Central Sprinkler	Letter re: Hearing on Motion to Dismiss in Church Insurance Company matter	3/30/87	1	A/C, WP
158	G. Derragon	W. Pardue	None	Letter re: Information requested in Episcopal Church of St. Michael project	3/17/87	5	WP
159	A. McMahan, Esq.	W. Pardue	G. Derragon A. Kindig	Letter re: Request for production of documents in Church Insurance Company matter	3/13/87	1	A/C, WP
160	G. Derragon	H. Grooms, Jr., Esq.	Central Sprinkler	Letter re: Retention of attorneys in Church Insurance Company matter	3/10/87	1	A/C, WP
161	W. Pardue	G. Dempster, Esq.	None	Letter re: Church Insurance Company matter	3/13/87	2	A/C, WP
162	W. Pardue	J. Fenningham, Esq.	None	Documents re: Freedman matter	3/9/88	5	A/C, WP
163	W. Pardue	J. Fenningham, Esq.	None	Letter re: Freedman matter	1/4/88	1	A/C, WP
164	W. Pardue	J. Fenningham, Esq.	None	Letter re: Freedman matter	11/20/87	1	A/C, WP
165	W. Pardue	J. Fenningham, Esq.	None	Letter re: Freedman matter	12/15/87	1	A/C, WP
166	W. Pardue	J. Fenningham, Esq.	None	Letter and enclosures re: Freedman matter	11/20/87	9	A/C, WP

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167	W. Pardue	J. Fenningham, Esq.	None	Telephone message slip re: Freedman letter	9/8/87	1	A/C, WP
168	W. Pardue	J. Fenningham, Esq.	None	Letter re: Freedman matter	9/1/87	2	A/C, WP
169	M. Fries	C. Schiavone	S. Torstensen, A. Post, J. Fenningham, Esq.	Memorandum re: Language of Omega Diagnostic Report as approved by counsel	7/18/96	2	A/C, WP
170	G. Polan	R. Hammer, Esq.	None	Letter and attachments re: U.S. Patent	8/7/86	5	A/C
172	G. Meyer, S. Meyer, A. Sabol, W. Pardue, J. Golinveaux, G. Polan, D. Rice, R. Hobbs, D. Yuhas, K. Dolan, A. Post, K. Bilo	C. Schiavone, J. Fenningham, Esq.	J. Fenningham, Esq.	Memorandum re: Document request in Hart et al. v. Central Sprinkler Corporation	10/31/97	1	AC, WP
171	W. Pardue	P. Andersen, Esq.	None	Letter re: Settlement Conference in L&D Construction v. Plumbers Plus	5/28/92	1	A/C
173	D. Rice	C. Schiavone, J. Fenningham, Esq.	None	Memorandum re: Document requests in Hart et al. v. Central Sprinkler Corporation	10/28/97	2	A/C, WP
174	Technical Services & Marketing Employees	D. Rice	None	Memorandum re: Document production distributed at request of counsel	11/3/97	1	A/C, WP
175	K. Richardson, Esq.	Central Sprinkler Corporation	J. Rath, SGVC	Letter re: Disposition of Truck Insurance Exchange v. Central Sprinkler Corporation	12/19/85	1	A/C
176	Central Sprinkler Corporation	K. Richardson, Esq.	T. Woodard	Letter re: Representation in Truck Insurance Exchange v. Central Sprinkler Corporation	1/21/85	1	A/C
177	W. Pardue	J. Fenningham, Esq.	None	Letter re: Settlement of Hudec lawsuit	10/1/87	1	A/C

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178	W. Pardue	J. Fenningham, Esq.	None	Letter with attachments re: Settlement of Hudec lawsuit	9/10/87	7	A/C
179	W. Pardue	J. Fenningham, Esq.	None	Telephone message slip re: Hudec and Friedman matters	8/20/87	1	A/C, WP
180	W. Pardue	J. Fenningham, Esq.	None	Letter re: Settlement and release of Hudec, Gahimer and Friedman matters	8/21/87	2	A/C, WP
181	R. McGreevy, Esq.	G. Polan	W. Pardue	Letter and attachment re: Omega diagnostic reports	11/25/92	2	A/C
182	W. Pardue	R. McGreevy, Esq.	None	Letter re: Status of Hartford Insurance Company v. Central Sprinkler	6/11/93	2	A/C
183	K. Luther	R. McGreevy, Esq.	W. Pardue	Letter to co-defendant re: Settlement of Hartford Insurance Company v. Central Sprinkler	7/24/92	2	A/C, WP
184	N. Duvall	R. McGreevy, Esq.	W. Pardue	Letter re: Summary of deposition testimony in Hartford Insurance Company v. Central Sprinkler	4/1/93	3	A/C, WP
185	C. Schiavone	R. Cullen, Esq.	None	Letter re: Sisters of Notre Dame matter	6/10/94	1	A/C
186	Central Sprinkler	Leach, McGreevy & Eliassen	None	Billing records for Hartford Insurance Company v. Central Sprinkler	2/28/93	9	A/C, WP
187	Integrated Fire and Failure Technologies Inc.	R. McGreevy, Esq.	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	7/2/93	2	A/C, WP
188	Integrated Fire and Failure Technologies Inc.	R. McGreevy, Esq.	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	6/4/93	2	A/C, WP
189	Central Sprinkler Corporation	Leach, McGreevy & Eliassen	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	6/30/92	9	A/C, WP
190	Central Sprinkler	Leach, McGreevy & Eliassen	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	2/20/93	9	A/C, WP

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191	Central Sprinkler	Leach, McGreevy & Eliassen	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	6/30/93	11	A/C, WP
192	Central Sprinkler	Leach, McGreevy & Eliassen	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	3/31/92	8	A/C, WP
193	Central Sprinkler	Leach, McGreevy & Eliassen	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	3/31/92	8	A/C, WP
194	Central Sprinkler	Leach, McGreevy & Eliassen	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	6/30/92	9	A/C, WP
195	Central Sprinkler	B. Lazar	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	3/30/92	5	A/C, WP
196	Central Sprinkler	Leach, McGreevy & Eliassen	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	12/15/93	7	A/C, WP
197	Central Sprinkler	Leach, McGreevy & Eliassen	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	6/30/93	10	A/C, WP
198	Integrated Fire and Failure Technologies Inc.	R. McGreevy	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	4/2/93	2	A/C, WP
199	R. McGreevy	Integrated Fire and Failure Technologies, Inc.	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	3/4/93	1	A/C, WP
200	Central Sprinkler	Leach, McGreevy & Eliassen	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	8/15/91	5	A/C, WP
201	Central Sprinkler	Leach, McGreevy & Eliassen	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	5/9/91	4	A/C, WP
202	Central Sprinkler	Leach, McGreevy & Eliassen	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	12/31/91	11	A/C, WP
203	Central Sprinkler	Leach, McGreevy & Eliassen	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	6/30/93	10	A/C, WP

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204	Central Sprinkler	Leach, McGreevy & Eliassen	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	12/15/93	7	A/C, WP
205	Central Sprinkler	Leach, McGreevy & Eliassen	None	Billing records re: Hartford Insurance Company v. Central Sprinkler	2/28/93	9	A/C, WP
206	W. Pardue	M. P. Fried, Esq.	S. Evans, Esq., D. Keenan, G. Furtivo	Letter re: Defense of Sisters of Notre Dame matter	1/31/89	2	A/C
207	W. Pardue	S. Evans, Esq.	M. P. Fried, Esq.	Letter re: Defense of Hartford Insurance Company Insurance Company v. Central Sprinkler	1/30/89	3	A/C
208	M. P. Fried, Esq.	S. Evans, Esq.	D. Keenan, W. Pardue	Letter re: Analysis of Hartford Insurance Company Insurance Company v. Central Sprinkler	11/28/88	8	A/C, WP
209	W. Pardue	R. Eliassen, Esq.	None	Letter re: Document production in Hartford Insurance Company Insurance Company v. Central Sprinkler	4/11/91	1	A/C
210	None	None	None	Hand written notes re: Attorneys instructions concerning document production in Hartford Insurance Company Insurance Company v. Central Sprinkler	4/23/91	1	A/C, WP
211	R. McGreevy, Esq.	W. Pardue	None	Letter re: Discovery in Hartford Insurance Company v. Central Sprinkler	9/10/91	1	A/C
212	B. Riley	R. McGreevy, Esq.	None	Letter re: Discovery in Hartford Insurance Company v. Central Sprinkler	7/3/91	2	A/C
213	W. Pardue	M. Harper	None	Letter with attachments re: Discovery responses in Hartford Insurance Company v. Central Sprinkler	9/7/89	7	A/C

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214	Eliassen, Postel, Eliassen & Johnson	W. Pardue	None	Fax and handwritten responses to Discovery Requests in Hartford Insurance Company v. Central Sprinkler	9/5/89	12	A/C
215	W. Pardue	S. Evans, Esq.	None	Letter re: Response to Discovery Requests in Hartford Insurance Company v. Central Sprinkler	3/28/89	1	A/C
216	W. Pardue	S. Evans, Esq.	M. Fried, Esq.	Letter re: Response to Discovery Requests in Hartford Insurance Company v. Central Sprinkler	2/17/89	3	A/C
217	W. Pardue	R. Eliassen, Esq.	None	Letter re: Response to Discovery Requests in Hartford Insurance Company v. Central Sprinkler	11/7/90	1	A/C
218	W. Pardue	R. Eliassen, Esq.	None	Letter re: Depositions in Hartford Insurance Company v. Central Sprinkler	3/2/90	1	A/C
219	W. Pardue	G. Costa	None	Letter re: Depositions in Hartford Insurance Company v. Central Sprinkler	9/18/90	1	A/C
220	W. Pardue	R. Eliassen, Esq.	None	Letter re: Depositions in Hartford Insurance Company v. Central Sprinkler	10/31/90	1	A/C
221	R. Eliassen, Esq.	W. Pardue	None	Letter w/attachments re: Documents in Hartford Insurance Company v. Central Sprinkler	10/9/89	3	A/C
222	M. P. Fried, Esq.	W. Pardue	None	Letter re: Status of Notre Dame and Mistic matters	8/10/90	1	A/C
223	W. Pardue	M. P. Fried, Esq.	J. Achtipes, R. Eliassen, Esq., G. Furtivo	Letter re: Notre Dame and Mistic cases	7/25/90	2	A/C
224	W. Pardue	R. Eliassen, Esq.	None	Letter re: Hartford Insurance Company Insurance Company v. Central Sprinkler	9/29/89	2	A/C

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225	W. Pardue	S. Evans, Esq.	None	Letter re: Discovery Requests in Hartford Insurance Company Insurance v. Central Sprinkler	8/10/89	1	A/C
226	W. Pardue	S. Evans, Esq.	M. Urbani	Letter re: Discovery Requests in Hartford Insurance Company v. Central Sprinkler	8/10/89	1	A/C
227	W. Pardue	M. Harper	None	Letter re: Hartford Insurance Company Insurance Company v. Central Sprinkler	8/11/89	1	A/C
228	W. Pardue	S. Evans, Esq.	None	Letter re: Depositions in Hartford Insurance Company v. Central Sprinkler	7/26/89	1	A/C
229	W. Pardue	S. Evans, Esq.	None	Letter w/attachments re: Discovery Requests in Hartford Insurance Company v. Central Sprinkler	6/7/89	5	A/C
230	W. Pardue	D. Quintana	N. Tallas	Letter w/attachments re: Discovery Requests in Hartford Insurance Company v. Central Sprinkler	5/24/89	2	A/C
231	W. Pardue	R. McGreevy, Esq.	None	Letter re: Discovery Requests in Hartford Insurance Company v. Central Sprinkler	9/4/91	1	A/C
232	W. Pardue	R. McGreevy, Esq.	None	Letter re: Status of Hartford Insurance Company v. Central Sprinkler	8/23/91	1	A/C
233	R. McGreevy, Esq.	I. Weil	W. Pardue	Letter re: Status of Hartford Insurance Company Insurance v. Central Sprinkler	8/29/91	2	A/C
234	B. Riley	R. McGreevy, Esq.	None	Letter re: Document Requests in Hartford Insurance Company v. Central Sprinkler	7/3/91	2	A/C

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235	W. Pardue	S. Evans, Esq.	None	Letter re: Discovery Requests in Hartford Insurance Company v. Central Sprinkler	5/22/89	1	A/C
236	S. Evans, Esq.	W. Pardue	None	Fax with attachments re: Discovery Requests in Hartford Insurance Company v. Central Sprinkler	5/15/89	5	A/C
237	Central Sprinkler Corp.	S. Evans, Esq.	None	Fax re: Discovery Requests in Hartford Insurance Company v. Central Sprinkler	4/14/89	5	A/C
238	W. Pardue	M. P. Fried, Esq.	S. Evans, Esq.	Letter re: Discovery Requests in Sisters of Notre Dame matter	3/14/89	2	A/C
239	None	W. Pardue	None	Hand written notes re: Discovery Responses in Hartford Insurance Company v. Central Sprinkler	2/17/89	10	A/C, WP
240	W. Pardue	R. McGreevy, Esq.	None	Discovery in Hartford Insurance Company Insurance v. Central Sprinkler	9/27/91	3	A/C
241	I. Weil	R. McGreevy, Esq.	W. Pardue	Letter re: Discovery in Hartford Insurance Company v. Central Sprinkler	9/17/91	2	A/C
242	W. Pardue	I. Weil	P. Andersen, Esq.	Status of L&D Construction Co. matter	7/26/91	2	A/C
243	R. Eliassen, Esq.	I. Weil	W. Pardue, G. Furtivo	Letter re: Status of Hartford Insurance Company v. Central Sprinkler	7/8/91	3	A/C
244	W. Pardue	R. Eliassen, Esq.	None	Letter re: Document Requests in Hartford Insurance Company v. Central Sprinkler	2/11/91	2	A/C
245	None	None	None	Hand written notes re: Discovery Requests in Hartford Insurance Company v. Central Sprinkler		5	A/C, WP

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246	W. Pardue	R. McGreevy, Esq.	None	Letter re: Document Requests in Hartford Insurance Company v. Central Sprinkler	9/17/91	1	A/C
247	None	None	None	Hand written notes re: Discovery Requests in Hartford Insurance Company v. Central Sprinkler		2	WP, A/C
248	W. Pardue	M. P. Fried, Esq.	None	Letter re: Defense of Minneapolis Club claim	5/18/89	1	A/C
249	W. Pardue	M. P. Fried, Esq.	None	Letter re: Defense of Minneapolis Club claim	4/4/89	1	A/C
250	S. Richter, Esq.	W. Pardue	None	Fax with attachments re: Discovery in Hartford Insurance Company Insurance v. Central Sprinkler	9/22/89	7	A/C
251	W. Pardue	S. Richter, Esq.	None	Letter w/attachments re: Settlement of Minneapolis Club v. Central Sprinkler	12/12/90	6	A/C
252	W. Pardue	S. Richter, Esq.	None	Billing records re: Minneapolis Club v. Central Sprinkler	4/12/90	5	A/C, WP
253	W. Pardue	S. Richter, Esq.	None	Billing records re: Minneapolis Club v. Central Sprinkler	1/9/91	2	A/C, WP
254	W. Pardue	S. Richter, Esq.	None	Billing records re: Minneapolis Club v. Central Sprinkler	12/26/90	3	A/C, WP
255	W. Pardue	S. Richter, Esq.	None	Letter re: Settlement of Minneapolis Club v. Central Sprinkler	11/7/90	3	A/C
256	W. Pardue	S. Richter, Esq.	None	Billing records re: Minneapolis Club v. Central Sprinkler	3/13/90	4	A/C, WP
257	W. Pardue	S. Richter, Esq.	P. O'Leary	Letter re: Defense of Minneapolis Club v. Central Sprinkler	7/6/90	1	A/C, WP

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
258	W. Pardue	P. O'Leary	M. P. Fried, Esq.	Letter re: Investigation of Minneapolis Club v. Central Sprinkler	3/19/90	3	WP
259	W. Pardue	S. Richter, Esq.	None	Settlement of Minneapolis Club v. Central Sprinkler	11/27/90	1	A/C
260	W. Pardue	S. Richter, Esq.	None	Letter re: Settlement of Minneapolis Club v. Central Sprinkler	8/16/90	2	A/C
261	W. Pardue	P. O'Leary	None	Letter re: Investigation of Minneapolis Club v. Central Sprinkler	3/30/90	3	WP
262	W. Pardue	Popham, Haik, Schnobrich & Kaufman, Ltd.	None	Billing records re: Minneapolis Club v. Central Sprinkler	10/13/89	8	A/C, WP
263	W. Pardue	S. Richter, Esq.	None	Letter with attached billing records re: Minneapolis Club v. Central Sprinkler Corp.	6/12/89	2	A/C, WP
264	W. Pardue	S. Richter, Esq.	None	Letter with attached billing records re: Minneapolis Club v. Central Sprinkler	11/9/89	3	A/C, WP
265	W. Pardue	S. Richter, Esq.	None	Letter with attached billing records re: Minneapolis Club v. Central Sprinkler	1/10/89	4	A/C, WP
266	W. Pardue	Popham, Haik, Schnobrich & Kaufman, Ltd.	None	Billing records re: Minneapolis Club v. Central Sprinkler	2/12/90	4	A/C, WP
267	W. Pardue	S. Richter, Esq.	None	Letter re: Defense of Minneapolis Club v. Central Sprinkler Corporation	2/9/90	1	A/C
268	M.P. Fried, Esq.	S. Richter, Esq.	W. Pardue	Letter re: Defense of Minneapolis Club v. Central Sprinkler	2/9/90	1	A/C

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269	W. Pardue	P. O'Leary	M. P. Fried, Esq.	Letter with attachments re: Investigation of Minneapolis Club v. Central Sprinkler	2/15/90	10	WP
270	S. Richter, Esq.	N. Tallos	W. Pardue	Letter with attachments re: Discovery Requests in Minneapolis Club v. Central Sprinkler	12/19/89	3	A/C
271	W. Pardue	S. Richter, Esq.	M. P. Fried, Esq.	Letter with attachment re: Discovery in Minneapolis Club v. Central Sprinkler	11/16/89	4	A/C
272	W. Pardue	S. Richter, Esq.	None	Letter re: Discovery in Minneapolis Club v. Central Sprinkler	11/3/89	1	A/C
273	W. Pardue	S. Richter, Esq.	None	Letter re: Status of Minneapolis Club v. Central Sprinkler	11/1/89	1	A/C, WP
274	W. Pardue	S. Richter, Esq.	None	Letter re: Discovery in Minneapolis Club v. Central Sprinkler	10/2/89	2	A/C
275	W. Pardue	C. Printon	None	Letter re: Discovery in Minneapolis Club v. Central Sprinkler	7/5/89	1	A/C
276	W. Pardue	C. Printon	S. Richter, Esq.	Letter re: Discovery in Minneapolis Club v. Central Sprinkler	6/2/89	1	A/C
277	W. Pardue	S. Richter, Esq.	None	Letter with attachments re: Defense of Minneapolis Club v. Central Sprinkler Corporation	5/10/89	5	A/C, WP
278	W. Pardue	S. Richter, Esq.	None	Letter with attachments re: Discovery Requests in Minneapolis Club v. Central Sprinkler	8/24/89	5	A/C
279	W. Pardue	S. Richter, Esq.	None	Letter with attachments re: Status of Minneapolis Club v. Central Sprinkler	7/6/89	5	A/C, WP

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
280	W. Pardue	J. Fenningham, Esq.	None	Letter re: Defense of Minneapolis Club v. Central Sprinkler	5/4/89	1	A/C, WP
281	S. Richter, Esq.	W. Pardue	None	Fax with attachments re: Defense of Minneapolis Club v. Central Sprinkler	5/5/89	8	A/C, WP
282	M. Abbott, Esq.	G. Polan	None	Letter re: Patent application	6/1/89		A/C
283	R. Hobbs	C. Polymeropoulos	None	Letter with attachments re: Expert testimony in trademark case	11/1/94	5	WP
284	None	R. Hobbs	None	Hand written notes re: Expert testimony in trademark case	10/31/94		WP
285	C. Polymeropoulos	R. Hobbs	J. Golinveaux, G. Meyer, G. Polan	Letter with attachments re: Expert testimony in trademark case	10/20/94	3	WP
286	R. Hobbs	C. Polymeropoulos	None	Telephone slip re: Expert testimony in trademark case	10/12/94	1	WP
287	None	R. DiDomizio	None	Letter re: Expert testimony in trademark case	10/11/94	5	WP
288	R. Jacobs-Meadway, Esq.	R. Hobbs	J. Golinveaux, G. Meyer, G. Polan	Letter re: Expert testimony in Omega trademark case	9/23/94	2	A/C, WP
289	R. Hobbs	C. Polymeropoulos	None	Letter with attachments re: Expert testimony in Omega trademark case		4	WP
290	None	R. Hobbs	None	Hand written notes re: Expert witness in Omega trademark case	9/12/94	1	WP
291	R. Jacobs-Meadway, Esq.	R. Hobbs	R. Bandura, J. Golinveaux, G. Meyer, G. Polan	Letter with attachments re: Omega trademark case	9/23/94	18	A/C
292	R. Hobbs	C. Polymeropoulos	None	Letter with attachments re: Expert testimony in Omega trademark case	9/22/94	7	WP

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293	None	R. Hobbs	None	Hand written notes re: Expert testimony in Omega trademark case	9/13/94	1	WP
294	M. Abbott, Esq.	B. Hoening	None	Letter re: Patent application	3/26/86	1	A/C
295	A. Seidel, Esq.	G. Pieczykolan	None	Letter re: U.S. Patent application	1/17/86	1	A/C
296	G. Meyer	M. Abbott	B. Hoening	Letter re: U.S. Patent application	5/18/85	2	A/C
297	G. Meyer	E. Gonda, Esq.	None	Letter with attachments re: U.S. Patent application	9/19/84	16	A/C
298	E. Gonda, Esq.	B. Hoening	None	Letter re: U.S. Patent application	8/23/84	3	A/C
299	E. Gonda, Esq.	B. Hoening	None	Letter re: U.S. Patent application	10/12/84	2	A/C
300	M. Abbott, Esq.	G. Meyer	B. Hoening	Letter with attachment re: U.S. Patent application	2/19/85	3	A/C
301	M. Abbott, Esq.	G. Meyer	B. Hoening	Letter with attachment re: U.S. Patent application	2/8/85	2	A/C
302	G. Meyer	M. Abbott, Esq.	B. Hoening	Letter with attachments re: U.S. Patent application	5/29/85	3	A/C
303	G. Meyer, J. Kavanagh	D. Monaco	R. Anderson, W. Tarpley, Phd	Letter with attachments re: U. S. Patent application	8/5/85	15	A/C
304	L. Mims	E. Freedus, Esq.	W. Pardue	Letter re: Settlement of San Ysidro Landmark Fire Protection matter	12/20/88	2	A/C
305	W. Pardue	C. Medendorp	None	Fax re: San Ysidro Landmark Fire Protection Company claim	1/18/88	1	A/C
306	W. Pardue	A. Kindig	J. Noyes, C. Whitehead, J. Misselwitz	Letter re: Investigation of San Ysidro Landmark Fire Protection v. Central Sprinkler	5/18/88	9	A/C, WP

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307	W. Pardue	P. Lynch	None	Letter re: Discovery in San Ysidro Landmark Fire Protection v. Central Sprinkler Company	3/7/88	1	A/C
308	W. Pardue	E. Freedus, Esq.	None	Letter re: Discovery in San Ysidro Landmark Fire Protection v. Central Sprinkler	2/12/88	2	A/C
309	W. Pardue	T. Sharbaugh, Esq.	None	Letter re: San Ysidro Landmark Fire Protection v. Central Sprinkler	1/6/88	1	A/C
310	E. McKelvey	T. Sharbaugh, Esq.	None	Letter re: San Ysidro Landmark Fire Protection v. Central Sprinkler		1	A/C
311	W. Pardue	J. Fenningham, Esq.	None	Letter re: Draft Contract Language	11/17/89	2	A/C
312	W. Pardue	J. Fenningham, Esq.	None	Letter re: Plumbing Contractors Inc. v. Central Sprinkler	9/27/89	1	A/C
313	W. Pardue	J. Fenningham, Esq.	None	Letter re: Plumbing Contractors Inc. v. Central Sprinkler	9/27/91	2	A/C
314	R. Derragon	M. Reynolds	W. Pardue	Letter re: Settlement of Superior Fire v. Central Sprinkler	8/13/87	1	A/C
315	G. Derragon	J. Westwood, Esq.	None	Letter re: Defense of PP&L v. Central Sprinkler	4/29/87	2	A/C
316	W. Pardue	P. Andersen, Esq.	None	Letter with attachments re: Defense of L& D Construction v. Plumbers Plus	10/8/91	6	A/C
317	W. Pardue	Ropers, Majeski, Kohn, Bentley, Wagner & Kane	None	Billing records re: L&D Construction v. Plumbers Plus	7/21/92		A/C, WP
318	W. Pardue	P. Andersen, Esq.	None	Letter with attachments re: Settlement of L&D Construction v. Plumbers Plus	5/28/92	3	A/C, WP

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319	W. Pardue	Ropers, Majeski, Kohn, Bentley, Wagner & Kane	None	Billing records re: L&D Construction v. Plumbers Plus	1/28/92	4	A/C, WP
320	N. Duvall	R. McGreevy, Esq.	None	Letter re: Defense of Hartford Insurance Company Insurance v. Central Sprinkler	2/23/93	3	A/C
321	W. Pardue	P. Andersen, Esq.	None	Fax with attachments re: Defense of L&D Construction v. Plumbers Plus	6/5/92	22	A/C
322	W. Pardue	P. Andersen, Esq.	None	Letter with attachments re: Deposition testimony in L&D Construction v. Plumbers Plus	6/3/92	8	A/C, WP
323	P. Andersen, Esq.	J. Widman, Esq.	R. Stroud	Letter with hand written notes re: Settlement of L&D Construction v. Central Sprinkler	6/9/92	2	WP
324	B. Roder	J. Brezzo	None	Draft letter with handwritten notes re: Miriam Park Apartments	5/8/92	3	WP
325	W. Pardue	P. Andersen, Esq.	None	Letter re: Settlement of L&D Construction v. Plumbers Plus	7/29/92	1	A/C
326	W. Pardue	I. Weil	None	Letter re: Settlement of L&D Construction v. Plumbers Plus	12/13/91	1	A/C
327	W. Pardue	P. Andersen, Esq.	None	Letter with attachments re: Discovery and Settlement of L&D Construction v. Plumbers Plus with hand written notations	6/22/92	28	A/C, WP
328	W. Pardue	P. Andersen, Esq.	M. Fried, Esq.	Letter with attachments re: Settlement Conference in L&D Construction	10/18/90	8	A/C
329	W. Pardue	P. Andersen, Esq.	None	Letter with attachments re: Settlement of L&D Construction v. Plumbers Plus	4/6/92		A/C

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330	P. Andersen, Esq.	J. Widman, Esq.	W. Shoftstall, R. Stroud, W. Fitzgerald, Esq.	Letter re: Proposed settlement of L&D Construction v. Plumbers Plus with handwritten notes	3/4/92	2	A/C, WP
331	W. Pardue	P. Andersen, Esq.	I. Weil	Letter with attachments re: Arbitration of L&D Construction v. Plumbers Plus	1/30/92	4	A/C
332	I. Weil	P. Andersen, Esq.	W. Pardue	Letter with attachments re: Arbitration of L&D Construction v. Plumbers Plus	1/9/92	14	A/C
333	M. Fried, Esq.	P. Andersen, Esq.	Central Sprinkler Corporation	Letter re: Defense of L&D Construction v. Central Sprinkler and Summary of Claims	11/3/89	4	A/C, WP
334	None	W. Pardue	None	Hand written notes re: Discovery of L&D Construction v. Plumbers Plus		1	A/C, WP
335	W. Pardue	P. Andersen, Esq.	M. Fried, Esq.	Letter re: Discovery in L&D Construction v. Plumbers Plus	12/4/90	1	A/C
336	R. Hobbs	P. Andersen, Esq.	W. Pardue	Letter with attachment re: Discovery in L&D Construction v. Plumbers Plus	5/18/92	2	A/C
337	P. Andersen, Esq.	W. Pardue	None	Fax with attachments re: Responses to Discovery Requests in L&D Construction v. Plumbers Plus	2/20/91	9	A/C
338	W. Pardue	P. Andersen, Esq.	None	Letter with attachments re: Discovery Requests in L&D Construction v. Plumbers Plus	11/6/90	10	A/C
339	W. Pardue	P. Andersen, Esq.	M. Fried, Esq.	Letter with attachments re: Plaintiffs' claims in L&D Construction v. Plumbers Plus	1/14/91	3	A/C
342	W. Pardue	P. Andersen, Esq.	M. Fried, Esq.	Letter re: Expert testimony in L&D Construction v. Plumbers Plus	1/15/91	3	A/C

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341	W. Pardue	P. Andersen, Esq.	None	Letter re: Status of L&D Construction v. Plumbers Plus	6/28/91	3	A/C, WP
342	W. Pardue	P. Andersen, Esq.	I. Weil	Letter re: Status of L&D Construction v. Plumbers Plus	8/20/91	3	A/C, WP
343	W. Pardue	P. Andersen, Esq.	None	Letter re: Summary of Deposition taken in L&D Construction v. Plumbers Plus	11/4/91	7	A/C, WP
344	W. Pardue	P. Andersen, Esq.	None	Letter re: Summary of Deposition taken in L&D Construction v. Plumbers Plus	11/15/91	3	A/C, WP
345	W. Pardue	P. Andersen, Esq.	N. Duvall	Letter re: Settlement of L&D Construction v. Plumbers Plus	6/12/92	3	A/C
346	W. Pardue	P. Andersen, Esq.	None	Letter with attachment re: Expert witness in L&D Construction v. Plumbers Plus	6/11/92	3	A/C
347	W. Pardue	P. Andersen, Esq.	None	Letter with attachments re: Status of L&D Construction v. Plumbers Plus	2/20/92	4	A/C, WP
348	P. Andersen, Esq.	W. Pardue	None	Letter with attachment re: Expert Witness in L&D Construction v. Plumbers Plus	4/10/92	4	A/C
349	W. Pardue	P. Andersen, Esq.	None	Letter with attachment re: Discovery in L&D Construction v. Plumbers Plus	4/30/92	2	A/C
350	N. Duvall	P. Andersen, Esq.	None	Letter re: L&D Construction v. Plumbers Plus	4/30/92	1	A/C
351	W. Pardue	Ropers, Majeski, Kohn, Bentley, Wagner & Kane	None	Billing records re: L&D Construction v. Plumbers Plus	4/15/92	4	A/C, WP

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352	P. Andersen, Esq.	W. Pardue	None	Letter with attachments re: Discovery Requests in L&D Construction v. Plumbers Plus	11/21/91	2	A/C
353	W. Pardue	P. Andersen, Esq.	None	Letter with attachment re: Discovery in L&D Construction v. Plumbers Plus	10/18/91	2	A/C, WP
354	W. Pardue	P. Andersen, Esq.	None	Letter re: Status of L&D Construction v. Plumbers Plus	9/11/91	1	A/C, WP
355	W. Pardue	P. Andersen, Esq.	None	Letter with attachments re: Discovery in L&D Construction v. Plumbers Plus	8/6/91	5	A/C, WP
356	W. Pardue	Ropers, Majeski, Kohn, Bentley, Wagner & Kane	None	Billing records re: L&D Construction v. Plumbers Plus	7/9/91	3	A/C, WP
357	W. Pardue	Ropers, Majeski, Kohn, Bentley, Wagner & Kane	None	Billing records re: L&D Construction v. Plumbers Plus	4/24/91	4	A/C, WP
358	W. Pardue	Ropers, Majeski, Kohn, Bentley, Wagner & Kane	None	Billing records re: L&D Construction v. Plumbers Plus	1/15/91	3	A/C, WP
359	W. Pardue	Ropers, Majeski, Kohn, Bentley, Wagner & Kane	None	Billing records re: L&D Construction v. Plumbers Plus	10/16/90	3	A/C, WP
360	W. Pardue	Ropers, Majeski, Kohn, Bentley, Wagner & Kane	None	Billing records re: L&D Construction v. Plumbers Plus	4/16/90	3	A/C, WP
361	W. Pardue	Ropers, Majeski, Kohn, Bentley, Wagner & Kane	None	Billing records re: L&D Construction v. Plumbers Plus	1/18/90	5	A/C, WP

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362	W. Pardue	P. Andersen, Esq.	M. P. Fried, Esq.	Letter re: L&D Construction v. Plumbers Plus	4/26/90	2	A/C, WP
363	P. Andersen, Esq.	W. Pardue	None	Fax with attachments re: Discovery in L&D Construction v. Plumbers Plus	2/25/91	5	A/C
364	W. Pardue	P. Andersen, Esq.	M. P. Fried, Esq.	Letter re: Discovery in L&D Construction v. Plumbers Plus	8/8/90	1	A/C
365	W. Pardue	P. Andersen, Esq.	M.P. Fried, Esq.	Letter re: Defense of L&D Construction v. Plumbers Plus	8/8/90	3	WP, A/C
366	W. Pardue	P. Andersen, Esq.	M.P. Fried, Esq.	Letter with attachments re: Defense of L&D Construction v. Plumbers Plus	6/1/90	7	A/C
367	W. Pardue	P. Andersen, Esq.	Home Insurance Company	Letter re: Defense of L&D Construction v. Plumbers Plus	12/4/89	1	A/C
368	W. Pardue	P. Andersen, Esq.	None	Letter re: Settlement of L&D Construction v. Plumbers Plus	2/26/90	1	A/C
369	W. Pardue	P. Andersen, Esq.	None	Fax with attachments re: Settlement of L&D Construction v. Plumbers Plus		5	A/C
370	W. Pardue	P. Andersen, Esq.	Home Insurance	Letter re: Settlement of L&D Construction v. Plumbers Plus	2/9/90	2	A/C, WP
371	W. Glover	A. Martini, Esq.	W. Pardue	Letter re: Defense of L&D Construction v. Plumbers Plus	10/16/89	2	A/C
372	N. Bestow	P. Andersen, Esq.	None	Fax with phone message slip and attachments re: Discovery in L&D Construction v. Plumbers Plus	5/20/90	4	A/C
373	W. Pardue	P. Andersen, Esq.	None	Letter re: Defense of L&D Construction v. Plumbers Plus	11/3/89	2	A/C

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374	C. Schiavone	J. B. Habegger, Esq.	J. Fenningham, Esq. R. E. Cullen, Esq.	Letter re: Defense of Johns v. Central Sprinkler and Hammer v. Central Sprinkler	12/3/92	3	A/C
375	C. Schiavone	R. Cullen, Esq.	None	Letter with attachments re: Billing records in Johns v. Central Sprinkler	11/19/92	5	A/C, WP
376	J. B. Habegger, Esq.	J. Fenningham, Esq.	Central Sprinkler Company	Letter re: Defense of Johns v. Central Sprinkler	9/30/92	2	A/C, WP
377	C. Schiavone	J. Fenningham, Esq.	G. Meyer	Letter with attachments re: Defense of Johns v. Central Sprinkler Company	10/20/92	32	A/C
378	J. Fenningham, Esq.	J. B. Habegger, Esq.	None	Letter re: Defense of Johns v. Central Sprinkler Corp.	9/23/92	2	A/C, WP
379	C. Schiavone	R. Eiseman	None	Telephone slip re: Johns v. Central Sprinkler	7/28/92	1	A/C
380	M. Lawless, Esq.	J. Fenningham, Esq.	Central Sprinkler Co.	Letter re: Defense of Johns v. Central Sprinkler Co.	8/27/92	1	A/C
381	J. Baker	C. Schiavone	G. Meyer, W. Pardue & R. Cullen, Esq.	Letter re: Defense counsel in Johns and Hammer cases	7/16/92	1	A/C
382	C. Schiavone	R. Cullen, Esq.	None	Letter with attachments re: Defense of Johns v. Central Sprinkler Co.	7/10/92	4	A/C
383	J.B. Habegger, Esq.	R. Cullen, Esq.	C. Schiavone	Letter re: Defense of Johns v. Central Sprinkler Co.	7/7/92	1	A/C
384	J.B. Habegger, Esq.	R. Cullen, Esq.	C. Schiavone	Letter re: Defense of Johns v. Central Sprinkler Co.	7/17/92		A/C
385	R. Cullen, Esq.	C. Schiavone	None	Fax re: Defense of Johns v. Central Sprinkler Co.	7/2/92	1	A/C
386	J. Baker	C. Schiavone	G. Meyer, W. Pardue & R. Cullen, Esq.	Letter re: Defense counsel in Johns and Hammer cases	7/16/92	1	A/C

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387	J. Baker	C. Schiavone	G. Meyer, W. Pardue & R. Cullen, Esq.	Letter re: Defense counsel in Johns and Hammer cases	7/16/92	1	A/C
388	C. Schiavone	A. Sabol	None	Hand written note re: Defense of Johns v. Central Sprinkler Co.	6/25/92	1	A/C, WP
389	W. Pardue	J. Fenningham, Esq.	R. Strong Associates	Letter re: Defense of Associated Indemnity Corporation v. Central Sprinkler Co.	5/17/88	1	A/C
390	W. Pardue	J. Fenningham, Esq.	None	Fax with attachments re: Draft letter concerning Clarion Hotel	10/31/89	3	A/C, WP
391	W. Pardue	P. Shields	None	Letter re: Burbank Housing Development matter	1/30/90	1	A/C
392	W. Pardue	R. Rubin, Esq.	None	Letter with attachments re: Defense of Sanal v. Central Sprinkler Corp.	4/10/86	38	A/C, WP
393	R. Rubin, Esq.	G. Pieczykolan	M. Csom	Letter with attachments re: Sanal Claim	12/27/85	4	A/C
394	W. Pardue	M. Csom	G. Pieczykolan, J. Hart	Letter with attachments re: Defense of Sanal claim	12/17/85	3	A/C, WP
395	W. Meyer	T. Sharbaugh, Esq.	None	Letter re: Sanal lawsuit	9/4/85	1	A/C
396	C. Schiavone	R. Cullen, Esq.	None	Letter with attachments re: Defense of Agbobu v. Central Sprinkler Co.	8/31/93	4	A/C
397	R. Cullen, Esq.	A. Salinas, Esq.	N. Duvall	Letter re: Defense of Agbobu v. Central Sprinkler	3/29/93	1	A/C
398	G. Meyer	C. Schiavone	None	Letter re: Settlement of Agbobu v. Central Sprinkler	3/17/93	1	A/C, WP
399	B. Wilson, Esq.	N. Duvall	C. Schiavone	Letter re: Status of Agbobu v. Central Sprinkler	2/11/91	1	A/C, WP

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400	R. Wilson, Esq.	R. Cullen, Esq.	Central Sprinkler Co.	Letter re: Defense of Agbobu v. Central Sprinkler Co.	2/5/93	2	A/C, WP
401	C. Schiavone	R. Cullen, Esq.	None	Fax with attachments re: Defense of Agbobu v. Central Sprinkler Co.	12/18/92	4	A/C
402	C. Schiavone	R. Cullen, Esq.	None	Fax with attachments re: Defense of Agbobu v. Central Sprinkler Co.	12/18/92	4	A/C, WP
403	A. Salinas, Esq.	R. Cullen, Esq.	C. Schiavone	Letter re: Defense of Agbobu v. Central Sprinkler	10/6/92	1	A/C
404	R. Cullen, Esq.	Wilson, Kenna & Borys	None	Billing records re: Defense of Agbobu v. Central Sprinkler	9/11/92	2	A/C, WP
405	C. Schiavone	R. Cullen, Esq.	None	Letter re: Defense of Agbobu v. Central Sprinkler	9/22/92	1	A/C
406	R. Cullen, Esq.	Wilson, Kenna & Borys	None	Billing records re: Defense of Agbobu v. Central Sprinkler	9/11/92	2	A/C, WP
407	R. Wilson, Esq.	R. Cullen, Esq.	C. Schiavone	Letter re: Defense of Agbobu v. Central Sprinkler	8/19/92	1	A/C
408	R. Cullen, Esq.	C. Schiavone	None	Letter re: Defense of Agbobu v. Central Sprinkler Co.	8/17/92	1	A/C
409	C. Schiavone	R. Cullen, Esq.	None	Letter with attachments re: Defense of Agbobu v. Central Sprinkler	8/11/92	18	A/C
410	C. Schiavone	R. Cullen, Esq.	None	Fax with attachments re: Defense of Agbobu v. Central Sprinkler	7/23/92	3	A/C
411	R. Cullen, Esq.	C. Schiavone	None	Fax with attachments re: Defense of Agbobu v. Central Sprinkler	7/16/92	5	A/C
412	B. Wilson, Esq.	N. Duvall	C. Schiavone	Letter re: Defense of Agbobu v. Central Sprinkler	7/15/92	2	A/C

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
413	R. Wilson, Esq.	R. Cullen, Esq.	None	Letter re: Defense of Agbobu v. Central Sprinkler	7/19/92		A/C
414	R. Wilson, Esq.	R. Cullen, Esq.	C. Schiavone	Letter re: Defense of Agbobu v. Central Sprinkler	6/19/92	2	A/C
415	C. Schiavone	N. Duvall	None	Phone slips re: Agbobu v. Central Sprinkler	6/25/92	2	A/C
416	J. Baker	R. Cullen, Esq.	C. Schiavone	Letter re: Defense of Agbobu v. Central Sprinkler	6/19/92	1	A/C
417	R. Cullen, Esq.	C. Schiavone	None	Fax with attachments re: Agbobu matter	6/18/92	8	A/C
418	G. Meyer	J. Bisset, Esq.	None	Letter with attachments re: Settlement of Sherrelwood claim	11/26/90	4	A/C
419	W. Pardue	J. Bisset, Esq.	T. Farrel	Letter with attachment re: Defense of Sherrelwood claim	9/21/90	9	A/C
420	J. Bisset, Esq.	C. Schiavone	None	Fax with attachments re: Defense of Sherrelwood matter	5/18/90	5	A/C
421	W. Pardue	J. Bisset, Esq.	T. Farrel	Letter re: Defense of Sherrelwood matter	6/12/89	1	A/C
422	W. Pardue	J. Bisset, Esq.	None	Fax with attachments re: Sherrelwood matter	3/23/90	7	A/C
423	J. Bisset, Esq.	W. Pardue	None	Hand written note with attachments re: Defense documents in Sherrelwood matter	4/3/90	25	A/C, WP
424	W. Pardue	P. Dupont	None	Letter with attachment re: Defense of Sherrelwood matter	4/5/90	7	A/C
425	None	None	None	Complaint with hand written notes in Sherrelwood v. Central Sprinkler		7	WP

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
426	W. Pardue	J. Bisset, Esq.	T. Farrel	Letter with attachments re: Defense of Sherrelwood matter	3/13/90	68	A/C
427	W. Pardue	J. Bisset, Esq.	None	Letter re: Discovery in Sherrelwood matter	3/2/90	1	A/C
428	W. Pardue	J. Bisset, Esq.	None	Telephone message slip re: Defense of Sherrelwood matter	6/13/90	1	A/C
429	T. Farrel	J. Bisset, Esq.	W. Pardue	Letter re: Defense of Sherrelwood matter	8/2/89	2	A/C
430	W. Pardue	J. Fenningham, Esq.	B. Buchanan	Letter with attachments re: Hammer Services v. Central Sprinkler	9/5/91	14	A/C
431	C. Schiavone	R. Cullen, Esq.	None	Fax with attachments re: Settlement of Great Lakes Plumbing v. Central Sprinkler	5/30/91	3	A/C
432	C. Schiavone	R. Cullen, Esq.	None	Fax with attachment re: Settlement of Great Lakes Plumbing matter		3	A/C
433	C. Schiavone	J. Fenningham, Esq.	None	Fax with attachments re: Great Lakes Plumbing matter	4/24/91	3	A/C
434	None	W. Pardue	None	Hand written notes re: Defense of Great Lakes Plumbing matter	None	2	A/C, WP
435	R. Cullen, Esq.	C. Schiavone	None	Fax with attachments re: Great Lakes Plumbing matter	4/22/91	14	A/C

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
436	G.G. Meyer J.R. Buchanan M. Graham E.J. McKelvey J. Walhof W.J. Pardue G.S. Polan R. Hobbs	A.T. Sabol	None	Memorandum re: Instructions from defense counsel re: McCormick Litigation	4/9/92	1	A/C, WP
437	G.G. Meyer	A.T. Sabol	None	Memorandum re: development of defense to McCormick claims	2/4/92	6	WP
438	G. Meyer	D.J. Bradley, Esq.	None	Letter re: attorney's assessment of McCormick claims	4/9/92	3	A/C, WP
439	D. McCormick E.J. McKelvey	G.G. Meyer	None	Exhibit for preparation of defense of McCormick claims	4/5/90	2	WP
440	G. Myer, Esq.	D.J. Bradley, Esq.	None	Letter with attachments and handwritten notes re: preparation of defense response to McCormick Statement of Claim	1/10/92	288	A/C, WP
441	None	None	None	Handwritten notes of meeting re: McCormick claims	?	1	WP
442	W. Pardue	D. McCormick	S. Meyer	Letter: Exhibit for preparation of defense to McCormick claims	3/26/87	2	WP
443	D. McCormick	G. Polan	W. Pardue A. Schoenberger	Letter: Exhibit for preparation of defense to McCormick claims	8/14/87	1	WP
444	A. Sabol W. Pardue	E. McKelvey	None	Exhibit: Letter with attached correspondence from counsel for use in preparation of defense to McCormick claims	4/9/90	4	WP
445	D. McCormick	G.R. Bembridge	None	Letter from counsel re: draft contract for purchase of land	3/28/90	2	A/C, WP

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
446	None	None	None	Draft contract for sale of land with handwritten notes	1990	7	A/C, WP
447	A. Stimpson	I.S. Harrison	None	Letter from counsel re: Patent Application	11/28/86	3	A/C
448	None	None	G. Meyer W. Pardue A. Sabol J. Curran, Jr. V. Weigand R. Hobbs S. Sack	Memorandum re: claims against Central Sprinkler	9/17/91	7	A/C, WP
449	None	None	G. Meyer W. Pardue A. Sabol J. Curran, Jr. V. Weigand R. Hobbs S. Sack	Memorandum re: claims against Central Sprinkler	9/13/91	7	A/C, WP
450	R. Miller, Esq.	W. Pardue	None	Letter with attachment re: Sarano v. Central Sprinkler	10/24/79	6	A/C
451	R. Miller, Esq.	W. Pardue	None	Letter with attachment re: annual audit	11/21/79	2	A/C
452	R. Miller, Esq.	W. Pardue	None	Letter re: annual audit	2/26/80	1	A/C
453-458	R. Miller, Esq.	W. Pardue	None	Letter with (separately numbered) attachments re: draft purchase order language	3/21/80	6	A/C, WP
459	R. Miller, Esq.	W. Pardue	None	Letter re: draft purchase order language	4/8/80	1	A/C/W
460	None	T. O'Reilly, Esq.	None	Memorandum from counsel re: labor investigation	?	6	A/C, WP

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
461	T. O'Reilly, Esq.	C. Whitney	None	Letter with attachment re: draft labor agreement	10/29/93	26	A/C, WP
462	T. O'Reilly, Esq. G.G. Meyer A.T. Sabol J.F. McHugh	C. Whitney	W. Pardue A. Schoenberger	Memorandum with attachment re: labor negotiations	10/11/93	7	A/C, WP
463	C. Whitney	T. O'Reilly, Esq.	T. Sharbaugh, Esq.	Letter with attachments re: labor negotiations	9/8/93	3	A/C, WP
464	W. Pardue	T. O'Reilly, Esq.	None	Fax with attachment re: labor negotiations	1/14/94	2	A/C, WP
465	None	None	None	Memorandum re: labor negotiations	?	2	A/C, WP
466	None	None	None	Draft labor agreement	11/09/90	31	A/C, WP
467	None	None	None	Draft labor agreement	10/26/90	29	A/C, WP
468	None	None	None	Excerpt of draft labor agreement with handwritten notes	?	1	A/C, WP
469	W. Pardue	Pelino & Lentz	None	Memorandum with handwritten notes re: status of labor negotiations	10/12/90	4	A/C, WP
470	W. Pardue	M. Lentz, Esq.	None	Fax with attachment re: status of labor negotiations	10/12/90	5	A/C, WP
471	W. Pardue	Pelino & Lentz	None	Memorandum with handwritten notes re: status of labor negotiations	10/8/90	7	A/C, WP
472	W. Pardue	Pelino & Lentz	None	Memorandum with handwritten notes re: status of labor negotiations	10/8/90	8	A/C, WP
473	W. Pardue	Pelino & Lentz	None	Fax with attachment re: status of labor negotiations	10/12/90	6	A/C, WP

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
474	W. Pardue	M. Lentz, Esq.	None	Letter re: status of labor negotiations	3/27/90	2	A/C, WP
475-476	W. Pardue	R. Miller, Esq.	None	Letter with (separately numbered) attachment re: corporate stock	4/7/80	1	A/C
477	R. Miller, Esq.	W. Pardue	None	Letter re: lease	10/29/80	1	A/C
478	J. Rosen, Esq.	W. Pardue	None	Letter re: settlement of claims	12/12/80	1	A/C, WP
479	R. Miller, Esq.	W. Pardue	None	Letter re: Hager Hinge Co. v. Central Sprinkler	2/12/80	1	A/C, WP
480	R. Miller, Esq.	W. Pardue	None	Letter re: OSHA	5/13/81	1	A/C
481	M. Berman, Esq.	W. Pardue	None	Letter re: labor agreement	11/9/81	1	A/C
482	R. Miller, Esq.	W. Pardue	None	Letter re: settlement of claims	11/20/81	1	A/C, WP
483-485	E.C. Scofield, III., Esq.	W. Pardue	None	Letter with (separately numbered) attachments re: defense of Hager Hinge Co. v. Central Sprinkler	11/18/81	3	A/C, WP
486	T.J. Stevens, Esq.	W. Pardue	None	Letter re: sale agreement	12/30/81	1	A/C
487	E.C. Gonda, Esq.	W. Pardue	None	Letter re: patent application	4/19/83	1	A/C
488	E.C. Gonda, Esq.	W. Pardue	None	Letter re: patent application	10/25/83	3	A/C
489	E.C. Gonda, Esq.	W. Pardue	None	Letter re: patent infringement claim	10/25/83	2	A/C
490	J.C. Fenningham, Esq.	W. Pardue	None	Letter re: settlement of claims	12/13/83	1	A/C, WP
491	S. Hamilton, Esq.	W. Pardue	None	Letter re: defense of claims	11/2/88	1	A/C, WP
492	A. Nishimura, Esq.	W. Pardue	None	Letter with attachment re: Chiu v. Central Sprinkler	6/6/88	2	A/C, WP
493	W. Pardue	M. Lentz, Esq.	None	Letter with attachment re: labor negotiations	11/10/87	3	A/C, WP

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
494	W. Pardue	M. Lentz, Esq.	None	Letter with attachments re: labor negotiations	10/22/87	50	A/C, WP
495	D. Chmelko	M. Lentz, Esq.	W. Pardue	Letter re: labor negotiations	9/2/87	1	WP
496	None	None	None	Handwritten notes re: labor negotiations	?	2	WP
497	None	E. Shaller	None	Memorandum with attachments and handwritten notes re: labor negotiations	?	33	A/C, WP
498	None	None	None	Draft labor agreement with notes	?	21	A/C, WP
499	W. Pardue	M. Berman, Esq.		Letter re: labor negotiations	7/22/85	3	A/C, WP
500	None	None	None	Handwritten notes re: labor negotiations	?	3	WP
501	T. Woodward	W. Pardue	None	Letter re: settlement of claim against insurance policy	10/21/80	1	WP
502	P. De Camara	R. Miller, Esq.	C. Palmer	Letter with attachment re: patent	4/3/78	2	A/C, WP
503	P. Camara	R. Miller, Esq.	W. Meyer C. Palmer	Letter with attachment re: patent	5/22/78	3	A/C, WP
504	W. Pardue	R. Miller, Esq.	None	Letter with attachments re: purchase order language	5/1/80	13	A/C, WP
505	Central Sprinkler	Noyes Services	None	Memorandum re: claims against product liability insurance policy	11/10/87	22	WP
506	Central Sprinkler	Noyes Services	None	Letter with attached memoranda re: claims against insurance policies	7/31/85	81	WP

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507	G. Meyer S. Meyer J. Golinveaux W. Pardue A. Sabol K. Dolan D. Yuhas A. Post K. Bilo	C. Schiavone J.C. Fenningham, Esq.	None	Memorandum with attachments re: Hart v. Central Sprinkler	10/28/97	17	A/C, WP
508	Central Sprinkler	Morgan, Lewis & Bockius and Corr, Stevens & Fenningham	None	Memorandum re: Omega Sprinkler litigation document production	3/19/98	9	A/C, WP
509	None	J.C. Fenningham, Esq.	None	Memorandum re: product liability claims	3/21/86	17	A/C, WP
510	G. Meyer	J.C. Fenningham, Esq.	None	Draft letter re: Palmer House claim	2/25/86	3	A/C, WP
511	R. Hobbs	J.C. Fenningham, Esq.	None	Letter re: deposition	5/1/97	6	A/C, WP
512	C. Schiavone R. Hobbs	J.C. Fenningham, Esq.	None	Letter with attachment re: deposition	3/5/97	6	A/C, WP
513	W. Custer, Esq.	J.C. Fenningham, Esq.	Central Sprinkler Co.	Letter re: deposition	3/4/97	1	A/C, WP
514	F. Mazzeo, Esq.	C. Schiavone	G. Meyer R. Hobbs J.C. Fenningham, Esq.	Letter with attachments re: Fort Wayne Cross Roads	9/10/97	10	A/C, WP
515	C. Schiavone R. Hobbs	J.C. Fenningham, Esq.	None	Letter re: Mann v. Central Sprinkler	9/18/95	2	A/C, WP
516	J.C. Fenningham, Esq.	K. Yadlosky	T. Mahoney, Esq. R. Mitchell, Esq.	Letter re: Mann v. Central Sprinkler	9/15/95	1	A/C, WP

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
517	G. Meyer S. Meyer A. Sabol B. Pardue J. Golinveaux G. Polan D. Rice R. Hobbs D. Yuhas K. Dolan A. Post K. Bilo	C. Schiavone J.C. Fenningham, Esq.	None	Memorandum re: Hart v. Central Sprinkler	10/31/97	1	A/C, WP
518	R. Hobbs	C. Schiavone J.C. Fenningham, Esq.	None	Memorandum re: Hart v. Central Sprinkler	10/28/97	2	A/C, WP
519	G.G. Meyer	R. Hobbs	J. Golinveaux G. Polan E. Sauers	Memorandum with attached letter from counsel re: trademark application advice from counsel	3/25/94	4	A/C, WP
520	J. Meadway, Esq.	G. Meyer	None	Fax with attachment re: trademark case	3/28/94	3	A/C, WP
521	C. Schiavone	F. Mazzeo, Esq.	None	Mailer re: Autry claim	?	1	A/C
522	R. Hobbs	F. Mazzeo, Esq.	None	Fax with attached draft letter re: Autry claim	2/19/98	5	A/C, WP
523	R. Hobbs	F. Mazzeo, Esq.	None	Letter with attachments re: Autry claim	2/16/98	5	A/C, WP
524	R. Hobbs	F. Mazzeo, Esq.	None	Fax with attachment re: expert	2/13/98	4	A/C, WP
525	R. Hobbs	F. Mazzeo, Esq.	None	Fax with attachment re: expert	2/12/98	22	A/C, WP
526	R. Hobbs	T.P. Stevens, Esq.	None	Case memorandum re: Autry claim	7/7/97	5	A/C, WP
527	R. Hobbs	F. Mazzeo, Esq.	None	Fax with attachment re: expert opinion in Autry claim	2/16/98	2	A/C, WP

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528	R. Hobbs R. Cameron A. Dracos	C. Schiavone	J.C. Fenningham, Esq.	Memorandum re: instructions from counsel re: meeting	10/31/97	1	A/C, WP
529	None	J.C. Fenningham, Esq.	None	Case file re: Mel's Marina	10/09/97	1	A/C, WP
530	None	J.C. Fenningham, Esq.	None	Case file re: Mel's Marina	10/09/97	1	A/C, WP
531	None	J.C. Fenningham, Esq.	None	Case file re: Mel's Marina	10/09/97	1	A/C, WP
532	None	J.C. Fenningham, Esq.	None	Case file re: Mel's Marina	10/09/97	1	A/C, WP
533	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	4/8/98	1	WP
534	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	4/8/98	1	WP
535	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	4/8/98	2	WP
536	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	4/8/98	1	WP
537	File	J.C. Fenningham, Esq.	None	Memorandum re: Mel's Marina	3/6/98	2	WP
538	R. Estes	T.P. Stevens, Esq.	Central Sprinkler Co. J.C. Fenningham, Esq.	Letter re: defense of potential claim at Mel's Marina	1/26/98	2	A/C, WP
539	T.P. Stevens, Esq.	R. Estes	None	Fax with attachment re: defense of potential claim at Mel's Marina	1/20/97	7	A/C, WP
540	J.C. Fenningham, Esq.	R. Estes	None	Telephone message slip and attorney notes re: Mel's Marina	1/19/98	3	A/C, WP
541	J.C. Fenningham, Esq.	R. Estes	None	Letter re: defense of potential claim at Mel's Marina	1/20/98	6	A/C, WP
542	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	1/13/98	1	WP
543	F. Bradley	T.P Stevens, Esq.	None	Fax re: Mel's Marina	1/16/98	1	WP
544	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	1/14/98	1	WP

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545	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	1/14/98	1	WP
546	S.L. Seltzer	R. Sanders	J.C. Fenningham, Esq. K. Dolan	Letter with attachment re: Mel's Marina	1/14/98	16	A/C, WP
547	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	12/15/97	2	WP
548	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	12/12/97	1	WP
549	G.G. Meyer	T.P. Stevens, Esq.	None	Letter with attachments re: Mel's Marina	12/29/97	43	A/C, WP
550	J.C. Fenningham, Esq. T.P. Stevens, Esq.	K. Dolan	None	Memorandum re: Mel's Marina	12/4/97	19	A/C, WP
551	J.C. Fenningham, Esq. T.P. Stevens, Esq.	K. Dolan	None	Memorandum re: Mel's Marina	12/4/97	19	A/C, WP
552	C. Schiavone	T.P. Stevens, Esq.	None	Letter re: Mel's Marina	12/10/97	2	A/C, WP
553	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	12/4/97	1	WP
554	C. Schiavone	T.P. Stevens, Esq.	None	Letter re: Mel's Marina	12/3/97	1	A/C, WP
555	C. Schiavone	T.P. Stevens, Esq.	None	Letter re: Mel's Marina	12/3/97	3	A/C, WP
556	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	12/4/97	1	WP
557	F. Bradley	T.P. Stevens, Esq.	Central Sprinkler	Letter to expert re: Mel's Marina	12/3/97	5	A/C, WP
558	F. Bradley	T.P. Stevens, Esq.	Central Sprinkler	Fax to expert re: Mel's Marina	12/3/97	2	A/C, WP
559	C. Schiavone	T.P. Stevens, Esq.	None	Fax re: Mel's Marina	12/3/97	2	A/C, WP
560	State Fire Marshall	T.P. Stevens, Esq.	Central Sprinkler J.C. Fenningham, Esq.	Letter with attachment re: Mel's Marina	12/3/97	4	WP
561	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	12/2/97	1	WP

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
562	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	12/2/97	1	WP
563	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	12/2/97	1	WP
564	G.G. Meyer	J.C. Fenningham, Esq.	None	Letter re: Mel's Marina	11/26/97	2	A/C
565	C. Schiavone	T.P. Stevens, Esq.	None	Fax with attachment re: Mel's Marina	11/25/97	9	A/C, WP
566	T.P. Stevens, Esq.	F. Bradley	None	Telephone message slip with attached notes re: Mel's Marina	11/24/97	4	A/C, WP
567	C. Schiavone	T.P. Stevens, Esq.	J.C. Fenningham, Esq.	Letter re: Mel's Marina	11/24/97	2	A/C, WP
568	T.P. Stevens, Esq.	D. Hozinec	None	Letter re: Mel's Marina	11/17/97	1	WP
569	F. Bradley	K. Dolan	T. Stevens C. Schiavone	Letter re: Mel's Marina	11/13/97	1	A/C, WP
570	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/31/97	1	WP
571	B. Kerns	T.P. Stevens, Esq.	None	Fax with attachment re: Mel's Marina	10/28/97	2	WP
572	K. Dolan	T.P. Stevens, Esq.	J.C. Fenningham, Esq.	Letter re: Mel's Marina	10/27/97	4	A/C, WP
573	J.C. Fenningham, Esq.	T.P. Stevens, Esq.	None	Memorandum re: Mel's Marina	10/27/97	8	A/C, WP
574-575	J.C. Fenningham, Esq.	T.P. Stevens, Esq.	None	Memorandum with (separately numbered) attachment re: Mel's Marina	10/27/97	5	A/C, WP
576	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/24/97	3	WP
577	S. Seltzer	J.C. Fenningham, Esq.	C. Schiavone	Letter with attachment re: Mel's Marina	10/23/97	9	A/C, WP
578	S. Seltzer	J.C. Fenningham, Esq.	None	Fax re: Mel's Marina	10/23/97	2	A/C, WP
579	C. Schiavone	J.C. Fenningham, Esq.	None	Fax re: Mel's Marina	10/23/97	2	A/C, WP

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580	J.C. Fenningham, Esq.	S. Seltzer	None	Telephone message slip with attorney notes re: Mel's Marina	10/21/97	2	A/C, WP
581	J.C. Fenningham, Esq.	T.P. Stevens, Esq.	None	Memorandum re: Mel's Marina	10/21/97	7	WP
582	J.C. Fenningham, Esq.	T.P. Stevens, Esq.	None	Memorandum re: Mel's Marina	10/21/97	7	WP
583	J.C. Fenningham, Esq.	T.P. Stevens, Esq.	None	Memorandum re: Mel's Marina	10/21/97	7	WP
584	T.P. Stevens, Esq.	J.C. Fenningham, Esq.	None	Memorandum re: Mel's Marina	10/21/97	1	WP
585	K. Dolan	T.P. Stevens, Esq.	None	Fax re: Mel's Marina	10/17/97	2	A/C, WP
586	T.P. Stevens, Esq.	E. Jeager	None	Telephone message slip with attorney notes re: Mel's Marina	10/17/97	2	WP
587	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/17/97	1	WP
588	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/17/97	1	WP
589	T.P. Stevens, Esq.	Central Sprinkler Engineering	None	Fax re: Mel's Marina	10/16/97	2	A/C
590	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/16/97	2	WP
591	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/15/97	4	WP
592	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/15/97	1	WP
593	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/15/97	1	WP
594	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/15/97	1	WP
595	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/15/97	2	WP
596	R. Hobbs	R. Sanders	None	Fax re: Mel's Marina	10/15/97	1	WP
597	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/15/97	1	WP
598	R. Hobbs	J.C. Fenningham, Esq.	None	Fax with attachment re: Mel's Marina	10/14/97	6	A/C, WP

A/C = Attorney/Client privilege
WP = Work Product

Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
599	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/13/97	2	WP
600	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/13/97	1	WP
601	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/13/97	2	WP
602	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/13/97	1	WP
603	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/13/97	1	WP
604	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/13/97	1	WP
605	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/9/97	1	WP
606	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/9/97	2	WP
607	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/7/97	1	WP
608	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/7/97	1	WP
609	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/6/97	1	WP
610	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/6/97	1	WP
611	None	None	None	Corr, Stevens case file re: Mel's Marina	?	1	WP
612	J.C. Fenningham, Esq.	R. Sanders	None	Telephone message slip re: Mel's Marina	10/13/97	1	A/C, WP
613	J.C. Fenningham, Esq.	R. Sanders	None	Telephone message slip re: Mel's Marina	10/13/97	1	A/C, WP
614	J.C. Fenningham, Esq.	M. Churchill	None	Note with attachment re: Mel's Marina	?	4	A/C
615	None	None	None	Corr, Stevens case file re: Mel's Marina	?	1	WP
616	None	None	None	Corr, Stevens case file re: Mel's Marina	?	1	WP
617	None	T.P. Stevens, Esq.	None	Draft Memorandum re: Mel's Marina	10/16/97	19	WP
618	None	T.P. Stevens, Esq.	None	Draft Memorandum re: Mel's Marina	10/16/97	19	WP

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
619	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/20/97	4	WP
620	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	10/21/97	1	WP
621	None	None	None	Corr, Stevens case file re: Mel's Marina	?	1	WP
622	K. Sanzo, Esq.	C. Schiavone	T. Stevens, Esq.	Letter re: Mel's Marina	12/2/97	1	A/C
623	F. Bradley	K. Dolan	C. Schiavone T. Stevens, Esq.	Letter re: Mel's Marina	11/13/97	1	WP
624	None	K. Dolan	None	Notes re: Mel's Marina	11/11/97	2	A/C, WP
625	B. Kerns	K. Dolan	None	Fax with attachment re: Mel's Marina	10/24/97	4	WP
626	B. Kerns	Interested Parties	None	Letter re: Mel's Marina	10/24/97	3	WP
627	K. Dolan	T.P. Stevens, Esq.	J.C. Fenningham, Esq.	Letter re: Mel's Marina	10/27/97	2	A/C, WP
628	K. Dolan	T.P. Stevens, Esq.	None	Fax with attachment re: Mel's Marina	10/27/97	5	A/C, WP
629	K. Dolan	T.P. Stevens, Esq.	None	Fax with attachment re: Mel's Marina	10/7/97	19	A/C, WP
630	None	K. Dolan	None	Memorandum re: Mel's Marina prepared for counsel	10/16/97	18	A/C, WP
631	None	K. Dolan	None	Notes prepared for counsel re: Mel's Marina	?	2	A/C, WP
632	R. Hobbs	J.C. Fenningham, Esq.	None	Notes of voicemail from counsel re: Mel's Marina	10/13/97	7	A/C, WP
633	R. Hobbs	J.C. Fenningham, Esq.	None	Fax re: Mel's Marina	10/14/97	3	A/C, WP
634	None	None	None	Corr, Stevens case file re: Mel's Marina	?	1	WP
635	None	None	None	Corr, Stevens case file re: Mel's Marina	?	1	WP

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
636	None	T.P. Stevens, Esq.	None	Fire Marshall's Report with attorney notes	12/8/97	14	WP
637	None	T.P. Stevens, Esq.	None	Fire Marshall's Report with attorney notes	12/8/97	14	WP
638	None	None	None	Corr, Stevens case file re: Mel's Marina	?	1	WP
639	J.C. Fenningham, Esq.	F. Bradley	None	Memorandum re: Mel's Marina	12/15/97	7	WP
640	J.C. Fenningham, Esq.	F. Bradley	None	Memorandum re: Mel's Marina	12/15/97	7	WP
641	J.C. Fenningham, Esq.	F. Bradley	None	Memorandum re: Mel's Marina	12/15/97	3	WP
642	J.C. Fenningham, Esq.	F. Bradley	None	Memorandum re: Mel's Marina	12/15/97	3	WP
643	J.C. Fenningham, Esq.	F. Bradley	None	Memorandum re: Mel's Marina	12/15/97	4	WP
644	J.C. Fenningham, Esq.	F. Bradley	None	Memorandum re: Mel's Marina	12/15/97	4	WP
645	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	3/20/98	1	WP
646	J.C. Fenningham, Esq. T.P. Stevens, Esq.	F. Bradley	None	Fax with attached memorandum re: Mel's Marina	3/13/98	7	WP
647	T.P. Stevens, Esq.	F. Bradley	None	Fax with attached memorandum re: Mel's Marina	3/16/98	8	WP
648	None	T.P. Stevens, Esq.	None	Attorney notes re: Mel's Marina	12/22/97	1	WP
649	File	F. Bradley	None	Memorandum re: Mel's Marina	12/15/97	7	WP
650	File	F. Bradley	None	Memorandum re: Mel's Marina	12/15/97	7	WP
651	File	F. Bradley	None	Memorandum re: Mel's Marina	12/15/97	4	WP
652	File	F. Bradley	None	Memorandum re: Mel's Marina	12/15/97	4	WP
653	File	F. Bradley	None	Memorandum re: Mel's Marina	12/15/97	3	WP
654	File	F. Bradley	None	Memorandum re: Mel's Marina	12/15/97	3	WP

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
655	None	T.P. Stevens, Esq.	None	Attorney note with attached memorandum re: Mel's Marina	12/22/97	2	WP
656	J.C. Fenningham, Esq.	J. Foley	None	Memorandum re: Mel's Marina	1/20/98	3	WP
657	None	T.P. Stevens, Esq.	None	Attorney note with attached memorandum re: Mel's Marina	12/22/97	2	WP
658	None	None	None	Corr, Stevens case file re: Mel's Marina	?	1	WP
659	None	None	None	Corr, Stevens case file re: Mel's Marina	?	1	WP
660	J.C. Fenningham, Esq.	T.P. Stevens, Esq.	None	Memorandum re: Mel's Marina	10/21/97	9	WP
661	None	T.P. Stevens, Esq.	None	Attorney note with attached memorandum re: Mel's Marina	11/24/97	4	WP
662	None	None	None	Investigator's materials re: Mel's Marina	10/3/97	23	WP
663	None	None	None	Investigator's materials re: Mel's Marina	11/5/97	10	WP
664	T.P. Stevens, Esq.	F. Bradley	None	Memorandum re: Mel's Marina	12/4/97	1	WP
665	None	None	None	Investigator's materials re: Mel's Marina	10/3/97	18	WP
666	T.P. Stevens, Esq.	K. Pierce	S. Brunette, Esq. H. Glover	Letter and investigator's materials re: Mel's Marina	2/3/98	12	WP
667	J.C. Fenningham, Esq.	Fred Bradley	None	Memorandum and materials re: Mel's Marina	4/2/98	104	WP
668	None	None	None	Corr, Stevens case file re: Mel's Marina	?	1	WP
669	None	None	None	Corr, Stevens case file re: Mel's Marina	?	1	WP
670	None	None	None	Corr, Stevens case file re: Mel's Marina	?	1	WP

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
671	M. Litman, Esq.	P. De Camara	None	Letter re: patent	8/12/77	1	A/C
672	R. Miller, Esq.	P. De Camara	None	Letter re: patent	3/1/78	1	A/C
673	Central Sprinkler	S.C. Eggiman, Esq.	None	Materials re: Fashion Group claim	?	1	A/C
674	S.C. Eggiman, Esq.	W. Pardue	None	Letter re: Fashion Group claim	?	1	A/C
675	W. Pardue	S.C. Eggiman, Esq.	None	Letter re: Fashion Group Claim	8/14/79	1	A/C
676	W. Pardue	S.C. Eggiman, Esq.	None	Letter re: Fashion Group Claim	7/11/79	17	A/C
677	W. Pardue	B. Molhan	None	Letter re: Fashion Group Claim	4/16/79	1	A/C
678	S.C. Eggiman, Esq.	J.R. Anderson	None	Letter re: Fashion Group claim	4/9/79	6	A/C
679	W. Pardue	S.C. Eggiman, Esq.	None	Letter re: Fashion Group Claim	4/13/79	3	A/C
680	W. Pardue	S.C. Eggiman, Esq.	None	Letter re: Fashion Group Claim	4/30/79	1	A/C
681	W. Pardue	S.C. Eggiman, Esq.	None	Letter re: Fashion Group Claim	3/22/79	1	A/C
682	W. Pardue	S.C. Eggiman, Esq.	None	Letter re: Fashion Group Claim	10/4/78	5	A/C
683	S.C. Eggiman, Esq.	W. Pardue	None	Letter re: Fashion Group claim	5/23/79	7	A/C
684	S.C. Eggiman, Esq.	W. Pardue	None	Letter re: Fashion Group claim	5/23/79	7	A/C
685	W. Pardue	S.C. Eggiman, Esq.	None	Letter re: Fashion Group Claim	5/17/79	1	A/C
686	W. Pardue	S.C. Eggiman, Esq.	J.F. Kenney	Letter re: Fashion Group Claim	11/30/78	1	A/C
687	W.D. Flaskamp, Esq.	D.S. Bennett, Jr.	W. Pardue	Letter re: claim against Central Sprinkler	6/8/78	1	A/C
688	W. Pardue	B. Hepler	None	Letter re: Fashion Group claim	5/2/78	1	A/C
689	W. Pardue	B. Hepler	None	Letter re: Fashion Group claim	5/2/78	1	A/C
690	W.D. Flaskamp, Esq.	J. Rose	J. Kenny	Letter re: Fashion Group claim	4/17/78	1	A/C

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
691	W. Pardue	R. Miller, Esq.	None	Letter re: Fashion Group claim	4/24/78	2	A/C
692	C. Noel, Esq.	T. McGrath, Esq.	W. Pardue W.D. Flaskamp	Letter re: Fashion Group claim	4/26/78	2	WP
693	R. Miller, Esq.	W. Pardue	P. De Camara	Letter re: Fashion Group claim	4/12/78	1	A/C
694	A. Sabol	T. DeVita, Esq.	None	Fax with attachment re: financial statement	3/7/95	9	A/C
695	J. Link	G. Pelose, Esq.	T. Sharbaugh, Esq.	Fax re: SEC filing	4/1/96	1	A/C
696	J.C. Fenningham, Esq.	R. Hobbs	B. Bandura C. Schiavone	Letter re: Massingale v. Central Sprinkler	4/2/97	1	A/C
697	J.C. Fenningham, Esq.	R. Hobbs	None	Letter re: Massingale v. Central Sprinkler	4/2/97	1	A/C
698	J.C. Fenningham, Esq.	R. Hobbs	None	Memorandum re: approval of draft language	6/6/96	1	A/C
699	J.C. Fenningham, Esq.	R. Hobbs	None	Memorandum re: approval of draft language	6/6/96	1	A/C
700	J.C. Fenningham, Esq.	R. Hobbs	None	Memorandum re: approval of draft language	5/31/96	1	A/C
701	Central Sprinkler	Morgan, Lewis & Bockius	None	Fax with attachments re: financial statement	3/7/95	5	A/C
702	A. Sabol	G. Pelose, Esq.	None	Fax with attachments re: financial statement	6/11/97	12	A/C
703	J. Link	G. Pelose, Esq.	None	Fax with attachments re: financial statement	6/8/97	2	A/C
704	G. Pelose, Esq.	J. Link	None	Fax re: financial statement	6/6/97	2	A/C

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Doc No.	To	From	CC's	Subject Matter	Date	No. of Pages	Basis
705	Central Sprinkler	Morgan, Lewis & Bockius	None	Fax with attachments re: financial statement	3/7/95	2	A/C
706	Central Sprinkler	Morgan, Lewis & Bockius	None	Fax with attachments re: financial statement	3/7/95	2	A/C
707	A. Sabol	G. Pelose, Esq.	None	Fax with attachments re: financial statement	6/11/97	19	A/C
708	A. Sabol	G. Pelose, Esq.	None	Fax with attachments re: financial statement	3/13/97	17	A/C
709	A. Sabol	J. Mirage, Esq.	None	Fax with attachment re: financial statement	1/26/98	21	A/C

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WP = Work Product

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION
1998 MAY 20 P 4:51

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents.	)	

COMPLAINT COUNSEL'S NOTICE OF SERVICE OF SECOND SET OF SUPPLEMENTAL DOCUMENTS IN RESPONSE TO RESPONDENTS' FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS

Pursuant to its continuing duty to supplement discovery responses as mandated by 16 C.F.R. § 1025.31(f), Complaint Counsel hereby provides supplemental documents in response to Respondents' First Request for Production of Documents and Things. Complaint Counsel provides these documents without waiving objections stated in Complaint Counsel's Responses to Respondents' First Set of Interrogatories and Complaint Counsel's Responses to Respondents' First Request for Production of Documents.

DATED: May 20, 1998

Deborah S. Orlove

Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.
Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, Maryland 20814
301-504-0626

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, **COMPLAINT COUNSEL'S NOTICE OF SERVICE OF SECOND SET OF SUPPLEMENTAL DOCUMENTS IN RESPONSE TO RESPONDENTS' FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS**, and **COMPLAINT COUNSEL'S SUPPLEMENTAL RESPONSES TO RESPONDENTS' FIRST SET OF INTERROGATORIES** were filed with the Secretary of the Commission, and telecopied and sent via overnight express to the following:

J. Gordon Cooney, Jr., Esq.
Thomas P. Hogan, Jr., Esq.
Emily J. Lawrence, Esq.
MORGAN, LEWIS & BOCKIUS LLP
2000 One Logan Square
Philadelphia, PA 19103
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CORR, STEVENS & FENNINGHAM
Five Neshaminy Interplex, Suite 315
Trevose, PA 19053
(215) 639-4070
fax (215) 639-8995
Attorneys for Central Sprinkler Corporation and Central Sprinkler Company

Pursuant to Respondents' instructions, documents were served only upon J. Gordon Cooney, Jr., Esq., at the above address. A copy was also served on the Presiding Officer pursuant to 16 C.F.R. § 1025.31(h) at:

The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
401 M St., S.W.
Mail Code 1900 L
Washington, DC 20460
(202) 564-6256
fax (202) 565-0044

Belinda V. Mitchell

Dated: 5/20/98

certif2.sup

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION
1998 MAY 20 P 4:51

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents.	)	

COMPLAINT COUNSEL'S SUPPLEMENTAL RESPONSES TO RESPONDENTS' FIRST SET OF INTERROGATORIES

Complaint Counsel hereby supplements its responses to Respondents' First Set of Interrogatories.

118. Identify and describe any and all incidents known to the CPSC in which a consumer or other person has reported a fire in connection with use of the Omegas. For each such incident, state the following:

(a) the name and address of the consumer;

(b) the date of the incident involving the fire;

(c) a description of any and all property damage, if any, caused by or associated with the fire; and

(d) a description of any and all personal injuries, if any, sustained as a result of or associated with the fire.

Response: Complaint Counsel incorporates herein its objections and response to Interrogatory No. 118 as stated in its initial Response to Respondents' First Set of

Interrogatories. Without waiving its objections, Complaint Counsel provides the following information on fires and injuries due to failure of Omega sprinklers to function that have occurred since Complaint Counsel's initial Responses were filed, and/or of which Complaint Counsel has become aware since its initial Responses were filed:

9. (a) Location: Joshua Tree Apartments, 11545 N. Frank Lloyd Wright Blvd., Scottsdale, AZ

(b) 05/12/98

(c) several hundred thousand dollars damage to structure and contents (investigation continuing)

(d) burns and smoke inhalation to female victim

(investigation continuing into whether other injuries occurred)

10. (a) Location: Jackson Memorial Hospital, 1611 N.W. 12th Ave., Miami, FL 33136

(b) 07/31/90

(c) damage to hospital room and facilities (investigation continuing)

(d) burns and smoke inhalation to female victim, requiring emergency room treatment and amputation of right hand; injuries to male victim requiring emergency room treatment

(investigation continuing into whether other injuries occurred)

11. (a) Location: Escondido Gardens, 2500 South Escondido Blvd., Escondido, CA 92075

(b) Complaint Counsel has insufficient information at this time with which

to respond to this subpart.

(c) Complaint Counsel has insufficient information at this time with which to respond to this subpart.

(d) Complaint Counsel has insufficient information at this time with which to respond to this subpart.

12. (a) Location: Escondido Gardens, 2500 South Escondido Blvd., Escondido, CA 92075

(b) Complaint Counsel has insufficient information at this time with which to respond to this subpart; however, Complaint Counsel adds that this fire and Omega nonactivation reportedly occurred several years prior to the fire and non-activation listed in #11.

(c) Complaint Counsel has insufficient information at this time with which to respond to this subpart.

(d) Complaint Counsel has insufficient information at this time with which to respond to this subpart.

DATED: May 20, 1998

Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.
Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, Maryland 20814
301-504-0626

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UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION
1998 MAY 20 P 4:51

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents.	)	

COMPLAINT COUNSEL'S SUPPLEMENTAL RESPONSES TO RESPONDENTS' FIRST SET OF INTERROGATORIES

Complaint Counsel hereby supplements its responses to Respondents' First Set of Interrogatories.

118. Identify and describe any and all incidents known to the CPSC in which a consumer or other person has reported a fire in connection with use of the Omegas. For each such incident, state the following:

(a) the name and address of the consumer;

(b) the date of the incident involving the fire;

(c) a description of any and all property damage, if any, caused by or associated with the fire; and

(d) a description of any and all personal injuries, if any, sustained as a result of or associated with the fire.

Response: Complaint Counsel incorporates herein its objections and response to Interrogatory No. 118 as stated in its initial Response to Respondents' First Set of

Interrogatories. Without waiving its objections, Complaint Counsel provides the following information on fires and injuries due to failure of Omega sprinklers to function that have occurred since Complaint Counsel's initial Responses were filed, and/or of which Complaint Counsel has become aware since its initial Responses were filed:

9. (a) Location: Joshua Tree Apartments, 11545 N. Frank Lloyd Wright Blvd., Scottsdale, AZ

(b) 05/12/98

(c) several hundred thousand dollars damage to structure and contents (investigation continuing)

(d) burns and smoke inhalation to female victim

(investigation continuing into whether other injuries occurred)

10. (a) Location: Jackson Memorial Hospital, 1611 N.W. 12th Ave., Miami, FL 33136

(b) 07/31/90

(c) damage to hospital room and facilities (investigation continuing)

(d) burns and smoke inhalation to female victim, requiring emergency room treatment and amputation of right hand; injuries to male victim requiring emergency room treatment

(investigation continuing into whether other injuries occurred)

11. (a) Location: Escondido Gardens, 2500 South Escondido Blvd., Escondido, CA 92075

(b) Complaint Counsel has insufficient information at this time with which

to respond to this subpart.

(c) Complaint Counsel has insufficient information at this time with which to respond to this subpart.

(d) Complaint Counsel has insufficient information at this time with which to respond to this subpart.

12. (a) Location: Escondido Gardens, 2500 South Escondido Blvd., Escondido, CA 92075

(b) Complaint Counsel has insufficient information at this time with which to respond to this subpart; however, Complaint Counsel adds that this fire and Omega nonactivation reportedly occurred several years prior to the fire and non-activation listed in #11.

(c) Complaint Counsel has insufficient information at this time with which to respond to this subpart.

(d) Complaint Counsel has insufficient information at this time with which to respond to this subpart.

DATED: May 20, 1998

Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.
Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, Maryland 20814
301-504-0626

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UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION

1998 MAY 22 P 5:33

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents.	)	

COMPLAINT COUNSEL'S SECOND SUPPLEMENTAL RESPONSES TO RESPONDENTS' FIRST SET OF INTERROGATORIES

Complaint Counsel hereby supplements its responses to Respondents' First Set of Interrogatories, to include the following information on additional injuries reportedly sustained in a fire in which an Omega failed to activate, as well as information pertaining to a fire at the Department of the Treasury in which Omegas reportedly did activate, though Complaint Counsel has not confirmed this information. Additionally, Complaint Counsel amends its responses to Respondents' First Set of Interrogatories to include information pertaining to the failure in testing of an Omega manufactured after 1990, which had been installed in plastic piping. Amendments to Complaint Counsel's Responses are depicted in bold print.

Interrogatory

118. Identify and describe any and all incidents known to the CPSC in which a consumer or other person has reported a fire in connection with use of the Omegas. For each such incident, state the following:

(a) the name and address of the consumer;

(b) the date of the incident involving the fire;

(c) a description of any and all property damage, if any, caused by or associated with the fire; and

(d) a description of any and all personal injuries, if any, sustained as a result of or associated with the fire.

Response: Complaint Counsel incorporates herein its objections and response to Interrogatory No. 118 as stated in its initial Response to Respondents' First Set of Interrogatories. Without waiving its objections, Complaint Counsel amends its Response to Interrogatory No. 118 to include the following additional information on injuries sustained in fires in which Omega sprinklers reportedly failed to function, of which Complaint Counsel has become aware since its initial Responses were filed:

10. (a) Location: Jackson Memorial Hospital, 1611 N.W. 12th Ave., Miami, FL 33136

(b) 07/31/90

(c) damage to hospital room and facilities (investigation continuing)

(d) burns and smoke inhalation to female victim, requiring emergency room treatment and amputation of right hand; injuries to male victim requiring emergency room treatment;

injuries to two fire-fighters

(investigation continuing into whether other injuries occurred)

Complaint Counsel also amends its response to this Interrogatory to add the

following information that may be responsive, regarding a fire in which Omegas reportedly did activate, though the staff has not confirmed the reported activation, nor has it confirmed that the alleged activation was complete, and that it occurred within the appropriate time after the sprinkler(s) were exposed to their activation/triggering temperature(s):

13. (a) Location: Treasury Department

(b) unknown at this time

(c) unknown at this time

(d) unknown at this time

Interrogatory

79. (a) State whether the Complainant contends that any Omegas used with plastic piping systems installed after 1990 have ever failed to activate under any type of testing.

If so:

(b) identify and describe any such a contention;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it is unclear,

vague and ambiguous, as it is impossible to ascertain whether the Interrogatory seeks information regarding piping systems installed after 1990, or regarding Omegas installed after 1990 (regardless of when the system was installed). Complaint Counsel further objects to this Interrogatory to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory on the ground that the term "failed to activate" is undefined, unclear, vague and ambiguous. Complaint Counsel is unable to formulate a response to this Interrogatory without clarification of how Respondents define a failure to activate. Without waiving its objections, Complaint Counsel will provide all non-privileged information it has with respect to testing of Omega sprinklers. **Without waiving its objections, and assuming that Respondents refer to Omegas manufactured after 1990 that were installed in plastic piping systems, that failed to activate in testing as defined in Complaint Counsel's discovery to Respondents, Complaint Counsel responds that it has information pertaining to such failures, and has supplied such information to Respondents in its supplemental document production of this date.**

DATED: May 22, 1998

Deborah S. Orlove

Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.
Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, Maryland 20814
301-504-0626

dso\central\int3.req

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, **COMPLAINT COUNSEL'S NOTICE OF SERVICE OF THIRD SET OF SUPPLEMENTAL DOCUMENTS IN RESPONSE TO RESPONDENTS' FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS**, and **COMPLAINT COUNSEL'S SECOND SUPPLEMENTAL RESPONSES TO RESPONDENTS' FIRST SET OF INTERROGATORIES** were filed with the Secretary of the Commission, and sent via overnight express to the following:

J. Gordon Cooney, Jr., Esq.
Thomas P. Hogan, Jr., Esq.
Emily J. Lawrence, Esq.
MORGAN, LEWIS & BOCKIUS LLP
2000 One Logan Square
Philadelphia, PA 19103
(215) 963-5000
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Michael F. Healy, Esq.
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John C. Fenningham, Esq.
CORR, STEVENS & FENNINGHAM
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Trevose, PA 19053
(215) 639-4070
fax (215) 639-8995
Attorneys for Central Sprinkler Corporation and Central Sprinkler Company

Pursuant to Respondents' instructions, documents were served only upon J. Gordon Cooney, Jr., Esq., at the above address. A copy was also served on the Presiding Officer pursuant to 16 C.F.R. § 1025.31(h) at:

The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
401 M St., S.W.
Mail Code 1900 L
Washington, DC 20460
(202) 564-6256
fax (202) 565-0044

Dated: 5/22/98

certif3.sup

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

1998 MAY 22 P 1:5[illegible]

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents	)	

COMPLAINT COUNSEL'S MOTION FOR LEAVE TO SUBMIT REPLY BRIEF IN SUPPORT OF COMPLAINT COUNSEL'S MOTION FOR PROTECTIVE ORDER AND *IN CAMERA* SUBMISSION

COMES NOW Complaint Counsel, pursuant to 16 C.F.R. § 1025.23(c), and respectfully requests that the Presiding Officer grant leave to submit a Reply Brief in Support of Complaint Counsel's Motion for Protective Order and *In Camera* Submission.

On May 15, 1998, Complaint Counsel filed a Motion for Protective Order and *In Camera* Submission for a document which may be responsive to Respondents' First Request for Production of Documents. On May 19, 1998, Respondents filed their Opposition to Complaint Counsel's Motion.[1] Because discovery of this document may have a chilling effect on the free flow of information to the government concerning enforcement of its laws, because discovery of this document may enable Respondents[2] to identify the informant,

[1] Complaint Counsel has not yet been properly served with Respondents' Opposition.

[2] This document should be protected from discovery by Respondents *and* their counsel because of the relationship between Respondents and their counsel. It has recently come to Complaint Counsel's

because revelation of the informant's identity may expose the informant to retaliation by Respondents or within the industry, Complaint Counsel hereby seeks leave to file a Reply Brief.

Dated: 5/22/98

Respectfully submitted,

Howard N. Tarnoff

Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.
Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
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Of Counsel
Eric L. Stone, Esq.
Director, Legal Division
Alan H. Schoem, Esq.
Assistant Executive Director
Office of Compliance

hnt\centmot\motnprt.rpl

attention that at least one partner in the Philadelphia office of Morgan, Lewis & Bockius LLP is a member of the Board of Directors of Central Sprinkler Corporation.

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents	)	

ORDER

AND NOW, this _____ day of _____, 1998, it is hereby ORDERED that leave is granted to Complaint Counsel to submit a Reply Brief in Support of Complaint Counsel's Motion for Protective Order and *In Camera* Submission.

_____
The Hon. William B. Moran
Administrative Law Judge

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, **COMPLAINT COUNSEL'S MOTION FOR LEAVE TO SUBMIT REPLY BRIEF IN SUPPORT OF COMPLAINT COUNSEL'S MOTION FOR PROTECTIVE ORDER AND *IN CAMERA* SUBMISSION** was filed with the Secretary of the Commission, telecopied and deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

J. Gordon Cooney, Jr., Esq.
Thomas P. Hogan, Jr., Esq.
Emily J. Lawrence, Esq.
MORGAN, LEWIS & BOCKIUS LLP
2000 One Logan Square
Philadelphia, PA 19103
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Attorneys for Central Sprinkler Corporation and Central Sprinkler Company

The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
401 M St., S.W.
Mail Code 1900 L
Washington, DC 20460
fax (202) 565-0044

Signed: Helen V. Mitchell

Dated: 5/22/98

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION
1998 MAY 28 P 5:34

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents	)	

COMPLAINT COUNSEL'S SECOND MOTION FOR PROTECTIVE ORDER AND *IN CAMERA* SUBMISSION

COMES NOW Complaint Counsel, pursuant to 16 C.F.R. § 1025.31 and 16 C.F.R. § 1025.45, and submits additional documents that may be responsive to Respondents' First Request for Production of Documents, requesting that those documents be protected from discovery herein.

The documents at issue are filed and submitted herewith *in camera* to the Secretary of the Commission and the Presiding Officer as Exhibits A - I (Complaint Counsel's Bates pages 0012903 - 0012976). Exhibits A - C and G - I are documents provided to the CPSC by former employees of Respondents who are serving as informants to the Agency. Exhibits D - F are letters sent by Complaint Counsel confirming meetings or conversations with those same informants.

All of these documents constitute or relate to confidential communications with informants regarding Omega sprinklers, Omega sprinkler failures, and Respondents' knowledge of same. The documents may be responsive to, among others, Respondents' First

Request for Production of Documents and Things Nos. 3 ("all documents that constitute the entirety of the CPSC administrative file regarding the Omegas"); 7 ("all documents provided to the CPSC by any person, organization, business, or any other entity regarding or related to the Omegas and/or Respondents"); 14 ("all documents that constitute, provide evidence of, refer, or relate to CSC manufacturing, selling, or marketing Omegas"); 15 ("all documents that constitute, provide evidence of, refer, or relate to any fires where Omegas allegedly failed to activate properly); 19 ("all documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and former employees of Respondents . . ."); 31 ("all documents received by the CPSC from Respondents or any agent, employee, or representative of Respondents); 44 ("all documents that constitute, provide evidence of, refer, or relate to the allegation in Paragraph 5 of the Complaint that CSC is a "manufacturer" of consumer products"); 46 ("all documents that constitute, provide evidence of, refer, or relate to the allegation in Paragraph 8 of the Complaint that the Omegas are "designed to perform in accordance with" UL Standard 199 and NFPA Standard 13"); 50 ("all documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 13 of the Complaint that "failure of the Omegas to function exposes the public to bodily injury and/or death"); and/or 51 ("all documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 15 of the Complaint that the "defect or defects in the Omegas create a substantial risk of injury to the public . . .").

Complaint Counsel does not intend to use these documents at trial. In fact, Complaint Counsel has obtained much of the information contained in the documents independently from other sources or through its own research. In some cases, such as Exhibits G, H and I, the

information submitted to the staff by the former employee is publicly available, and can be obtained by Respondents as easily as it was obtained by Complaint Counsel. There is no need to sacrifice the well-being of an informant to provide the information to Respondents.

Similarly, Exhibit C, from a former employee of Respondents, relates to information that Respondents already have in their possession, and in fact should be producing to Complaint Counsel in response to Complaint Counsel's discovery requests. This exhibit also relates to several would-be informants, however, who, as is apparent from the document, prefer to remain anonymous, even with respect to the staff.

Exhibit B is a document written by a former employee to the staff in response to specific questions from Complaint Counsel relating to case preparation, expert consultants, and other items that are clearly work product. As with the anonymous letter received by Complaint Counsel that was the subject for its first such Motion for Protective Order in this case, Complaint Counsel is using the information contained in these documents to further its investigation into the Omega problem, and to channel its discovery in this matter. Complaint Counsel will disclose all information on the topics discussed in the documents that it obtains in its further investigation and intends to use at the hearing of this matter.

If the documents submitted *in camera* with this Motion are disclosed, the identity of the informants, even if redacted, may be readily determined by Respondents. Public policy dictates that informants be protected, both for their own well-being, and to prevent them, and others, from being discouraged from sharing information with the government. Congress recognized these policies in providing an exception to the Freedom of Information Act's general policy of disclosure. *See* 5 U.S.C. § 552(b)(7)(d). Courts have also recognized the

importance of protecting confidential informants, even when they are former employees of a party seeking discovery. *See, e.g., Hodgson v. Charles Martin Inspectors of Petroleum, Inc.*, 459 F.2d 303 (5th Cir. 1972) (Secretary of Labor entitled to assert informer's privilege, and not required to produce in discovery statements taken from employer's former employees, as disclosure of the statements may subject the employees to retaliation (1) in that employees' efforts to find new jobs could be handicapped if former employer should brand them as "informers" when references are sought; (2) by a new employer if that employer finds out that they have in the past cooperated with the (government); and/or (3) by their former employer, should the former employee find it desirable or necessary to seek reemployment with the original employer).

As is clear from the documents, Complaint Counsel is using its informants as non-testifying consultants who are assisting the staff in preparing its case in this matter. Not only should the identity of the informants be protected, but the entire content of the documents, to the extent Complaint Counsel does not intend to use them as evidence at trial, should be protected from discovery pursuant to the work product privilege and the regulations applicable to these proceedings. *See* Fed. R. Civ. P. 26(b)(3) (protecting from disclosure "documents and tangible things . . . prepared in anticipation of litigation or for trial by or for a party or that party's representative (including his attorney, consultant, surety, indemnitor, insurer, or agent)"); 16 C.F.R. § 1025.31(c)(4)(ii) ("a party may discover facts known or opinions held by an expert who has been retained or specially employed by another party in anticipation of litigation or preparation for trial and who is not expected to be called as a witness at trial only upon a showing of exceptional circumstances under which it is

impracticable for the party seeking discovery to obtain facts or opinions on the same subject by other means).

Based on the foregoing, Complaint Counsel respectfully requests that the documents submitted herewith *in camera* be fully protected from discovery in this matter.[1]

Dated: May 26, 1998

Respectfully submitted,

Deborah S. Orlove

Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.
Complaint Counsel
United States Consumer Product Safety Commission
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(301) 504-0626

Of Counsel
Eric L. Stone, Esq.
Director, Legal Division
Alan H. Schoem, Esq.
Assistant Executive Director
Office of Compliance
dso\central\doc[illegible].mot

1 In the alternative, if the Presiding Officer determines that any of these documents are discoverable, Complaint Counsel requests that, pursuant to 16 C.F.R. § 1025.45(2), certain information be excised to protect the sources and other informants to the greatest possible extent, and that the documents to be produced be provided only to outside counsel for Respondents, and only to those outside counsel who are not Board Members of, or hold other positions with respect to, Respondents.

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, **COMPLAINT COUNSEL'S MOTION FOR PROTECTIVE ORDER AND *IN CAMERA* SUBMISSION** was filed with the Secretary of the Commission, and deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

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Attorneys for Central Sprinkler Corporation and Central Sprinkler Company

Pursuant to 16 C.F.R. § 1025.45, the document was submitted *in camera* only to the Secretary of the Commission, and to Presiding Officer at:

The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
401 M St., S.W.
Mail Code 1900 L
Washington, DC 20460
fax (202) 565-0044

Signed: _____

Dated: 5/26/98

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents	)	

ORDER

AND NOW, this _____ day of _____, 1998, it is hereby ORDERED that **COMPLAINT COUNSEL'S SECOND MOTION FOR PROTECTIVE ORDER** is GRANTED.

_____
The Hon. William B. Moran
Administrative Law Judge

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION
1998 MAY 28 P 5:34

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents	)	

COMPLAINT COUNSEL'S SECOND MOTION FOR PROTECTIVE ORDER AND *IN CAMERA* SUBMISSION

COMES NOW Complaint Counsel, pursuant to 16 C.F.R. § 1025.31 and 16 C.F.R. § 1025.45, and submits additional documents that may be responsive to Respondents' First Request for Production of Documents, requesting that those documents be protected from discovery herein.

The documents at issue are filed and submitted herewith *in camera* to the Secretary of the Commission and the Presiding Officer as Exhibits A - I (Complaint Counsel's Bates pages 0012903 - 0012976). Exhibits A - C and G - I are documents provided to the CPSC by former employees of Respondents who are serving as informants to the Agency. Exhibits D - F are letters sent by Complaint Counsel confirming meetings or conversations with those same informants.

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information submitted to the staff by the former employee is publicly available, and can be obtained by Respondents as easily as it was obtained by Complaint Counsel. There is no need to sacrifice the well-being of an informant to provide the information to Respondents.

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Exhibit B is a document written by a former employee to the staff in response to specific questions from Complaint Counsel relating to case preparation, expert consultants, and other items that are clearly work product. As with the anonymous letter received by Complaint Counsel that was the subject for its first such Motion for Protective Order in this case, Complaint Counsel is using the information contained in these documents to further its investigation into the Omega problem, and to channel its discovery in this matter. Complaint Counsel will disclose all information on the topics discussed in the documents that it obtains in its further investigation and intends to use at the hearing of this matter.

If the documents submitted *in camera* with this Motion are disclosed, the identity of the informants, even if redacted, may be readily determined by Respondents. Public policy dictates that informants be protected, both for their own well-being, and to prevent them, and others, from being discouraged from sharing information with the government. Congress recognized these policies in providing an exception to the Freedom of Information Act's general policy of disclosure. *See* 5 U.S.C. § 552(b)(7)(d). Courts have also recognized the

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impracticable for the party seeking discovery to obtain facts or opinions on the same subject by other means).

Based on the foregoing, Complaint Counsel respectfully requests that the documents submitted herewith *in camera* be fully protected from discovery in this matter.[1]

Dated: May 26, 1998

Respectfully submitted,

Deborah S. Orlove

Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.
Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
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dso\central\doc[illegible].mot

1 In the alternative, if the Presiding Officer determines that any of these documents are discoverable, Complaint Counsel requests that, pursuant to 16 C.F.R. § 1025.45(2), certain information be excised to protect the sources and other informants to the greatest possible extent, and that the documents to be produced be provided only to outside counsel for Respondents, and only to those outside counsel who are not Board Members of, or hold other positions with respect to, Respondents.

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, **COMPLAINT COUNSEL'S MOTION FOR PROTECTIVE ORDER AND *IN CAMERA* SUBMISSION** was filed with the Secretary of the Commission, and deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

J. Gordon Cooney, Jr., Esq.
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fax (215) 639-8995

Attorneys for Central Sprinkler Corporation and Central Sprinkler Company

Pursuant to 16 C.F.R. § 1025.45, the document was submitted *in camera* only to the Secretary of the Commission, and to Presiding Officer at:

The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
401 M St., S.W.
Mail Code 1900 L
Washington, DC 20460
fax (202) 565-0044

Signed: _____

Dated: 5/26/98

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents	)	

ORDER

AND NOW, this _____ day of _____, 1998, it is hereby ORDERED that **COMPLAINT COUNSEL'S SECOND MOTION FOR PROTECTIVE ORDER** is GRANTED.

_____
The Hon. William B. Moran
Administrative Law Judge

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION
1998 MAY 28 P 12:32

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446	:	**CPSC Docket No. 98-2**
	:	
and	:	**Motion For Reconsideration Or, In The**
	:	**Alternative, For Certification Pursuant**
Central Sprinkler Co., a Corporation,	:	**To 16 C.F.R. § 1025.24(b)(4)**
451 North Cannon Avenue	:	
Lansdale, PA 19446,	:	
	:	
Respondents.	:	
	:	

MOTION OF RESPONDENTS CENTRAL SPRINKLER CORPORATION AND CENTRAL SPRINKLER COMPANY FOR RECONSIDERATION OR, IN THE ALTERNATIVE, FOR CERTIFICATION PURSUANT TO 16 C.F.R. § 1025.24(b)(4)

Respondents Central Sprinkler Corporation and Central Sprinkler Company (collectively, "Central") hereby move for reconsideration of the Order on Motion to Dismiss of May 15, 1998, of Administrative Law Judge Moran denying Central's Motion to Dismiss the Administrative Complaint in the above-captioned matter for lack of jurisdiction ("the Order"). Because the Order misapprehends the relevant statute and legislative history, as well as Central's arguments and unrefuted evidence, the Order should be reconsidered and Central's Motion to Dismiss granted.

In the alternative, Central moves pursuant to 16 C.F.R. § 1025.24(b)(4) for certification of the Order for interlocutory appeal to the Consumer Product Safety Commission.

WHEREFORE, Central respectfully requests that the Administrative Law Judge grant

this Motion for reconsideration or, in the alternative, for certification pursuant to 16 C.F.R. § 1025.24(b)(4).

Further support for this Motion is contained in the attached Memorandum Of Law, which is incorporated by reference herein.

Respectfully submitted,

Michael F. Healy
MORGAN, LEWIS & BOCKIUS LLP
1800 M Street, N.W.
Washington, D.C. 20036-5869
(202) 467-7000

J. Gordon Cooney, Jr.
Thomas P. Hogan, Jr.
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John C. Fenningham
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Five Neshaminy Interplex, Suite 315
Trevose, PA 19053
(215) 639-4070

Attorneys for Central Sprinkler Corporation and Central Sprinkler Company

DATED: May 26, 1998

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp., a Corporation,	:	
451 North Cannon Avenue	:	**CPSC Docket No. 98-2**
Lansdale, PA 19446	:	
	:	**Memorandum of Law in Support of**
and	:	**Motion For Reconsideration Or, In The**
	:	**Alternative, For Certification Pursuant**
Central Sprinkler Co., a Corporation,	:	**To 16 C.F.R. § 1025.24(b)(4)**
451 North Cannon Avenue	:	
Lansdale, PA 19446,	:	
	:	
Respondents.	:	
	:	

MEMORANDUM OF LAW IN SUPPORT OF MOTION OF RESPONDENTS CENTRAL SPRINKLER CORPORATION AND CENTRAL SPRINKLER COMPANY FOR RECONSIDERATION OR, IN THE ALTERNATIVE, FOR CERTIFICATION PURSUANT TO 16 C.F.R. § 1025.24(b)(4)

I. INTRODUCTION

On March 26, 1998, Respondents Central Sprinkler Corporation and Central Sprinkler Company (collectively, "Central") filed a Motion to Dismiss Complaint Counsel's Administrative Complaint in the above-captioned matter. The Administrative Complaint seeks the recall of Central Sprinkler Company's Omega-brand fire sprinkler heads. Central's Motion to Dismiss was based, in part, on the ground that because Omega sprinkler heads are not consumer products within the meaning of the Consumer Product Safety Act, 15 U.S.C. § 2051 et seq. ("the Act"), the Consumer Product Safety Commission ("CPSC") lacks jurisdiction under the Act either to seek remedial measures or to regulate Omega sprinkler heads.

Following briefing, on May 15, 1998, Administrative Law Judge William B. Moran denied the Motion in an Order on Motion to Dismiss ("the Order"). Because Central believes

that the Order is based in part on errors of law and fact, Central moves for reconsideration of the Order. In the alternative, Central moves, pursuant to 16 C.F.R. § 1025.24(b)(4), for certification that the Order is appropriate for interlocutory appeal to the CPSC.

II. LEGAL ARGUMENT

The Order misapprehends several of Central's arguments and, with all due respect, incorrectly concludes that Omega sprinkler heads are consumer products subject to the CPSC's jurisdiction. In so doing, the Order does not fully consider the Act's language and legislative history, courts' analysis of the Act, and Central's supporting evidence. Therefore, the Administrative Law Judge should reconsider the Order and grant Central's Motion to Dismiss.

In the alternative, the Administrative Law Judge should, pursuant to 16 C.F.R. § 1025.24(b)(4), certify the Order for interlocutory appeal to the CPSC because the issue of the CPSC's jurisdiction over Omega sprinkler heads involves a controlling question of law or policy as to which there is substantial ground for a difference of opinion, and for which an immediate appeal could materially advance the ultimate termination of this matter.

A. The Order Should Be Reconsidered Because It Does Not Assess Properly The Act Or Its Legislative History And Does Not Take Into Account Unrebutted Evidence Establishing That Omega Sprinkler Heads Are Not Consumer Products.

The Order holding that Omega sprinkler heads are consumer products is incorrect and should be reconsidered for three reasons. First, the Order incorrectly eliminates the Act's requirement regarding the "use" of a consumer product. Second, the Order incorrectly divorces consideration of Omega sprinklers from consideration of fire sprinkler systems, thus relying on

Complaint Counsel's inappropriate distinction between them and minimizing the importance of Consumer Product Safety Commission v. Anaconda Company, 593 F.2d 1314 (D.C. Cir. 1979), in favor of Kaiser Aluminum and Chemical Corporation v. Consumer Product Safety Commission, 574 F.2d 178 (3d Cir.), cert. denied, 439 U.S. 881 (1978). Third, the Order ignores unrebutted evidence submitted by Central establishing that Omega sprinkler heads are exceptions to the Act's definition of "consumer product," as they are not "customarily produced or distributed for sale to, or use or consumption by, or enjoyment of, a consumer." 15 U.S.C. § 2052.

1. The Order Incorrectly Interprets The Act's Requirement Regarding Use Of A Consumer Product.

In the Order, the Administrative Law Judge recognizes that one of the Act's indicia of a consumer product is that it is used, consumed or enjoyed by consumers. (Order, p. 8.) As quoted by the Administrative Law Judge, the Act requires that a "consumer product" be produced or distributed "for sale to a consumer for use in or around" a household, residence or school, or "for the personal use, consumption or enjoyment of a consumer in or around" those places. 15 U.S.C. § 2052(a)(1). The Order cites Anaconda in emphasizing that it is not necessary that a product actually be sold to a consumer, "but only that it be produced or distributed for his use." (Order, p. 14.) In discussing the "use" requirement, however, the Order does not take into account both the legislative history of the Act and courts' interpretation of the requirement.

Central submits that the Act requires some active involvement by the consumer with the product. As Central explained on page 10 of its Memorandum of Law in support of its Motion to

Dismiss, the Senate originally had broadly defined "use" of a consumer product to include not only active use, but also mere "exposure to" the product. That sweeping definition failed to survive conference with the House of Representatives, however, and "exposure to" did not become part of the Act. The Order, however, incorrectly appears to have adopted the rejected Senate approach that would extend to products to which consumers merely are "exposed." (Order at 14.) Moreover, the cases cited in the Order, United States v. One Hazardous Product Consisting of a Refuse Bin, 487 F. Supp. 581 (D.N.J. 1980) and Consumer Product Safety Commission v. Chance Manufacturing Company, Inc., 441 F. Supp. 228 (D.D.C. 1977), do not support the "exposure" definition of use, because the products in those cases -- outdoor metal refuse bins and an amusement park ride, respectively -- are actively used, occupied, enjoyed or manipulated by consumers.

In One Hazardous Product Consisting of a Refuse Bin, the court referred to an affidavit establishing that "the refuse bins were easily accessible to members of the public," 487 F. Supp. at 583, and that "use of the facility [the bin] by consumers is actively facilitated and encouraged." Id. at 585 (emphasis added). Likewise, the court in Chance relied not simply on "exposure" to the dangers of amusement park rides, but, rather, on the riders' "occupancy of its cars and concomitant exposure to whatever dangers it may present . . . ." 441 F. Supp. at 233 (emphasis added). That riders might be "exposed" to the ride's dangers was simply an attendant factor to the riders' physical occupancy of the cars.

In contrast, Central presented affidavits -- unrefuted and undisputed -- establishing that consumers are not able to install Omega sprinkler heads, and that the sprinkler heads are expressly designed to be passive so that they are not accessible to, or occupied, maintained or

controlled by, consumers. (Central Mem. in Support of Mot. to Dismiss, hereinafter "Mot. to Dism.," Ex. A ¶¶ 22, 27; Ex. B ¶ 24.)

The Order cites no authority for its reasoning that simply because Omega sprinklers are fire safety-related, they must be within the Act's coverage. (Order at 15.) In carving out that new statutory definition of consumer product, the Order does not recognize the distinction between Omega sprinklers and items like smoke detectors and burglar alarms. Consumers purchase, install, test and change batteries on smoke detectors, which they cannot do with an Omega sprinkler, and consumers actively set and engage burglar alarms when they choose to have their alarms' protection turned on. These product uses are inapplicable to Omega sprinklers and are, indeed, impossible for consumers to effect. Consumers do not, for example, set or turn on either an Omega sprinkler or a sprinkler system.

Because the Order misapprehended the Act's "use" requirement and broadened the definition of "use" to include mere "exposure to," the Administrative Law Judge should reconsider the Order that incorrectly concluded that Omega sprinklers are consumer products.

2. The Order Makes An Improper And Incorrect Distinction Between Omega Sprinklers And Sprinkler Systems.

In addition to broadening the "use" requirement, the Order adopts the incorrect "distinction" advocated by Complaint Counsel regarding sprinklers and sprinkler systems. Specifically, Complaint Counsel asserts that they can and should be considered as wholly separate, such that the CPSC has jurisdiction over sprinklers, but -- as both Complaint Counsel and the Order seem to recognize -- not over sprinkler systems. Contrary to Complaint Counsel's assertion, however, Central did not confuse or blur the subject of the jurisdictional inquiry.

(Order at 6.) Despite Complaint Counsel's argument, the distinction between sprinkler systems and sprinklers is not crucial to the jurisdictional issue. Indeed, it is a classic "distinction without a difference."

The Order seeks to distinguish Anaconda from the case at bar by saying that Anaconda addressed aluminum wiring systems, while this matter involves only sprinklers, not sprinkler systems.[1/] (Order at 10 n.5, 11-12.) This approach, however, ignores the design, installation, integration and operation of sprinklers and sprinkler systems, as detailed in Central's Motion to Dismiss. (Mot. to Dism. at 3, Ex. B ¶¶ 10-20.) Because the sprinklers are but one integrated part of the overall system, which itself is a fundamental, integrated part of a building's construction, it is meaningless to consider regulating the sprinklers independently of the entire system. Indeed, the ultimate merits question identified by the Administrative Law Judge concerns whether Omega sprinklers will fail in a fire. This question, however, turns on a number of factors that are specific to the installed sprinkler system, including the system pressure designed for the particular building, the number of sprinklers in a given room, the type of piping in which the sprinklers are installed, whether certain materials were used by the maintenance or installation contractor that may impede the performance of the sprinkler, and so on. Indeed, the potential for "failure" can only be evaluated within the context of the entire system: the available water pressure and hydraulic design of the sprinkler system, the type of pipe used in the sprinkler system, and whether contaminants are present. Thus, the distinction between sprinklers and

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1/ It is true that the Anaconda court addressed defendants' argument that aluminum wiring systems were not consumer products. Anaconda, 593 F.2d at 1317. As discussed further above, however, the so-called distinction between sprinklers and sprinkler systems is not a useful one.

sprinkler systems, and the resulting attempt to distinguish Anaconda, is unavailing and, more importantly, incorrect.

Moreover, the distinction is purely semantic. It is meaningless to concede, as Complaint Counsel and the Order appear to, that the CPSC cannot regulate sprinkler systems, but to accept that the CPSC can regulate sprinklers. Indeed, it follows from the logic of the Order that the CPSC has authority over each individual, albeit integrated, part of the overall sprinkler system -- the sprinkler, piping, valves, fittings, pumps, and so on -- but not over the whole. Given that any system can be alternatively considered in terms of its consolidated individual parts, the effective result of the Order is, simply, that the CPSC has jurisdiction over all items -- except, perhaps, for raw materials -- simply by breaking them down artificially into separate articles despite their design, construction and application as a consolidated whole. Such a result conflicts with Anaconda, where the court rejected the CPSC's expansive view that the CPSC's jurisdiction extends to component parts of dwelling, including wiring, plumbing and flooring systems and their various building components. [2/] Anaconda, 593 F.2d at 1320 (emphasis added.) The Order acknowledges that housing is not a consumer product, (Order at 10-11), but states that component parts of housing -- indeed, any product found in a home -- are consumer products. (Order at 11, 15.) By applying Kaiser's discussion of dishwashers and light fixtures, however, to a "component" analysis, the Order ignores consumers' obvious use of those products, in contrast

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2/ According to the Order, therefore, even if a building itself is not a consumer product, per Anaconda, if the building were considered as "separate" components such as "foundation," "support beams," "roof trusses," and "bricks," then the CPSC could regulate each piece, but not the overall building. Such a result would effectively overrule Anaconda.

to consumers' non-use of a building's integrated components such as beams, foundation, and sprinklers.

Because the Order improperly distinguishes between sprinklers and sprinkler systems, the Administrative Law Judge should reconsider the Order that incorrectly concluded that Omega sprinklers are consumer products.

3. The Order Improperly Ignores Unrebutted Evidence Establishing That Omega Sprinkler Heads Are Exceptions To The Act's Definition Of "Consumer Product."

As the Order properly notes, Section 2052(a)(1)(A) of the Act excludes from the definition of "consumer product," and thus from the CPSC's jurisdiction, articles "not customarily produced or distributed for sale to, or use or consumption by, or enjoyment of, a consumer." (Order at 8.) The Order fails, however, to consider that a product cannot be considered as being customarily produced for sale to, or use by, consumers, if there is no "significant marketing of the product as a distinct article of commerce" for that purpose. ASG Indus., Inc. v. Consumer Product Safety Comm'n, 593 F.2d 1323, 1328 (D.C. Cir.), cert. denied, 444 U.S. 864 (1979). As Central explained in its Motion to Dismiss and in a detailed, unrefuted affidavit, Central does not market, advertise, distribute or sell Omega sprinklers to consumers or for use by consumers. (Mot. to Dism. at 8-10, Ex. A ¶¶ 8-20.) To the contrary, Central markets, advertises, distributes and sells Omega sprinklers to professional sprinkler installers for the purpose of regulatory code compliance. (Id., Ex. A ¶ 13.) Complaint Counsel has failed to establish that Central significantly markets Omega sprinklers to consumers. In fact, as Complaint Counsel admits in its response to Central's First Set of Interrogatories, it has no independent information refuting Central's affidavit concerning the lack of marketing or sales to

consumers. In response to Interrogatory No. 3, which asked Complaint Counsel to "State whether [Central] markets Omegas" and if so, to "identify and describe any such marketing" and related documents, Complaint Counsel admitted that it "is in the process of requesting from [Central] a description of such marketing. This information is within [Central's] possession." (Compl. Counsel Resp. to Resp. First Set of Interrog., No. 3.)

The Order also ignores that certain Omega sprinkler models are marketed and distributed for distinctly non-consumer locations for commercial/industrial use. (Mot. to Dism. at 9 n.3.) As such, they are, per the Act, industrial products not customarily produced for consumer use. The occasional "crossover" of industrial/commercial models into possible consumer use does not bring those models of Omega sprinklers into the Act's purview because they are not customarily produced for consumer sale or use. Anaconda, 593 F.2d at 1322; Kaiser, 574 F.2d at 181. Thus, the Order's conclusion that "once a product is found in a home, the ability to regulate it under the Act applies to all other locations where it is found," (Order at 15), is incorrect and contrary to established law. Under that ruling, the CPSC can regulate all products that happen to be in a home, even if the products are primarily found elsewhere. Such a broad sweep of CPSC jurisdiction is contrary to the Act's legislative history, policy and interpretive caselaw. Moreover, to the extent that Omega sprinklers are purchased and installed for commercial/industrial building owners, those owners are not within the class of persons subject to the protection of the Act, as the Act reflects that industrial purchasers are better able to protect themselves. Kaiser, 574 F.2d at 180-81.

Because the Order did not recognize that Omega sprinkler heads fit the Act's exception for products not routinely produced for consumer sale or use, the Administrative Law Judge

should reconsider the Order that incorrectly concluded that Omega sprinklers are not excepted from the Act's definition of "consumer product."

B. In The Alternative, If The Administrative Law Judge Does Not Reconsider The Order, He Should, Pursuant To 16 C.F.R. § 1025.24(b)(4), Certify The Order For Interlocutory Appeal To The CPSC.

As the Administrative Law Judge recognized, the Act's definition of "consumer product" is complex and ambiguous. (Order at 8.) Further, resolving jurisdictional questions is made more difficult by the Act's omission of a definition of "consumer." (Id.) Given both the importance and complexity of the jurisdictional question, if the Administrative Law Judge does not reconsider the Order and grant Central's Motion to Dismiss, he should, in the alternative, certify the Order for interlocutory appeal to the CPSC pursuant to 16 C.F.R. § 1025.24(b)(4).

The CPSC's regulations provide that an interlocutory appeal from an Administrative Law Judge to the CPSC may proceed on motion to the Administrative Law Judge and his or her determination in writing that the ruling

> . . . involves a controlling question of law or policy as to which there is substantial ground for differences of opinion and that an immediate appeal from the ruling may materially advance the ultimate termination of the litigation, or that subsequent review will be an inadequate remedy.

16 C.F.R. § 1025.24(b)(4).[3/]

3/ The regulation closely patterns 28 U.S.C. § 1292(b), providing for interlocutory appeal from a district court to a court of appeals. Therefore, cases discussing § 1292(b) are instructive in considering a motion under 16 C.F.R. § 1025.24(b)(4). The CPSC regulations contain two additions, however: the provision for a controlling question of policy, as well as law, and the possibility that a subsequent review of the ruling will be an inadequate remedy.

Thus, there are three factors to consider in determining whether to certify a ruling for interlocutory appeal: (1) whether the ruling involved a controlling question of law or policy; (2) whether a substantial ground for difference of opinion exists; and (3) whether an immediate appeal will materially advance the ultimate termination of the case or whether subsequent review will be inadequate. See Sofferin v. American Airlines, Inc., 788 F. Supp. 1010, 1011 (N.D. Ill. 1992) (discussing 28 U.S.C. § 1292(b)); American Ass'n of Cruise Passengers v. Cunard Line, Ltd., 1988 WL 120828, *2 (D.D.C. 1988) (same), aff'd in part, rev'd in part on diff. grounds, 911 F.2d 786 (D.C. Cir. 1990). The instant Order satisfies the three criteria and should, therefore, be certified for interlocutory appeal to the CPSC.

1. The Order Involves A Controlling Question Of Law Or Policy.

A controlling question of law includes all orders which, if erroneous, would be reversible error on final appeal. Katz. v. Carte Blanche Corp., 496 F.2d 747, 755 (3d Cir.), cert. denied, 419 U.S. 885 (1974); American Ass'n of Cruise Passengers, 1988 WL 120828 at *2 (issue of court's subject matter jurisdiction over action is appropriate for interlocutory appeal); see Consumer Product Safety Comm'n v. Anaconda Co., 445 F. Supp. 498, 503 (D.D.C. 1977) (certification that issue of CPSC's jurisdiction over wiring systems involves controlling question of law). The Order, holding that the CPSC has jurisdiction over Omega sprinklers because they are "consumer products" within the meaning of the Act, involves a controlling question of law because if the Order is incorrect, it would be reversible error once the CPSC reviews the Administrative Law Judge's initial decision. As in Anaconda, the instant Order involved the issue of whether a product is a "consumer product" under the Act. 445 F. Supp. at 500. Further, as in American Association of Cruise Passengers, the jurisdictional issue turns on interpretation

of a statutory definition. 1988 WL 120828 at *2 (whether cruise ships are "common carriers" under Shipping Act of 1984).

In addition to involving a controlling question of law, Central's Motion to Dismiss and the Order denying it involve a controlling question of policy: whether the CPSC's authority extends to building construction and code compliance, areas traditionally, and pervasively, regulated by state and local authorities. (Mot. to Dism. at 15-17; Central's Reply Brief, hereinafter "Reply," pp. 10-11.) As the court recognized in Anaconda, CPSC authority over building construction and building components raised significant problems of federalism. Anaconda, 593 F.2d at 1320. The important policy issue raised by Central's motion warrants interlocutory appeal.

Central's Motion to Dismiss raised the issue of whether Omega sprinklers are "consumer products" under the Act. Further, the Motion to Dismiss addressed the policy issue of the expansive reach of CPSC authority into areas extensively regulated by state and local authorities. Because the Order's ruling regarding these issues would be reversible by the CPSC upon its review of the Administrative Law Judge's initial decision, the Order involves a controlling question of law or policy.

2. There Exists A Substantial Ground For Differences Of Opinion Regarding The CPSC's Jurisdiction.

Where different courts have arrived at different conclusions regarding an issue, there exists a substantial ground for a difference of opinion. Sofferin, 788 F. Supp. at 1011 (different district courts had reached different results on issue of law's retroactivity); Stong v. Bucyrus-Erie Company, 476 F. Supp. 224, 225 (E.D. Wis. 1979) (substantial ground for difference of opinion

reflected in fact that three courts had upheld offset provision and three had invalidated it). In addition, where courts have considered analogous issues but the precise issue is a question of first impression, there is substantial ground for a difference of opinion. Mueller v. First Nat'l Bank of the Quad Cities, 797 F. Supp. 656, 664 (C.D. Ill. 1992); American Association of Cruise Passengers, 1988 WL 120828 at *3; Colon v. Tompkins Square Neighbors, Inc., 294 F. Supp. 134, 139-40 (S.D. N.Y. 1968).

As the Order acknowledges, determination of whether an item is a "consumer product" under the Act, and therefore subject to CPSC jurisdiction, is an ambiguous, complex question. Although the precise issue of whether fire sprinklers are within the Act's reach has not been addressed, and thus is a question of first impression, courts' determinations of CPSC jurisdiction and the various bases for the rulings indicate that there are substantial grounds for differences of opinion. For example, until Congress amended the Act to address amusement park rides, numerous courts considered whether such rides were consumer products, and arrived at very different results. See, e.g., Walt Disney Prod. v. United States CPSC, 1979 U.S. Dist. Lexis 12996 (C.D. Cal. 1979) (amusement rides not consumer products); Chance, 441 F. Supp. 228 (amusement ride is consumer product). More on point are the Anaconda and Kaiser cases, most analogous to the issue at bar, and for which the two circuits reached opposite results regarding aluminum wiring and aluminum wiring systems built into housing construction. Indeed, both appellate decisions reversed lower court rulings that had themselves conflicted with each other.

Given the conflicting opinions in Kaiser and Anaconda, which are most analogous to the question of CPSC jurisdiction over fire sprinklers integrated into building construction, as well as the fact that the precise issue has not been squarely addressed by any court, the Order involves

a controlling question of law or policy as to which there is substantial ground for differences of opinion.

3. Immediate Appeal Of The Order Will Materially Advance The Ultimate Termination Of This Case.

The third and final criteria to consider in certifying a ruling for interlocutory appeal to the CPSC is whether immediate appeal will materially advance the ultimate termination of the case. An interlocutory appeal of an underlying jurisdictional issue will speed ultimate termination of a case, for a reversal of a finding of jurisdiction will terminate otherwise protracted litigation. Anaconda, 445 F. Supp. at 501 (where court had previously held that CPSC had jurisdiction under Act to investigate aluminum wiring systems, protracted and expensive litigation would needlessly result if decision were ultimately overturned); see Mueller, 797 F. Supp. at 664 (reversal of decision would terminate case); Stong, 476 F. Supp. at 225 (reversal of order would be dispositive of case, and no further proceedings would be necessary).

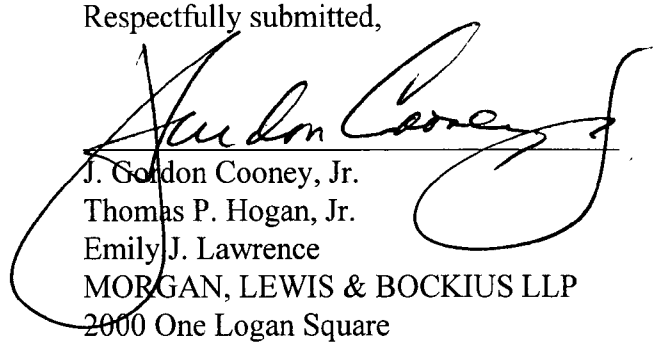
Because the extent of the CPSC's jurisdiction is limited by the Act, determination of whether Omega sprinklers are "consumer products" under the Act is dispositive of the jurisdictional question. Therefore, if the CPSC reverses the Order, this matter will halt without further litigation, materially advancing the ultimate termination of the case.

III. CONCLUSION

For all of the reasons stated above, the Administrative Law Judge should reconsider the Order of May 15, 1998, and grant Central's Motion to Dismiss. In the alternative, the Administrative Law Judge should, pursuant to 16 C.F.R. § 1025.24(b)(4), certify the Order for

interlocutory appeal to the CPSC.

Respectfully submitted,



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Attorneys for Central Sprinkler Corporation and Central Sprinkler Company

DATED: May 26, 1998

CERTIFICATE OF SERVICE

I, Emily J. Lawrence, hereby certify that I have served the attached document, the Motion for Reconsideration or, in the Alternative, for Certification Pursuant to 16 C.F.R. § 1025.24(b)(4), and accompanying Memorandum of Law, upon all parties and participants of record in these proceedings by certified mail, a copy to each on May 26, 1998.

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Emily J. Lawrence

Emily J. Lawrence

For: Respondents Central Sprinkler Corporation and Central Sprinkler Company

DATED: May 26, 1998

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446	:	**CPSC Docket No. 98-2**
	:	
and	:	
	:	
Central Sprinkler Co., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446,	:	
	:	
Respondents.	:	
	:	

ORDER

AND NOW, this _____ day of _____, 1998, it is hereby ORDERED that respondents' Motion for Reconsideration or, in the Alternative, for Certification Pursuant to 16 C.F.R. § 1025.24(b)(4), is GRANTED.

_____
Hon. William P. Moran
Administrative Law Judge

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
	)	
CENTRAL SPRINKLER CORP.,	)	
	)	
and	)	**CPSC Docket No. 98-2**
	)	
CENTRAL SPRINKLER CO.,	)	
	)	
Respondents	)	

NOTICE OF FIRST PREHEARING CONFERENCE

Pursuant to 16 C.F.R. § 1025.21 of the Rules of Practice for Adjudicative Proceedings ("Rules"), the Parties are notified that a prehearing conference will be held in this matter on **June 16, 1998, commencing at 10:00 a.m. at the United States Consumer Product Safety Commission, 4330 East West Highway, Bethesda, Maryland in Courtroom 420.**

The Parties are referred to the Code of Regulations citation listed above for identification of the matters to be raised at the conference and are additionally advised that the date, time and place of the hearing will be established at that time. The prehearing conference shall be stenographically reported, as provided in § 1025.47 of the Rules.

SO ORDERED.

William B. Moran

William B. Moran
United States Administrative Law Judge

Date: May 29, 1998
Washington, D.C.

In the Matter of Central Sprinkler Corp. And Central Sprinkler Co., Respondents
CPSC Docket No. 98-2

CERTIFICATE OF SERVICE

I hereby certify that the foregoing Notice of First Prehearing Conference, dated May 29, 1998 was sent in the following manner to the addressees listed below.

Regular Mail to:

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Sadye E. Dunn

Sadye E. Dunn
Secretary, Consumer Product Safety Commission

Date: June 2, 1998

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FREEDOM OF INFORMATION

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U.S. CONSUMER PRODUCT SAFETY COMMISSION
WASHINGTON, D.C. 20207-0001

OFFICE OF COMPLIANCE
Legal Division

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June 1, 1998

VIA TELECOPIER AND CERTIFIED MAIL

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Re: ***In the Matter of Central Sprinkler Corp. and Central Sprinkler Co.*, CPSC Docket No. 98-2**
Complaint Counsel's Responses to Respondents' Interrogatories; Complaint Counsel's Responses to Respondents' First Request for Production of Documents

Dear Counsel:

Pursuant to the parties' continuing duty to supplement discovery responses as mandated by 16 C.F.R. § 1025.31(f), enclosed please find Complaint Counsel's Privilege Log. Again, we apologize for the delay in providing the log to you. As we explained, our database became inoperable during the last stages of creating the log. We appreciate your patience as we reconstructed the log on a different database.

Sincerely,

Deborah S. Orlove

Deborah S. Orlove, Esq.
Complaint Counsel

cc: The Honorable William B. Moran
Sayde Dunn, Secretary, Consumer Product Safety Commission
Michael F. Healy, Esq.
John C. Fenningham, Esq.

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In the Matter of Central Sprinkler Corp. and Central Sprinkler Co.
Complaint Counsel's Privilege Log

June 1, 1998

TAB	DATE	FROM	ADDRESSEE(S)	RECIPIENT(S)	DOCUMENT TYPE	SUBJECT	SIZE	CLAIM
1	10/25/96	Cumberland, Catherine			notes	investigation team meeting	3	WP/AC
2	11/12/96	Khanna, Rikki	Cumberland, Catherine	(through) Hobel, James	memorandum	internal agency product safety assessment	3	WP/AC
3	01/21/97	Cumberland, Catherine			notes	meeting with consultants/state law enforcement officials	4	WP/AC
4	01/22/97	Cumberland, Catherine			notes	teleconference with testing laboratory	4	WP/AC
5	02/19/97	Cumberland, Catherine			notes	meeting with testing laboratory to discuss sprinklers	1	WP/AC
6	03/12/97	Cumberland, Catherine			notes	meeting with Central	5	WP/AC
7	03/31/97	Ceasar, Valery			notes	litigation team meeting	5	WP/AC
8	03/31/97	Cumberland, Catherine			notes	meeting with UL and Central Sprinkler	7	WP/AC
9	03/31/97	Stone, Eric			notes	meeting with UL and Central Sprinkler	7	WP/AC
10	04/14/97	Cumberland, Catherine			notes	litigation team meeting	1	WP/AC
11	04/14/97	Stone, Eric	Khanna, Rohit	Marchica, Nicholas; Cumberland, Catherine	e-mail	litigation team meeting	1	WP/AC
12	04/18/97	Singer, Eric	Consumer Product Safety Commission	(through) Dunn, Sadye; Bromme, Jeffrey; Gilbert, Pamela; Schmeltzer, David; Stone, Eric	memorandum	request for Subpoena and Special Order	2	AC/WP
13	05/02/97	Cumberland, Catherine	Consultant/State Fire Marshal		letter	request for information	1	WP
14	05/15/97	Cumberland, Catherine			notes	investigation team meeting	2	WP/AC

TAB	DATE	FROM	ADDRESSEE(S)	RECIPIENT(S)	DOCUMENT TYPE	SUBJECT	SIZE	CLAIM
15	06/12/97	Cumberland, Catherine	file	(through) Schmeltzer, David; Schoem, Marc; CC: Cumberland, Catherine; Singer, Eric; Khanna, Rikki; Marchica, Nick; Stadnik, Andrew; Hoebel, James; Perez, Carlos	memorandum	request for closed meeting	1	WP/AC
16	06/12/97	Cumberland, Catherine	file	Cumberland, Catherine; Singer, Eric; Stone, Eric; Khanna, Rikki; Stadnik, Andrew; Hoebel, Jim; Perez, Carlos	memorandum	litigation investigation	1	WP/AC
17	06/12/97	Cumberland, Catherine			notes	meeting with state consultants/ state law enforcement officials	4	WP/AC
18	06/19/97	Cumberland, Catherine			notes	third-party subpoena	3	WP/AC
19	06/19/97	Singer, Eric	Stadnik, Andy; Marchica, Nick; Khanna, Rikki		memorandum	information for consultants review	1	WP
20	08/04/97	Cumberland, Catherine			memorandum	teleconference with fire investigation consultants	1	WP/AC
21	08/04/97	Cumberland, Catherine			memorandum	teleconference with state fire marshal's office	1	WP/AC

TAB	DATE	FROM	ADDRESSEE(S)	RECIPIENT(S)	DOCUMENT TYPE	SUBJECT	SIZE	CLAIM
22	08/04/97	Singer, Eric	Cumberland, Catherine		memorandum, with handwritten notes of Cumberland, Catherine	Progress of follow-up investigation of sprinkler failures	5	WP/AC
23	08/05/97	Cumberland, Catherine			memorandum	teleconference with state law enforcement official and sprinkler contractor	1	WP/AC
24	08/18/97	Singer, Eric	Schoem, Alan; Stone, Eric; Schoem, Marc; Cumberland, Catherine; Stadnik, Andy; Marchica, Nick; Khanna, Rik		memorandum	case action plan	6	WP/AC
25	09/02/97	Singer, Eric	Schroeder, Tom		memorandum	litigation investigation	1	WP/AC
26	09/04/97	Singer, Eric			notes	teleconference with consultant	2	WP/AC
27	09/17/97	Cumberland, Catherine	CPSC Regional Directors, Supervisors and Investigators	(through) Schoem, Mark	memorandum	communications with state law enforcement officials	1	WP/AC
28	09/18/97	Cumberland, Catherine			notes	litigation team meeting	1	WP/AC
29	09/18/97	Singer, Eric	Khanna, Rikki		memorandum	litigation investigation	1	WP/AC
30	09/25/97	Cumberland, Catherine			notes	litigation team meeting	1	WP/AC
31	09/25/97	Singer, Eric	Schroeder, Tom	Cumberland, Catherine	memorandum	litigation investigation	1	WP/AC
32	10/16/97	Cumberland, Catherine			notes	meeting with Central counsel	1	WP/AC
33	10/23/97	Singer, Eric	Bromme, Jeffrey; Lemberg, Steve		memorandum	litigation investigation	2	WP

TAB	DATE	FROM	ADDRESSEE(S)	RECIPIENT(S)	DOCUMENT TYPE	SUBJECT	SIZE	CLAIM
34	10/29/97	Cumberland, Catherine			notes	litigation team meeting (with consultants) regarding fire involving Omegas	1	WP/AC
35	11/13/97	Cumberland, Catherine			notes	litigation team meeting	2	WP/AC
36	11/20/97	Singer, Eric	Rumelt, Donald; Palman, Amy		memorandum	litigation investigation	1	WP/AC
37	11/21/97	Singer, Eric	Lemberg, Steve		memorandum	website questionnaire	1	WP
38	11/24/97	Cumberland, Catherine			notes	litigation team meeting	1	WP/AC
39	12/01/97	Singer, Eric	Schoem, Alan	Stone, Eric	memorandum	case status and future handling	5	WP/AC
40	12/02/97	Singer, Eric	Stone, Eric		memorandum	inter-agency information sharing; case strategy	2	WP/AC
41	12/02/97	Singer, Eric	Cohn, Murray		memorandum	website questionnaire	1	WP/AC
42	12/02/97	Singer, Eric	Allen, Richard		memorandum	website questionnaire	1	WP
43	12/02/97	Singer, Eric	Stone, Eric		memorandum	case status	1	WP/AC
44	12/03/97	Singer, Eric	Khanna, Rikki; Kumagai, Mark		memorandum	case investigation and technical issues	1	WP/AC
45	12/04/97	Stone, Eric	file	Singer, Eric; Cumberland, Catherine	notes	voice mail from Sanzo, Cathy	1	WP/AC
46	12/08/97	Singer, Eric	Schoem, Alan		memorandum	website questionnaire	1	WP/AC
47	12/10/97	Singer, Eric	Rumelt, Dan		memorandum	website questionnaire	1	WP/AC
48	12/10/97	Singer, Eric	Rumelt, Dan		memorandum	talking points for hotline staff	3	WP/AC
49	12/11/97	Cumberland, Catherine			notes	NFSA meeting	4	WP/AC
50	12/15/97	Singer, Eric	DiGrazia, James		memorandum	Central's sprinkler change-out procedure	1	WP/AC
51	12/15/97	Singer, Eric	Cumberland, Catherine		memorandum	agency sample inventory matrix	2	WP/AC
52	12/19/97	Cumberland, Catherine			notes	meeting with Central counsel on testing and recall	4	WP/AC

TAB	DATE	FROM	ADDRESSEE(S)	RECIPIENT(S)	DOCUMENT TYPE	SUBJECT	SIZE	CLAIM
53	12/22/97	Singer, Eric	Cumberland, Catherine		memorandum	inter-agency communications	2	WP/AC
54	12/22/97	Singer, Eric	file		memorandum	analysis of legal issues	9	WP/AC
55	12/31/97	Singer, Eric	Stone, Eric		memorandum	case update	1	WP/AC
56	12/31/97	Singer, Eric	Perez, Carlos		memorandum	reimbursement for Omega sprinklers	5	WP/AC
57	01/03/98	Former Central employee/consultant			audiotape	Omega design/development		WP
58	01/05/98	Cumberland, Catherine			notes	litigation team meeting	1	WP/AC
59	01/11/98	Singer, Eric	Rosenson, Sarah		memorandum	draft third-party subpoenas	2	WP
60	01/13/98	consultant	Singer, Eric; Kumagai, Mark		audiotape	Omega: Design & History		WP
61	01/14/98	Singer, Eric	Cumberland, Catherine		memorandum	third-party subpoenas and information collection	1	WP/AC
62	01/15/98	Cumberland, Catherine			notes	inter-agency teleconference	1	WP/AC
63	01/16/98	Singer, Eric	attorney for informants	Kumagai, Mark; other attorney; informants	letter	discussions with informants	1	WP
64	01/22/98	Singer, Eric	consultant		letter	meeting with consultant	2	WP
65	01/23/98	Singer, Eric	State Attorney General		letter	letter regarding state law enforcement activities	10	WP/records compiled for law enforcement activities
66	01/24/98	Singer, Eric	Stone, Eric		memorandum	case update	5	WP/AC
67	01/26/98	DiGrazia, James	Singer, Eric		memorandum, with handwritten notes of Cumberland, Catherine	Northern California Fire Prevention Officers' meeting	1	WP/AC
68	01/26/98	Singer, Eric	Stone, Eric		memorandum	briefing memorandum to commission	1	WP/AC

TAB	DATE	FROM	ADDRESSEE(S)	RECIPIENT(S)	DOCUMENT TYPE	SUBJECT	SIZE	CLAIM
69	01/26/98	Singer, Eric	Stone, Eric		memorandum	case update	1	WP/AC
70	01/27/98	Singer, Eric	State Attorney General		letter	letter regarding CPSC investigation	1	WP
71	02/02/98	Singer, Eric	Schoem, Alan		memorandum	litigation/investigation update and future handling	2	WP/AC
72	02/03/98	Marchica, Nick			notes	teleconference with technical consultant/former employee	3	WP/AC
73	02/03/98	Singer, Eric	attorney for consultant		letter	meeting with consultant	2	WP
74	02/03/98	Singer, Eric	Mitchell, Belinda		memorandum	litigation/investigation	1	WP/AC
75	02/03/98	Singer, Eric	Cumberland, Catherine		memorandum	third party testing data	1	WP/AC
76	02/05/98	Singer, Eric	State Attorney General	Assistant Attorneys General	letter	letter regarding state law enforcement activities	25	WP/records compiled for law enforcement activities
77	02/05/98	Singer, Eric	Solomon, Jennifer		memorandum	legal research assignments	1	WP/AC
78	02/10/98	Singer, Eric	Solomon, Jennifer		memorandum	legal research assignments	1	WP/AC
79	02/12/98	Singer, Eric	Schroeder, Tom	Orlove, Deborah; Stone, Eric; Stadnik, Andy	memorandum	litigation/investigation	2	WP/AC
80	02/16/98	Former Central employee/consultant	Singer, Eric		audiotape	Omega: Design & History		WP
81	02/19/98	Former Central employee/consultant	Singer, Eric		audiotape	Omega: Design & History		WP
82	02/20/98	Singer, Eric	Orlove, Deborah		memorandum	litigation/investigation	1	WP/AC
83	02/20/98	Singer, Eric	Orlove, Deborah		memorandum	regarding potential consultants	1	WP
84	03/10/98	Singer, Eric	attorney for consultant		letter	meeting with consultant	1	WP

TAB	DATE	FROM	ADDRESSEE(S)	RECIPIENT(S)	DOCUMENT TYPE	SUBJECT	SIZE	CLAIM
85	03/25/98	Attorney for consultant	Singer, Eric		letter	meeting with consultant	1	WP
86	04/03/98	attorney for consultant	Singer, Eric		letter	documents responsive to request for information	1	WP
87	04/03/98	Marchica, Nick			notes	meeting with technical consultants	5	WP/AC
88	04/06/98	Singer, Eric	Attorney for consultant		letter	meeting with consultant	1	WP
89	04/10/98	Singer, Eric	Lawn, Joyce		memorandum	information regarding potential consultants	1	WP
90	04/13/98	Singer, Eric	consultants		letter	focus of discussions regarding sprinklers	1	WP
91	04/14/98	Marchica, Nick			notes	teleconference with technical consultants	6	WP/AC
92	04/14/98	Singer, Eric	Walters, Don	Cumberland, Catherine	memorandum	litigation/investigation	1	WP/AC
93	04/15/98	Singer, Eric	Former Central employee/consultant		e-mail	litigation/investigation	1	WP
94	04/16/98	Singer, Eric	attorney for consultant		letter	contact with technical consultant	1	WP
95	04/20/98	consultant	Singer, Eric		letter	search for technical consultant	1	WP
96	04/20/98	Former Central employee/consultant	Singer, Eric		e-mail	Central's knowledge of problems in plastic pipe	1	WP
97	04/20/98	Singer, Eric	Former Central employee/consultant		e-mail	litigation	1	WP
98	04/26/98	Singer, Eric	Stone, Eric; Orlove, Deborah; Tarnoff, Howard		memorandum	surreply to Motion to Dismiss	2	WP/AC
99	04/29/98	Kumagai, Mark			notes	meeting with technical consultant	12	WP/AC
100	04/29/98	Marchica, Nick			notes	meeting with technical consultant/former employee	12	WP/AC

TAB	DATE	FROM	ADDRESSEE(S)	RECIPIENT(S)	DOCUMENT TYPE	SUBJECT	SIZE	CLAIM
101	05/05/98	Kumagai, Mark			notes	meeting with technical consultant	3	WP/AC
102	05/05/98	Marchica, Nick			notes	meeting with technical consultants	3	WP/AC
103	05/06/98	Singer, Eric	Central former employee/consultant		e-mail	litigation status	1	WP
104	05/13/98	Singer, Eric	consultant		letter	meeting with consultant	2	WP
105	05/14/98	Kumagai, Mark			notes	meeting with technical consultant	5	WP/AC
106	05/14/98	Singer, Eric	consultant		letter	request for information	1	WP
107	05/15/98	Singer, Eric	Cumberland, Catherine; Balazsy, Andrew	Orlove, Deborah; Tarnoff, Howard	memorandum	litigation/investigation	1	WP/AC
108	05/15/98	Singer, Eric	Cumberland, Catherine		memorandum	sample acquisition, sprinkler replacement costs	1	WP/AC
109	05/18/98	Singer, Eric	Searles, Loretta		memorandum	litigation expenditures	1	WP/AC
110	05/20/98	Kumagai, Mark			notes	meeting with technical consultant	4	WP/AC
111	05/20/98	Singer, Eric	consultant		letter	litigation investigation	1	WP
112	05/21/98	Singer, Eric	Attorney for consultant		letter	inquiry on Omega test	3	WP
113	05/21/98	Singer, Eric	Cumberland, Catherine		memorandum	litigation investigation	1	WP/AC
114	05/26/98	Singer, Eric	Caton, Thomas; Kumagai, Mark; Marchica, Nicholas		e-mail	production of documents responsive to discovery	1	WP
115	05/26/98	Singer, Eric	Cumberland, Catherine		memorandum	litigation/investigation	3	WP/AC
116	02/00/98	Teevan, Frank	Orlove, Deborah		notes	11/5/96 meeting with Central	10	WP
117	05/00/98	Hoebel, Jim			notes	1998 Fire Council notes and materials	26	WP/AC
118	undated	Cumberland, Catherine			notes	litigation meeting	4	WP/AC

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, **COMPLAINT COUNSEL'S PRIVILEGE LOG** was filed with the Secretary of the Commission, telecopied, and deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

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Attorneys for Central Sprinkler Corporation and Central Sprinkler Company

The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
401 M St., S.W.
Mail Code 1900 L
Washington, DC 20460
fax (202) 565-0044

Signed: Kenn Bern

Dated: 6/1/98

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents	)	

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION
1998 JUN -1 P 5:52

COMPLAINT COUNSEL'S MOTION TO EXCLUDE RESPONDENTS' UNFILED OPPOSITIONS

COMES NOW Complaint Counsel, pursuant to 16 C.F.R. § 1025.23(c), 16 C.F.R. § 1025.14 and 16 C.F.R. § 1025.16, and respectfully requests that documents submitted to the Presiding Officer by Respondents, but not filed with the Secretary of the Commission or served upon Complaint Counsel of record, be excluded from the record in this matter, and not be considered for purposes of the Motions to which they purport to respond.

I. THE OPPOSITIONS AT ISSUE

On May 15, 1998, Complaint Counsel filed and served on all counsel[1] and the Presiding Officer an *In Camera* Submission of Documents in Response to Discovery, and Request for Disclosure Determination. On or about May 19, 1998, Respondents forwarded a "Proposed Protective Order and Opposition of Respondents to Complaint Counsel's Submission of Documents *in Camera*," with exhibits, to the Presiding Officer. Respondents did not file the document with the Secretary of the Commission, and did not serve Complaint

1 Complaint Counsel's filing was both telecopied and deposited in the United States Mail, certified delivery, postage pre-paid, to all recipients on May 15, 1998.

Counsel of record with their purported opposition, despite their claim in a cover letter that "Complaint Counsel has been served with copies of these pleadings."[2] *See* Correspondence from Thomas P. Hogan, Jr. to The Hon. William B. Moran, dated May 19, 1998, purporting to copy Complaint Counsel, and Certificate of Service to Opposition, attached hereto as Exhibit A.

On May 15, 1998, Complaint Counsel also filed a Motion for Protective Order and *in Camera* Submission pertaining to a document received by the staff from a confidential informant. On or about May 19, 1998, Respondents allegedly forwarded to the Presiding Officer "Respondents' Opposition to Complaint Counsel's Motion for Protective Order Regarding Anonymous Letter." This document, like Respondents' other Opposition, was not filed with the Secretary of the Commission, and not served upon Complaint Counsel of Record, despite the cover letter stating that it was served.[3] *See* Exhibit A hereto.

II. THE RESPONSES WERE NOT PROPERLY FILED OR SERVED, AND SHOULD BE EXCLUDED FROM CONSIDERATION

Title 16 C.F.R. § 1025.14 requies an original and three copies of all documents submitted to the Commission or the Presiding Officer to be addressed to, and filed with, the Secretary of the Commission. 16 C.F.R. § 1025.14. Title 16 C.F.R. § 1025.16 provides

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2 Respondents had sent the document via facsimile to the Director of the CPSC's Legal Division, and the Assistant Executive Director of the CPSC's Office of Compliance, both of whom are Of Counsel in this case, but not to Complaint Counsel. Although Complaint Counsel notified Respondents in writing of this error, it was never cured, nor was the document ever filed with the Secretary of the Commission.

3 As with Respondents' other Opposition, the document was forwarded to the Director of the CPSC's Legal Division, and to the Assistant Executive Director of the Office of Compliance (Of Counsel in the case), despite the fact that counsel for Respondents was aware that Ms. Orlove, Mr. Singer and Mr. Tarnoff are Complaint Counsel of record herein.

that service of documents (such as oppositions to motions) be made by registered or certified mail, delivery to an individual or, "when a party has appeared by an attorney or other representative, service upon that attorney or other representative shall constitute service upon the party." 16 C.F.R. § 1025.16.

Title 16 C.F.R. § 1025.23(c) requires oppositions to any written motions to be made in writing and filed within 10 days after service of any written motion or petition (unless otherwise designated by the rules of the Presiding Officer). 16 C.F.R. § 1025.23(c). That section also clearly and unambiguously provides that "failure to respond to a written motion may, in the discretion of the Presiding Officer, be considered as consent to the granting of the relief sought in the motion." 16 C.F.R. § 1025.23(c).

In the instant case, Respondents failed to file their Oppositions with the Secretary of the Commission. Respondents also failed to serve Complaint Counsel of record with same, despite Complaint Counsel's reiteration to counsel for Respondents that all documents must be served on counsel of record, Ms. Orlove, Mr. Singer and Mr. Tarnoff. *See* Letter from Deborah S. Orlove to Thomas P. Hogan, Jr., dated May 20, 1998, attached hereto as Exhibit B. The period for response to Complaint Counsel's motions has expired. Pursuant to the Rules of Practice governing this proceeding, both purported Oppositions must be excluded from consideration.

WHEREFORE Complaint Counsel respectfully requests that Respondents' submissions to the Presiding Officer, in the form of their "Proposed Protective Order and Opposition of Respondents to Complaint Counsel's Submission of Documents In Camera" and "Respondents' Opposition to Complaint Counsel's Motion for Protective Order Regarding

Anonymous Letter," be excluded from consideration, and the relief requested by Complaint Counsel in its Motions be GRANTED.

Dated: June 1, 1998

Respectfully submitted,

Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.
Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, MD 20814
(301) 504-0626

Of Counsel
Eric L. Stone, Esq.
Director, Legal Division
Alan H. Schoem, Esq.
Assistant Executive Director
Office of Compliance

dso\central\doc5.mot

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, **COMPLAINT COUNSEL'S MOTION TO EXCLUDE PROHIBITED *EX PARTE* COMMUNICATIONS IN THE FORM OF RESPONDENTS' UNFILED OPPOSITIONS** was filed with the Secretary of the Commission, telecopied, and deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

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The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
401 M St., S.W.
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Signed: _____

Dated: 6/1/98

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215-963-5000
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Morgan, Lewis
& Bockius LLP
COUNSELORS AT LAW
125 years
1873 1998

Thomas P. Hogan, Jr.
215-963-5253

May 19, 1998

VIA TELECOPIER AND REGULAR MAIL

The Honorable William B. Moran
Offices of the Administrative Law Judges
Environmental Protection Agency
401 M Street, S.W.
Mail Code 1900 L
Washington, DC 20460

Re: In the Matter of Central Sprinkler Corp. and Central Sprinkler Co. (Docket No. 98-2)

Dear Judge Moran:

Enclosed please find: (1) Respondents' Opposition to Complaint Counsel's Motion For Protective Order Regarding Anonymous Letter; and (2) Proposed Protective Order and Opposition of Respondents to Complaint Counsel's Submission of Documents In Camera.

Complaint Counsel has been served with copies of these pleadings.

Respectfully,

Thomas P. Hogan, Jr.

TPH/lgh

Encl.

cc: Complaint Counsel (w/encl.)

CERTIFICATE OF SERVICE

I, Thomas P. Hogan, Jr., hereby certify that on this date a true and correct copy of the foregoing Respondents' Opposition To Complaint Counsel's Motion For Protective Order Regarding Anonymous Letter was served via telecopier and regular mail upon the following:

Eric L. Stone
Director
Division of Administrative Litigation
U.S. Consumer Product Safety Commission
4430 East West Highway
Bethesda, MD 20814

Alan H. Schoem
Assistant Executive Director
Office of Compliance
U.S. Consumer Product Safety Commission
4430 East West Highway
Bethesda, MD 20814

The Honorable William B. Moran
Offices of the Administrative Law Judges
Environmental Protection Ageycy
401 M Street, S.W.
Mail Code 1900 L
Washington, DC 20460

Dated: May 19, 1998

Thomas P. Hogan, Jr.

U.S. CONSUMER PRODUCT SAFETY COMMISSION
WASHINGTON, D.C. 20207-0001

OFFICE OF COMPLIANCE
Legal Division

Deborah S. Orlove
Trial Attorney
Tel: 301-504-0626 ext. 1347
Fax: 301-504-0359

May 20, 1998

VIA TELECOPIER AND FIRST CLASS MAIL
Thomas P. Hogan, Jr., Esq.
MORGAN, LEWIS & BOCKIUS LLP
2000 One Logan Square
Philadelphia, PA 19103
(215) 963-5299

Re: ***In the Matter of Central Sprinkler Corp. and Central Sprinkler Co.*, CPSC Docket No. 98-2**
Service of Documents; Complaint Counsel's Responses to Respondents' First Interrogatories and Request for Production of Documents

Dear Mr. Hogan:

I am writing to alert you that I and my co-counsel, Eric Singer and Howard Tarnoff, are the counsel of record in this matter, and that proper service of any pleadings or other documents in this matter requires service to us. As you know, I have been corresponding with you in this case for many weeks now, and have signed all motions since the Complaint issued. The pleading you telecopied only to the Director of the CPSC's Office of Compliance and to the Director of the Legal Division was not properly served, and the method by which it was transmitted cannot be relied upon to reach me and the other counsel of record in a timely manner.

Additionally, we have received conflicting requests from you and your co-counsel with respect to disclosure of our correspondence on these matters to Judge Moran. Yesterday, we received a fax from Gordon Cooney of your office requesting that we not copy the Judge on our correspondence re: discovery, nearly at the same time we received a fax from you to the Judge attaching your correspondence to us on discovery issues.

I am also writing in response to your letter dated May 13, 1998 which discusses Complaint Counsel's supplemental discovery responses. You allege in your letter that our discovery is deficient because the data compilation "provides little more than the naked conclusions of Complaint Counsel regarding test results." However, as you recall, you requested in discovery "all documents identified in the "List and Summary of Documentary Evidence" attached to the Complaint" in this matter. *See* Request No. 1, Respondents' First

Request for Production of Documents and Things. The data compilation was the first item listed by Complaint Counsel in the List and Summary of Documentary Evidence. We initially objected to production of the compilation, choosing only to produce the raw data upon which it was based, as the compilation of the data was Complaint Counsel's work product. You voiced objections, indicating that you cannot defend this case without the documents in the List and Summary. Despite the privileged nature of the compilation, we provided it to you in a supplemental response, in the spirit of full disclosure. We have provided you with what you requested.

In your May 13 letter, you now claim that "absent the underlying data and methodology," the data compilation provides Central "with little relevant information and no opportunity to examining [sic] the validity of the results." However, the test data upon which the compilation is based has been produced to you where claims of confidentiality have not been made or have been waived, and, where such claims still apply, the documents have been submitted to the Presiding Officer for *in camera* review and determination of the circumstances and extent of disclosure. You were served with Complaint Counsel's Request for that determination earlier this week.

In your letter, you also suggest that the staff has "no information that indicates any failures regarding Omegas using silicone o-rings, and no information that indicates failures in any post-1990 Omegas used in copper or plastic systems." Our Interrogatory Responses and document production, as well as the numerous letters we have written to counsel for Central on issues such as the February, 1998 Omega failure, contradict your conclusions. Regardless, we do not intend to argue the evidence in letters; all argument will occur at the appropriate time before the Presiding Officer.

With respect to persons with knowledge, as we have indicated before, all persons whose names are reflected in the documents produced, as well as persons employed by Central, either now or in the past, and all persons who own, install, inspect or otherwise deal with Omega sprinklers may be knowledgeable about the Omega problem, and may be called by Complaint Counsel as fact witnesses. Upon receipt of Central's responses to our discovery, I expect that additional witnesses will be disclosed. Once we determine who we intend to call as witnesses in this matter, both fact and expert, we will make all necessary and appropriate disclosures.

As Complaint Counsel continues its investigation and preparation of this case, we expect that additional information will come to light. We will continue to supplement our discovery responses as required by the applicable rules. To that end, we are producing today under separate cover another supplement of documents responsive to Respondents' discovery requests. Additionally, we will be filing today an amended response to Respondents' Interrogatories in light of new evidence on a significant fire that occurred just last week, and other information that has developed in this case.

Please do not hesitate to contact me should you have any additional questions.

Sincerely,

Deborah S. Orlove, Esq.
Complaint Counsel

cc: J. Gordon Cooney, Jr., Esq.
Emily J. Lawrence, Esq.
Michael F. Healy, Esq.
John C. Fenningham, Esq.

dso/discov5.ltr

********** -COMM. JOURNAL- ********** DATE MAY-20-1998 ***** TIME 10:27 *** P.01

MODE = MEMORY TRANSMISSION START=MAY-20 10:26 END=MAY-20 10:27

FILE NO.= 091

STN NO.	COM	ABBR NO.	STATION NAME/TEL.NO.	PAGES	DURATION
001	OK	8	92024677176	004/004	00:00'33"

-CPSC COMPLIANCE -

********** -301 504 0359 - ***** - 301 504 0359- **********

U.S. CONSUMER PRODUCT SAFETY COMMISSION
WASHINGTON, D.C. 20207-0001

OFFICE OF COMPLIANCE
LEGAL DIVISION

Facsimile: (301) 504-0359
Office: (301) 504-0626

DATE: 5/20/98 PAGES TRANSMITTED 3 + COVER

TO: Michael F. Healy, Esq.
MORGAN, LEWIS & BOCKIUS, LLP

OFFICE: _____

FAX: (202) 467-7176

FROM: Deborah Orlove, Esq.

TELEPHONE: (301) 504-0626 Ext. 1347

REMARKS: _____

_____

_____

☒ Confirmation copy to follow by U.S. Mail

☐ Fax Transmission Only

Note: If all pages are not received, or if you have any problems with this transmittal, please contact the person listed above.

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MODE = MEMORY TRANSMISSION START=MAY-20 10:24 END=MAY-20 10:26

FILE NO.= 090

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-CPSC COMPLIANCE -

********** -301 504 0359 - ***** - 301 504 0359- **********

U.S. CONSUMER PRODUCT SAFETY COMMISSION
WASHINGTON, D.C. 20207-0001

OFFICE OF COMPLIANCE
LEGAL DIVISION
Facsimile: (301) 504-0359
Office: (301) 504-0626

DATE: 5/20/98 PAGES TRANSMITTED 3 + COVER

TO: John C. Fenningham, Esq.
Corr, Stevens, & Fenningham

OFFICE: _____

FAX: (215) 639-8995

FROM: Deborah Orlove, Esq.

TELEPHONE: (301) 504-0626 Ext. 1347

REMARKS: _____

_____

_____

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********** -COMM. JOURNAL- ********** DATE MAY-20-1998 ***** TIME 10:24 *** P.01

MODE = MEMORY TRANSMISSION START=MAY-20 10:23 END=MAY-20 10:24

FILE NO.= 089

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-CPSC COMPLIANCE -

********** -301 504 0359 - ***** - 301 504 0359- **********

U.S. CONSUMER PRODUCT SAFETY COMMISSION
WASHINGTON, D.C. 20207-0001

OFFICE OF COMPLIANCE
LEGAL DIVISION

Facsimile: (301) 504-0359
Office: (301) 504-0626

DATE: 5/20/98 PAGES TRANSMITTED 3 + COVER

TO: Michael F. Healy, Esq.
MORGAN, LEWIS & BOCKIUS, LLP

OFFICE: _____

FAX: (202) 467-7176

FROM: Deborah Orlove, Esq.

TELEPHONE: (301) 504-0626 Ext. 1347

REMARKS: _____

_____

_____

☒ Confirmation copy to follow by U.S. Mail

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********** -COMM. JOURNAL- ********** DATE MAY-20-1998 ***** TIME 10:23 *** P.01

MODE = MEMORY TRANSMISSION START=MAY-20 10:22 END=MAY-20 10:23

FILE NO.= 088

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-CPSC COMPLIANCE -

********** -301 504 0359 - ***** - 301 504 0359- **********

U.S. CONSUMER PRODUCT SAFETY COMMISSION
WASHINGTON, D.C. 20207-0001

OFFICE OF COMPLIANCE
LEGAL DIVISION
Facsimile: (301) 504-0359
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DATE: 5/20/98 PAGES TRANSMITTED 3 + COVER

TO: J. Gordon Cooney, Jr.
Thomas P. Hogan, Jr.
Emily J. Lawrence
MORGAN, LEWIS & BOCKIUS, LLP

FAX: (215) 963-5299

FROM: DEBORAH ORLOVE, ESQ.

TELEPHONE: (301) 504-0626 Ext. 1347

REMARKS: _____

☒ Confirmation copy to follow by U.S. Mail

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Note: If all pages are not received, or if you have any problems with this transmittal, please contact the person listed above.

This message is intended only for the use of the individual or entity to which it is addressed and may contain information that is privileged, confidential and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by telephone, and return the original message to us at the above address via the U.S. Postal Service. Thank you.

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UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION
1998 JUN -2 A 9:01

In the Matter of	
CENTRAL SPRINKLER CORP.,	CPSC DOCKET NO.: 98-2
and	
CENTRAL SPRINKLER CO.,	
Respondents	

FACTORY MUTUAL RESEARCH CORPORATION'S RESPONSE TO COMPLAINT COUNSEL'S REQUEST FOR DISCLOSURE DETERMINATION OF FACTORY MUTUAL RESEARCH CORPORATION DOCUMENTS

Non-party participant Factory Mutual Research Corporation ("FMRC") opposes any request by Complaint Counsel that any FMRC documents be placed in the public record. FMRC also objects to Complaint Counsel's request that any FMRC documents, other than those provided by or prepared at the request of Central Sprinkler Co., be disclosed to Central Sprinkler.

As set forth in the Affidavit of Peter H. Hachenburg filed herewith, in order for FMRC to maintain its status as an internationally recognized testing laboratory, inspection body, and approval body, FMRC must preserve the confidentiality of both information supplied by its customers and information generated during the testing of products for those customers. FMRC's duty of confidentiality stems not only from its contracts with its customers, but also from the very nature of FMRC as an internationally recognized testing laboratory and approval body.

To date, FMRC has cooperated with the Commission by providing confidential documents

in response to the Commission's subpoena. FMRC provided these documents with an express "request for confidentiality pursuant to 16 C.F.R. § 1015.18," a copy of which is attached hereto as Exhibit A. Now the Commission seeks to provide all of those documents to Respondent Central Sprinkler, and to place some or all of those documents in the public record. Any such violation of FMRC's obligations of confidentiality would seriously impair FMRC's continued ability to function as an internationally recognized testing laboratory. (Hachenburg Affidavit, ¶ 8). It would have a chilling effect on FMRC's future customers, leading some of them to either market or purchase fire protection products without any testing by FMRC. (*Id.*) This could place those customers and the general public at unnecessary risk. It would also limit the information that the Commission could access when it investigates any product that is related to fire safety or the other types of testing performed by FMRC and other testing laboratories.

The Commission has acknowledged that 18 U.S.C. § 1905 and/or 15 U.S.C. § 2055(a) bar disclosure of trade secret and confidential commercial information. In addition, 16 C.F.R. § 1025.31(d)(6) provides for the protection of trade secret and other confidential research, development, or commercial information. The procedures for *in camera* submission are not meant to abrogate the rights of FMRC and its customers to preserve the confidentiality of these documents, but rather to allow the Presiding Officer access to this information so that it may be considered in reaching a decision on the merits of this proceeding. 16 C.F.R. § 1025.45(2) places the burden on any party desiring access to *in camera* materials, such as Central Sprinkler, to make a motion setting forth its justification for such access. Neither Central Sprinkler nor any other party has yet filed such

a motion. Nonetheless, in the spirit of cooperation and efficiency, FMRC will describe below the documents for which it would not object to such a motion from Central Sprinkler.

FMRC's documents can generally be placed into two categories for the purposes of this motion. The first category consists of documents either provided to FMRC by Central Sprinkler or prepared by FMRC in response to Central Sprinkler's request that FMRC test its products. These documents are identified by the following in the lower right corner: 00233-01021, 01392-01402, and 01752-01753. The second category consists of all other documents produced by FMRC in response to the Commission's subpoena. These documents are identified by the numbers 00001-00232, 01022-01751, 01754-02152.

As to the first category, FMRC does not object to the Commission producing those documents to Central Sprinkler because such production is not inconsistent with FMRC's obligations of confidentiality. FMRC objects to placing these documents in the public record, however, to the extent that Central Sprinkler makes such objections. This is because FMRC's duty of confidentiality runs to Central Sprinkler for this category of documents.

As to the second category of documents, FMRC objects to any disclosure to either Central Sprinkler or anyone else. Producing these documents to Central Sprinkler or placing them in the public record would violate FMRC's obligations of confidentiality to the companies that either provided this information to FMRC or that retained FMRC to perform testing, or would destroy the proprietary and confidential nature of FMRC's own trade secrets and confidential business information. If the Presiding Officer determines that any of the documents in this second category should be produced, FMRC requests the opportunity to redact information identifying its customers

and other sources of confidential information.

Respectfully submitted,

FACTORY MUTUAL RESEARCH CORPORATION
By its attorneys,

Alan R. Miller
John N. Love
Rosemary Connolly
ROBINS, KAPLAN, MILLER & CIRESI L.L.P.
222 Berkeley Street, Suite 2200
Boston, MA 02116-3748
(617) 267-2300

DATED: 5/28/98

CERTIFICATE OF SERVICE

I, John N. Love, hereby certify that on May 28, 1998, a copy of this document was delivered to the following by facsimile and by first class mail, postage prepaid:

Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.
Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, MD 20814
(301) 504-0626
Fax (301) 504-0359

(cont'd)

(cont'd)

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(215) 639-4070
Fax (215) 639-8995

The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
401 M Street, SW
Mail Code 1900 L
Washington, DC 20460
Fax (202) 565-0044

John N. Love, Esq.

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)
	)
CENTRAL SPRINKLER CORPORATION	)
	)
	)

REQUEST FOR CONFIDENTIALITY

Factory Mutual Research Corporation ("FMRC") hereby submits its written response to the Subpoena issued by the United States of America Consumer Product Safety Commission ("Commission") and requests confidentiality for the documents submitted in response to the subpoena as well as FMRC's written responses provided hereto.

This request for confidentiality is made pursuant to 16 C.F.R. §1015.18 because the responsive documents and information constitute confidential and proprietary business information between FMRC and its clients. Before undertaking to perform testing, FMRC promises its clients, implicitly or explicitly, that it will keep all information submitted by the client, as well as its testing results, confidential. FMRC's clients entrust FMRC with their proprietary and confidential information and often these clients are competitors in the same markets, thereby necessitating that FMRC maintain the strictest confidences with regard to the information and test results. FMRC has an important business interest to protect in maintaining the confidentiality of its clients' files and the results of FMRC's testing. FMRC therefore requests that the information provided to the Commission pursuant to this subpoena be exempt from disclosure including, but not limited to, disclosure pursuant to the Freedom of Information Act, 5 U.S.C. §1552.

Further, FMRC requests that should a request for disclosure or production of the information that FMRC has provided to the Commission in response to the subpoena be made, that FMRC be notified prior to the disclosure of such requested information so that FMRC may take appropriate action to protect the confidentiality of the information and its disclosure. Notification should be provided to: Peter H. Hachenburg, Esquire, Vice President, General Counsel and Secretary, Factory Mutual Research Corporation, 1151 Boston-Providence Turnpike, Norwood, Massachusetts 02062.

Respectfully submitted,

Dated: June 17, 1997

Peter H. Hachenburg

PETER H. HACHENBURG

V.P., Gen'l. Counsel & Secretary

3519403-1

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, **COMPLAINT COUNSEL'S *IN CAMERA* SUBMISSION OF DOCUMENTS IN RESPONSE TO DISCOVERY, AND REQUEST FOR DISCLOSURE DETERMINATION** was filed with the Secretary of the Commission, telecopied, and deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

J. Gordon Cooney, Jr., Esq.
Thomas P. Hogan, Jr., Esq.
Emily J. Lawrence, Esq.
MORGAN, LEWIS & BOCKIUS LLP
2000 One Logan Square
Philadelphia, PA 19103
(215) 963-5000
fax (215) 963-5299

Michael F. Healy, Esq.
MORGAN, LEWIS & BOCKIUS LLP
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fax (202) 467-7176

John C. Fenningham, Esq.
CORR, STEVENS & FENNINGHAM
Five Neshaminy Interplex, Suite 315
Trevose, PA 19053
(215) 639-4070
fax (215) 639-8995

Attorneys for Central Sprinkler Corporation and Central Sprinkler Company

Geoffrey A. Lewis, Esq.
Senior Corporate Counsel
Underwriters Laboratories, Inc.
333 Pfingsten Road
Northbrook, IL 60062-2096
Fax (847) 498-3789

Alan R. Miller, Esq.
Robins, Kaplan, Miller & Ciresi, LLP
222 Berkeley St., Suite 2200
Boston, MA 02116-3751
Fax (617) 267-8288

The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
401 M St., S.W.
Mail Code 1900 L
Washington, DC 20460
fax (202) 565-0044

The documents at issue will be delivered under separate cover to the Secretary of the Commission, and to Presiding Officer for *in camera* review pursuant to 16 C.F.R. § 1025.45.

Signed: Deborah Mitchell

Dated: 5/15/98

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UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION
1998 JUN -2 A 9:02

In the Matter of CENTRAL SPRINKLER CORP., and CENTRAL SPRINKLER CO., Respondents	CPSC DOCKET NO.: 98-2

AFFIDAVIT OF PETER H. HACHENBURG

I, Peter H. Hachenburg, make the following declarations:

1. I am Vice President, General Counsel, and Secretary of non-party Factory Mutual Research Corporation ("FMRC").

2. FMRC is an internationally recognized testing laboratory, inspection body, and approval body. FMRC conducts basic and applied research on topics such as effectiveness of fire alarms and sprinklers, flammability, wind resistance, and other topics related to property loss prevention and control.

3. FMRC's relationships with its customers depend upon its ability to maintain the confidentiality of information provided by the customers and information developed during its testing. Before undertaking to perform tests, FMRC promises its customers that it will keep all information submitted by them, as well as the test results, confidential.

4. For FMRC to perform its testing and research functions, its needs technical data about the products it tests. Much of those data consists of confidential trade secrets and other proprietary

data of the products' manufacturers. Such data often amount to nothing less than a recipe for each product, revelation of which would permit a manufacturer's competitors to duplicate its products without making any substantial investment in research and development. Revelation of failed testing could also obviously damage a manufacturer's ability to market its products.

5. FMRC also conducts tests for customers who did not manufacture the product being tested, but rather intend to use that product under particular circumstances. In such cases, the testing and the details of those circumstances are confidential and proprietary to the customer.

6. This kind of confidentiality is critical to the performance of FMRC's role as an internationally recognized testing laboratory, inspection body and certification body. International standards governing the conduct of testing laboratories, inspection bodies, and certification bodies, such as FMRC, require such confidentiality. The International Standards Organization/International Electrotechnical Commission ("ISO/IEC") promulgates international requirements for the acceptance of inspection bodies, testing laboratories, and certification bodies such as FMRC. ISO/IEC Guide 39-1983, covering the requirements for acceptance of inspection bodies provides in pertinent part:

> **Confidentiality and Security.**
>
> The inspection body shall be willing to observe terms and conditions to provide for confidentiality and security of its practices as required by the users of its services.
>
> Inspection bodies may in the course of their duties receive information such as manufacturing processes, market information, volume or value of production, which is of a secret nature or confidential. It is of the greatest importance that this confidentiality is respected at all times and is the subject of a clear understanding

between the body granting recognition, the inspection body and the manufacturer subject to inspection.

All inspection staff shall be made aware of the need for confidentiality and security of their work. The distribution of confidential information within the staff shall be limited to those persons whose job requires that they have such information.

7. ISO/IEC Guide 38-1983, setting forth the general international requirements for the acceptance of testing laboratories, provides, "The testing laboratory shall be willing to observe terms and conditions to provide for confidentiality and security of its practices as required by the users of its services." ISO/IEC Guide 40-1983, stating the general international requirements for the acceptance of certification bodies, provides, "The Certification Body shall ensure the confidentiality of its activities and those of the testing an inspection bodies it commissions."

8. A breach in the confidentiality would harm FMRC and its customers:

- A loss of confidentiality would quickly lead to a loss of customers. FMRC's customers do not demand confidentiality just as a whim: they are very serious about it. If the confidentiality of their proprietary information is not respected, at least some of those customers will not submit their products for evaluation by FMRC.

- FMRC depends on its ready access to such confidential data to be able to conduct its property loss prevention and control research and provide other property conservation services. If its access to confidential data is impaired (as it would be if manufacturers stopped providing such data), FMRC's ability to conduct its business would be adversely affected. There would be a definite "chilling" effect from the unnecessary disclosure of its customers' trade secrets.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on May 27, 1998.

Peter H. Hachenburg

PETER H. HACHENBURG

CERTIFICATE OF SERVICE

I, John N. Love, hereby certify that on May 28, 1998, a copy of this document was delivered to the following by facsimile and by first class mail, postage prepaid:

Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.
Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, MD 20814
(301) 504-0626
Fax (301) 504-0359

J. Gordon Cooney, Jr., Esq.
Thomas P. Hogan, Jr., Esq.
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Michael F. Healy, Esq.
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Five Neshaminy Interplex, Suite 315
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(cont'd)

(cont'd)

The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
401 M Street, SW
Mail Code 1900 L
Washington, DC 20460
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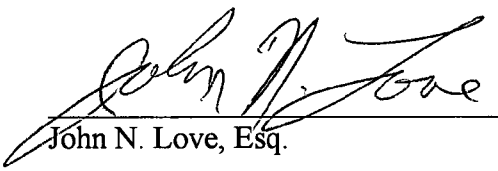

John N. Love, Esq.

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UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION

1998 JUN 15 P 2:35

In the Matter of	)	
	)	
CENTRAL SPRINKLER CORP.,	)	
	)	
and	)	**CPSC Docket No. 98-2**
	)	
CENTRAL SPRINKLER CO.,	)	
	)	
Respondents	)	

CONFIDENTIALITY ORDER AND ORDER REGARDING COMPLAINT COUNSEL'S *IN CAMERA* SUBMISSION OF DOCUMENTS AND REQUEST FOR DISCLOSURE DETERMINATION

On May 15, 1998, Complaint Counsel filed documents *in camera*, in response to Respondent's First Discovery Request, for a determination of "whether and to what extent such documents should be produced under 16 C.F.R. § 1025.33." Complaint Counsel's *In Camera* Submission of Documents In Response to Discovery and Request for Disclosure Determination ("Request"). The Bate stamped documents, some 9,540 pages, were provided to the Consumer Product Safety Commission ("CPSC") in response to subpoenas issued in May 1997, but they were not delivered to Respondents because the subpoenaed parties, Underwriters Laboratories Inc. ("UL") and Factory Mutual Research Corporation ("FMRC"), asserted confidentiality and trade secret claims and would not agree to their disclosure in discovery.

For that reason, Complaint Counsel has sought the Presiding Judge's determination of whether and to what extent, in accordance with 15 U.S.C. § 2055(a)(8) and 16 C.F.R. 1025.45, the documents may be produced. UL and FMRC, identified as "third parties" in the Request were served with copies of this filing.

The letters from the FMRC and UL, identified in the Request as Exhibits "A" and "B", and dated June 17, 1997 and August 29,1997, respectively, request that the subpoenaed documents be exempt from disclosure under the Freedom of Information Act ("FOIA") as confidential, proprietary, reflective of internal thought processes of the third parties, and on the basis that this release could harm the third parties' and/or the "applicant's" competitive position. Subsequently, FMRC has reiterated its opposition to any FMRC documents being placed in the public record as well as the disclosure of those documents to Central Sprinkler Corp. and Central Sprinkler Co. ("Central"), other than those provided by or prepared at the request of Central.[1] For its part, UL, in a letter dated May 27, 1998, has stated that it has no objection to disclosure to Respondents (subject to a confidentiality agreement) of the documents it has produced to the CPSC.

Central filed its opposition on May 19, 1998, to Complainant Counsel's *in camera* submission and request for disclosure determination, asserting that this amounted to conducting an *ex parte* trial, and that such material is subject to discovery under Title 15 U.S.C. § 2055(a)(8). Central asserts that the CPSC should have sought a negotiated confidentiality agreement with Respondents and in line with this approach, submitted a draft Confidentiality Agreement ("Draft Agreement") for this Court's approval[2]. The Draft Agreement is an elaborate

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[1]On May 28, 1998, FMRC filed a request to participate as a non-party in this proceeding in order to protect its confidential documents from unwarranted disclosure. A ruling on this request is not being made at this time, pending responses to the request from the parties.

[2]Complaint Counsel filed, on June 1, 1998, a Motion to Exclude Respondents Unfiled Oppositions on the basis that they were not filed with the Secretary of the Commission nor upon Complaint Counsel. A ruling on this motion will be made at the first prehearing conference, now scheduled for June 16, 1998.

and broadly worded document which attempts to give the parties "the right to limit access to any document or other item relevant to this litigation . . . ," provides a dispute resolution mechanism for contested designations of limited access, including the allocation of the burden of proof, and calls for the return or destruction of all such material at the conclusion of the litigation.

Discussion

Some perspective is in order concerning these issues. It is not reasonable for counsel for Respondent to view Complaint Counsel's *in camera* submission of documents as an attempt to engage in an *"ex parte* trial of this matter." Rather, it is apparent that Complaint Counsel has made a good faith attempt to find a path between honoring Respondent's discovery requests and the third parties' request that the documents subpoenaed by the Consumer Product Safety Commission not be disclosed.

Counsel for Respondent has also lost sight of the consideration that, regardless of which documents are ultimately disclosed for purposes of discovery as part of the public record, in full or redacted form and with or without confidentiality orders, the determination of liability by the presiding judge, if liability is indeed established, will be made ***only*** on the basis of those documents which are submitted into evidence *at the hearing.*

As to the some 9,540 pages of materials in issue, it has been noted that the third parties have asserted FOIA claims as the basis for their nondisclosure request. Complaint Counsel observes that Title 18 U.S.C. § 1905 generally and 15 U.S.C. § 2055 more particularly, speak to the public disclosure of confidential information. Section 6 (a)(8) of the Consumer Product Safety Act, 15 U.S.C. 2055 (a)(8), provides that information shall be disclosed when relevant in

any administrative or judicial proceedings to which the Commission is a party, subject to *in camera* review of confidential material. With an appropriate confidentiality order, it is clear that the material provided by the third parties is disclosable to Respondent, Central. *See*, Culligan v. Yamaha Motor Corp., 110 F.R.D. 122, 127; 1986 U.S. Dist. LEXIS 26489, April 21, 1986. (". . . information that the statutes require the agency to keep confidential may nevertheless be subject to disclosure in litigation.")

This does not completely resolve the matter however, as two other aspects must be addressed. As mentioned, disclosure of all the documents to Central is now appropriate, given the confidentiality order set forth *infra*. However, resolving what Central may discover[3] does not resolve the appropriate content of the *public* record in this case. Central's attempt to entirely block from public disclosure, both for the present and at the conclusion of this litigation, permanently, all of the third party documents (and potentially any other documents) is rejected.

Rather, for purposes of determining the appropriate content of the public record in this proceeding, the third parties are directed within 45 days of this Order to identify by referencing the particular Bate stamped page(s) and separately identifying for each request for exemption from disclosure the trade secret or privileged or confidential commercial or financial information and:

1. Specifically identifying (by highlighting or red underlining) the ***exact*** portion(s) of the document claimed to be confidential;

---

[3] It is noted that Central may already have all of the materials it seeks. The third parties' request for confidentiality rests, in part, upon this relationship with the "applicant," to wit, Central.

2. State whether the information claimed to be confidential has ever been released in any manner to a person who was not an employee or in a confidential relationship with the company;

3. State whether the information so specified is commonly known within the industry or is readily ascertainable by outside persons with a minimum of time and effort;

4. State how release of the information so specified would be likely to cause substantial harm to the company's competitive position; and

5. State whether the submitter is authorized to make claims of confidentiality on behalf of the person or organization concerned.

Failure to comply with the specifics listed above will result in release of the documents in issue to the public record in this matter.

Conclusion and Confidentiality Order

For the foregoing reasons, the documents submitted by Complaint Counsel are directed to be delivered to Counsel for Central. Pending resolution of confidentiality issues as to the composition of the public record in this case, Counsel for Central is directed to not disseminate the documents and to use them only for purposes of this litigation. If Central's Counsel wishes to disclose these documents in connection with trial preparation to persons other than Central employees, Counsel shall provide ten (10) days notice to the third parties, who shall have the right to prevent such disclosure by submitting a motion to the Presiding Judge. Pending a determination of such a motion, no disclosure shall be made. A copy of this Order shall be

provided to all persons to whom confidential documents are disclosed and these persons shall be subject to its terms.

So Ordered.

William B. Moran

William B. Moran
United States Administrative Law Judge

Dated: June 3, 1998
Washington, D.C.

In the Matter of Central Sprinkler Corp. And Central Sprinkler Co., Respondents
CPSC Docket No. 98-2

CERTIFICATE OF SERVICE

I hereby certify that the foregoing **Confidentiality Order and Order Regarding Complaint Counsel's *In Camera* Submission of Documents and Request for Disclosure Determinations**, dated June 3, 1998 was sent in the following manner to the addressees listed below.

By Regular Mail to:

J. Gordon Cooney, Jr., Esquire
Thomas P. Hogan, Esquire
Emily J. Lawrence, Esquire
MORGAN, LEWIS & BOCKIUS, LLP
2000 One Logan Square
Philadelphia, Pennsylvania 19103

Michael F. Healy, Esquire
MORGAN, LEWIS & BOCKIUS, LLP
1800 M Street, N.W.,
Washington, D.C. 20036

John C. Fenningham, Esquire
CORR, STEVENS & FENNINGHAM
Five Neshaminy Interplex, Suite 315
Trevose, Pennsylvania 19053

Alan H. Schoem
Assistant Executive Director
Office of Compliance
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Eric Stone, Esquire
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Deborah S. Orlove, Esquire
Complaint Counsel
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Howard N. Tarnoff, Esquire
Complaint Counsel
Legal Division
Office of Compliance
U.S. CONSUMER PRODUCT SAFETY COMMISSION
4330 East West Highway
Bethesda, Maryland 20814

By Certifed Mail/Return Receipt Requested to:

John N. Love, Esquire
ROBINS, KAPLAN, MILLER & CIRESI, LLP
222 Berkley Street
Boston, Massachusetts 02116

Geoffrey A. Lewis, Esquire
Senior Corporate Counsel
UNDERWRITERS LABORATORIES, INC.
333 Pfingsten Road
Northbrook, Illinois 60062

/s/
Sadye E. Dunn
Secretary, Consumer Product Safety Commission

Date: June 5, 1998

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETARY
OF INFORMATION

1998 JUN -9 1 A 9:30

In the Matter of	)	
	)	
CENTRAL SPRINKLER CORP.,	)	
	)	
and	)	**CPSC Docket No. 98-2**
	)	
CENTRAL SPRINKLER CO.,	)	
	)	
Respondents	)	

ORDER GRANTING COMPLAINT COUNSEL'S
MOTION FOR PROTECTIVE ORDER

On May 18, 1998, Complaint Counsel for the Consumer Product Safety Commission ("CPSC") filed a motion requesting that a document, which may be within the ambit of Respondent's First Request for Production of Documents, be protected from discovery. The document was submitted to the Presiding Judge *in camera*. The document, authored by an unidentified informant, contains "information and suggestions regarding Omega sprinkler failures . . ." Motion at 1.

Complaint Counsel relates that the document will not be used at trial, although it is being used to further CPSC's investigation. Complaint Counsel assures that all information it obtains as a result of such further investigation stemming from the document will be disclosed to Respondents.

Respondents Central Sprinkler Corp. and Central Sprinkler Co. ("Central"), filing an opposition to the motion, assert that the informant's privilege protects only the identity of the informant, not the contents of the document. In addition, since the document is anonymous, Respondent contends that the informant's identity is unknowable.

Respondents also assert that the "privilege must give way" where disclosure of an informant's identity or the contents of the communication are either relevant and helpful to the defense of an accused or is essential to a fair determination. Respondents' Opposition at 4. Upon consideration of the Motion and Respondent's Opposition, Complaint Counsel's Motion is GRANTED

Discussion

The informant's privilege is a well established and sound doctrine. Sec. Of Labor v. Superior Care, Inc., 107 F.R.D. 395, 397 (E.D. N.Y. 1985). It applies to civil as well as criminal cases. Han v. Dept. Of Agriculture, 580 F. Supp. 1564, 1567 (D.N.J. 1984). The privilege is not absolute, but rather is qualified. A balancing test is employed which involves consideration of "the public's interest in efficient enforcement of the Act, the informer's right to be protected against possible retaliation, and the defendant's need to prepare for trial." Sec. of Labor v. Charles Martin 459 F.2d 303, 305 (5th Cir. 1972).

The Presiding Judge has closely reviewed the subject document and concludes that its disclosure bears no relationship to Central's need to prepare for trial. The author of the document is not a witness and Complaint Counsel only intends to use the document as a basis for possible leads in its investigation. Complaint Counsel further relates that it will disclose all information it develops from the document and intends to use in the hearing.

Further, Central's argument that the privilege is not applicable because the document is an anonymous letter is rejected. Sophisticated legal counsel, as Central's representatives clearly are, know full well that the identity of an author is not dependent solely upon affixing one's name to a document. The details of a document, and even expressions or phrases within it, can

provide markers which may reveal the identity of the author or narrow the group of possible authors to a few individuals who can be quizzed.[1] As noted in Massman-Johnson, 1980 OSAHRC LEXIS 467, at *12 (May 2, 1980), quoting from Quality Stamping Products Inc., 79 OSAHRC 28 /F11, "the identity of an informer might be revealed from the disclosure of even a basically factual statement relevant to an investigation . . ."

Accordingly, having conducted the required balancing of interests, Complaint Counsel's Motion for Protective Order is GRANTED; the document is protected from discovery.

So Ordered.

William B. Moran

William B. Moran
United States Administrative Law Judge

Dated: June 4, 1998
Washington, D.C.

---

[1] The suggestion that Central needs the letter "[t]o the extent . . . [it] reveals or explains any potential problems with the Omegas . . . [to enable it to] address any potential problems appropriately" (Central Opposition at 5) is rejected. Central denies the gravamen of the Complaint and the document in issue does not "reveal or explain" any potential problems with the sprinklers beyond that which the Complaint and the documents delivered to Central through discovery have already provided.

In the Matter of Central Sprinkler Corp. And Central Sprinkler Co., Respondents
CPSC Docket No. 98-2

CERTIFICATE OF SERVICE

I hereby certify that the foregoing **Order Granting Complaint Counsel's Motion for Protective Order**, dated June 4, 1998 was sent in the following manner to the addressees listed below.

By Regular Mail to:

J. Gordon Cooney, Jr., Esquire
Thomas P. Hogan, Esquire
Emily J. Lawrence, Esquire
MORGAN, LEWIS & BOCKIUS, LLP
2000 One Logan Square
Philadelphia, Pennsylvania 19103

Michael F. Healy, Esquire
MORGAN, LEWIS & BOCKIUS, LLP
1800 M Street, N.W.,
Washington, D.C. 20036

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4330 East West Highway
Bethesda, Maryland 20814

Sadye E. Dunn

Sadye E. Dunn
Secretary, Consumer Product Safety Commission

Date: June 9, 1998

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETARY
OF INFORMATION

1998 JUN -9 1 A 9:30

In the Matter of	)	
	)	
CENTRAL SPRINKLER CORP.,	)	
	)	
and	)	**CPSC Docket No. 98-2**
	)	
CENTRAL SPRINKLER CO.,	)	
	)	
Respondents	)	

ORDER GRANTING COMPLAINT COUNSEL'S
MOTION FOR PROTECTIVE ORDER

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Complaint Counsel relates that the document will not be used at trial, although it is being used to further CPSC's investigation. Complaint Counsel assures that all information it obtains as a result of such further investigation stemming from the document will be disclosed to Respondents.

Respondents Central Sprinkler Corp. and Central Sprinkler Co. ("Central"), filing an opposition to the motion, assert that the informant's privilege protects only the identity of the informant, not the contents of the document. In addition, since the document is anonymous, Respondent contends that the informant's identity is unknowable.

Respondents also assert that the "privilege must give way" where disclosure of an informant's identity or the contents of the communication are either relevant and helpful to the defense of an accused or is essential to a fair determination. Respondents' Opposition at 4. Upon consideration of the Motion and Respondent's Opposition, Complaint Counsel's Motion is GRANTED

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The Presiding Judge has closely reviewed the subject document and concludes that its disclosure bears no relationship to Central's need to prepare for trial. The author of the document is not a witness and Complaint Counsel only intends to use the document as a basis for possible leads in its investigation. Complaint Counsel further relates that it will disclose all information it develops from the document and intends to use in the hearing.

Further, Central's argument that the privilege is not applicable because the document is an anonymous letter is rejected. Sophisticated legal counsel, as Central's representatives clearly are, know full well that the identity of an author is not dependent solely upon affixing one's name to a document. The details of a document, and even expressions or phrases within it, can

provide markers which may reveal the identity of the author or narrow the group of possible authors to a few individuals who can be quizzed.[1] As noted in Massman-Johnson, 1980 OSAHRC LEXIS 467, at *12 (May 2, 1980), quoting from Quality Stamping Products Inc., 79 OSAHRC 28 /F11, "the identity of an informer might be revealed from the disclosure of even a basically factual statement relevant to an investigation . . ."

Accordingly, having conducted the required balancing of interests, Complaint Counsel's Motion for Protective Order is GRANTED; the document is protected from discovery.

So Ordered.

William B. Moran

William B. Moran
United States Administrative Law Judge

Dated: June 4, 1998
Washington, D.C.

---

[1] The suggestion that Central needs the letter "[t]o the extent . . . [it] reveals or explains any potential problems with the Omegas . . . [to enable it to] address any potential problems appropriately" (Central Opposition at 5) is rejected. Central denies the gravamen of the Complaint and the document in issue does not "reveal or explain" any potential problems with the sprinklers beyond that which the Complaint and the documents delivered to Central through discovery have already provided.

In the Matter of Central Sprinkler Corp. And Central Sprinkler Co., Respondents
CPSC Docket No. 98-2

CERTIFICATE OF SERVICE

I hereby certify that the foregoing **Order Granting Complaint Counsel's Motion for Protective Order**, dated June 4, 1998 was sent in the following manner to the addressees listed below.

By Regular Mail to:

J. Gordon Cooney, Jr., Esquire
Thomas P. Hogan, Esquire
Emily J. Lawrence, Esquire
MORGAN, LEWIS & BOCKIUS, LLP
2000 One Logan Square
Philadelphia, Pennsylvania 19103

Michael F. Healy, Esquire
MORGAN, LEWIS & BOCKIUS, LLP
1800 M Street, N.W.,
Washington, D.C. 20036

John C. Fenningham, Esquire
CORR, STEVENS & FENNINGHAM
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Trevose, Pennsylvania 19053

Alan H. Schoem
Assistant Executive Director
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4330 East West Highway
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Director, Legal Division
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Complaint Counsel
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4330 East West Highway
Bethesda, Maryland 20814

Sadye E. Dunn

Sadye E. Dunn
Secretary, Consumer Product Safety Commission

Date: June 9, 1998

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION
1998 JUN 15 P 2:36

In the Matter of	:	
	:	
Central Sprinkler Corp.	:	
	:	
and	:	**CPSC Docket No. 98-2**
	:	
Central Sprinkler Co.,	:	
	:	
Respondents.	:	
	:	

RESPONDENTS' OPPOSITION TO
COMPLAINT COUNSEL'S MOTION TO EXCLUDE OPPOSITIONS

Presently before the Court is Complaint Counsel's Motion to exclude Respondents' oppositions to certain motions filed by Complaint Counsel.[1/] Complaint Counsel argues that the Presiding Officer should exclude Respondents' oppositions because, despite the fact that such oppositions were served on acting lead counsel for the CPSC and duly submitted to the Presiding Officer, such oppositions technically were not served on three other CPSC lawyers in the same office and/or formally filed with the Secretary of the CPSC.[2/] For reasons that follow, Respondents respectfully request that the Presiding Officer deny Complaint Counsel's Motion.

As an initial matter, counsel for the CPSC already has been effectively served with Respondents' Oppositions. Respondents' Oppositions were timely served on Eric Stone, the

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1/ See Complaint Counsel's Motion To Exclude Respondents' Unfiled Oppositions ("Complaint Counsel's Motion"), filed June 1, 1998.

2/ The oppositions at issue are: (1) Proposed Protective Order and Opposition of Respondents To Complaint Counsel's Submission of Documents In Camera; and (2) Respondents' Opposition To Complaint Counsel's Motion For A Protective Order Regarding Anonymous Letter (collectively, "Respondents' Oppositions").

Director of Administrative Litigation for the CPSC.[3/] See Exhibit "A" to Complaint Counsel's Motion. Mr. Stone has been and continues to act as lead counsel for the CPSC in this matter in conferences with Respondents, and has participated in conferences with the Presiding Officer as counsel for the CPSC as recently as last Friday, May 28, 1998. Therefore, serving Mr. Stone was both appropriate and effective. Upon CPSC counsel's request that all further service copies be directed to Deborah Orlove, Eric Singer, or Howard Tarnoff, see Exhibit "B" to Complaint Counsel's Motion, Respondents complied and have served subsequent pleadings as requested.

In addition, no prejudice of any kind has been suffered by Complaint Counsel, nor does Complaint Counsel's Motion even attempt to claim any prejudice. Respondents' Oppositions were served May 19; by May 20, Complaint Counsel already had sent a letter to Respondents commenting on Respondents' Oppositions. See Exhibits "A" and "B" to Complaint Counsel's Motion. Thus, Complaint Counsel clearly received Respondents' Oppositions in a timely fashion. As further evidence that Complaint Counsel timely received Respondents' Oppositions, on May 22, 1998, Complaint Counsel filed a request for leave to submit a reply brief to one of Respondents' Oppositions.[4/]

Finally, to the extent that any administrative confusion could have resulted based on the fact that Respondents' Oppositions were not filed with the Secretary of the CPSC, Respondents already have cured any such potential problem. Respondents have sent the appropriate

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3/ Respondents' Oppositions also were served on the Hon. William B. Moran, Presiding Officer, and Alan Schoem, the Assistant Executive Director for the CPSC Division of Compliance. See Exhibit "A" to Complaint Counsel's Motion.

4/ See Complaint Counsel's Motion For Leave To Submit Reply Brief In Support Of Complaint Counsel's Motion For Protective Order and In Camera Submission.

documents to the Secretary, with a complete explanation of the original service dates. See Letter to Secretary, attached hereto as Exhibit "A". Counsel will make sure that all subsequent pleadings are forwarded directly to the Secretary.

Thus, counsel for the CPSC has been effectively served, Complaint Counsel has suffered no prejudice, and Respondents have taken appropriate steps to assure that the Secretary's file regarding this matter is complete. All of this could have been accomplished via a letter or telephone call between counsel, rather than burdening the Court with another motion.

Based on all of the foregoing, Respondents respectfully request that the Presiding Officer enter the attached Order, denying Complaint Counsel's Motion. Given their actual receipt of a formal response opposing their motions, their request to file a reply memorandum, and their failure to allege any prejudice whatsoever, Complaint Counsel cannot plausibly contend that the Presiding Officer should view Respondents as having consented to Complaint Counsel's motions. See 15 C.F.R. § 1025.23(c).

Respectfully submitted,

Dated: June 2, 1998

J. Gordon Cooney, Jr.
Thomas P. Hogan, Jr.
Emily J. Lawrence
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2000 One Logan Square
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(215) 639-4070

Attorneys for Respondents
CENTRAL SPRINKLER CORP. and
CENTRAL SPRINKLER COMPANY

ALL-STATE® LEGAL 800-222-0510 EDR11 RECYCLED

2000 One Logan Square
Philadelphia, PA 19103-6993
215-963-5000
Fax: 215-963-5299

Morgan, Lewis
& Bockius LLP
COUNSELORS AT LAW

125 years
1873 1998

Thomas P. Hogan, Jr.
215-963-5253

June 2, 1998

VIA REGULAR MAIL

Sadye E. Dunn, Secretary
U.S. Consumer Product Safety Commission
Office of the Secretary
4330 East West Highway, Building 4340
Bethesda, MD 20814

Re: In the Matter of Central Sprinkler Corp., et al. (CPSC Docket. No. 98-2)

TO THE SECRETARY:

Enclosed please find an original and three copies of each of the following pleadings and discovery responses: (1) Respondents' Opposition To Complaint Counsel's Motion For Protective Order Regarding Anonymous Letter, served May 19, 1998 ; (2) Proposed Protective Order and Opposition Of Respondents To Complaint Counsel's Submission of Documents In Camera, served May 19, 1998; (3) Respondents' Motion To Compel Full and Complete Responses To Interrogatories and Document Requests, served May 20, 1998; (4) Respondents' Responses and Objections To Complaint Counsel's First Request For Production of Documents And Things, served May 26, 1998; (5) Respondents' Responses and Objections To Complaint Counsel's First Set of Interrogatories, served May 26, 1998; and (6) Privilege Log of Central Sprinkler Corporation and Central Sprinkler Company, served May 26, 1998.

These pleadings previously were served as noted on their respective certificates of service. They inadvertently were not forwarded to your attention. I apologize for any inconvenience or confusion.

Respectfully,

Thomas P. Hogan, Jr.

TPH/lgh

Encl.

cc: The Honorable William B. Moran (w/o encl.) (via telecopier)
Deborah S. Orlove, Esquire (w/o encl.) (via telecopier)
Alan H. Schoem, Esquire (w/o encl.) (via telecopier)
Eric L. Stone, Esquire (w/o encl.) (via telecopier)

CERTIFICATE OF SERVICE

I, Thomas P. Hogan, Jr., hereby certify that on this date a true and correct copy of the foregoing Respondents' Opposition to Complaint Counsel's Motion to Exclude Opposition was served via telecopier and regular mail upon the following:

The Honorable William B. Moran
Offices of the Administrative Law Judges
Environmental Protection Agency
401 M Street, S.W.
Mail Code 1900 L
Washington, DC 20460

Eric L. Stone
Director
Division of Administrative Litigation
U.S. Consumer Product Safety Commission
4430 East West Highway
Bethesda, MD 20814

Alan H. Schoem
Assistant Executive Director
Office of Compliance
U.S. Consumer Product Safety Commission
4430 East West Highway
Bethesda, MD 20814

Deborah S. Orlove
Complaint Counsel
Division of Administrative Litigation
U.S. Consumer Product Safety Commission
4430 East West Highway
Bethesda, MD 20814

Dated: June 2, 1998

Thomas P. Hogan, Jr.

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION
1998 JUN 18 P 3:39

In the Matter of	
CENTRAL SPRINKLER CORP.,	
and	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	
Respondents.	

COMPLAINT COUNSEL'S NOTICE OF SERVICE OF FOURTH SET OF SUPPLEMENTAL DOCUMENTS IN RESPONSE TO RESPONDENTS' FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS

Pursuant to its continuing duty to supplement discovery responses as mandated by 16 C.F.R. § 1025.31(f), and pursuant to the Presiding Officer's June 5, 1998 Confidentiality Order and Order Regarding Complaint Counsel's *In Camera* Submission of Documents and Request for Disclosure Determination, Complaint Counsel hereby provides supplemental documents in response to Respondents' First Request for Production of Documents and Things. The documents are Bates-stamped documents 2228 - 11768, with an intentional gap at Bates pages 8701 - 8999. These documents may be responsive to Respondents' First Request for Production of Documents and Things Nos. 2, 3, 5, 7, 9, 12, 13, 14, 23, 24, 25, 27, 31, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 56, 57, 58, 60, 66, 68, 69, 70 and/or 71. Complaint Counsel provides these documents without waiving objections stated in Complaint Counsel's Responses to Respondents' First Set of Interrogatories and Complaint Counsel's Responses to Respondents' First Request for Production of Documents. Complaint Counsel provides these documents to Counsel for Respondents subject to the Presiding Officer's Confidentiality Order, dated June 5, 1998.

DATED: June 8, 1998

Deborah S. Orlove

Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.
Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, Maryland 20814
301-504-0626

supp4.doc

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, **COMPLAINT COUNSEL'S NOTICE OF SERVICE OF FOURTH SET OF SUPPLEMENTAL DOCUMENTS IN RESPONSE TO RESPONDENTS' FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS** was filed with the Secretary of the Commission, and deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

J. Gordon Cooney, Jr., Esq.
Thomas P. Hogan, Jr., Esq.
Emily J. Lawrence, Esq.
MORGAN, LEWIS & BOCKIUS LLP
2000 One Logan Square
Philadelphia, PA 19103
(215) 963-5000
fax (215) 963-5299

Michael F. Healy, Esq.
MORGAN, LEWIS & BOCKIUS LLP
1800 M Street, NW
Washington, DC 20036-5869
(202) 467-7000
fax (202) 467-7176

John C. Fenningham, Esq.
CORR, STEVENS & FENNINGHAM
Five Neshaminy Interplex, Suite 315
Trevose, PA 19053
(215) 639-4070
fax (215) 639-8995

Attorneys for Central Sprinkler Corporation and Central Sprinkler Company

Geoffrey A. Lewis, Esq.
Senior Corporate Counsel
Underwriters Laboratories, Inc.
333 Pfingsten Road
Northbrook, IL 60062-2096
Fax (847) 498-3789

Alan R. Miller, Esq.
John N. Love, Esq.
Robins, Kaplan, Miller & Ciresi, LLP
222 Berkeley St., Suite 2200
Boston, MA 02116-3751
Fax (617) 267-8288

The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
401 M St., S.W.
Mail Code 1900 L
Washington, DC 20460
fax (202) 565-0044

The documents at issue were delivered to the Secretary of the Commission and the Presiding Officer on May 18, 1998, following filing of Complaint Counsel's *In Camera* Submission of Documents in Response to Discovery, and Request for Disclosure Determination the previous Friday, May 15, 1998.

Pursuant to Respondents' instructions, the documents referred to herein are forwarded this date (via certified mail, postage-prepaid) to J. Gordon Cooney, Jr., Esq., et al., at the above address.

Signed: _____

Dated: 6/18/98

47

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION
1998 JUN 18 P 5:06

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents	)	

COMPLAINT COUNSEL'S OPPOSITION TO RESPONDENTS' MOTION FOR CERTIFICATION FOR INTERLOCUTORY APPEAL

COMES NOW Complaint Counsel and respectfully submits its Opposition to Respondents' Motion for Certification for Interlocutory Appeal to the CPSC.

I. INTRODUCTION

On March 3, 1998, the staff of the Consumer Product Safety Commission filed an Administrative Complaint against Respondents Central Sprinkler Corp. and Central Sprinkler Co. The Complaint seeks a nationwide recall of approximately 10 million "Omega" automatic fire sprinklers manufactured by Respondents since 1982.

On March 26, 1998, Respondents filed a Motion to Dismiss and Supporting Memorandum. On April 6, 1998, Complaint Counsel filed its Opposition to Respondents' Motion to Dismiss. On May 15, 1998, Respondents' Motion to Dismiss was denied by Order of the Presiding Officer (hereinafter, "Judge Moran's Order"). On May 26, 1998, Respondents filed a Motion for Reconsideration of the Presiding Officer's Order or, in the

alternative, for Certification Pursuant to 16 C.F.R. § 1025.24(b)(4) (interlocutory appeal). Via teleconference on May 29, 1998, the Presiding Officer informed the parties that Respondents' Motion for Reconsideration was denied. Therefore, Complaint Counsel files this Opposition to Respondents' Motion for Certification.

As detailed below, Respondents' Motion should be denied because it does not meet the narrowly construed requirements for interlocutory appeal certification specified in 16 C.F.R. § 1025.24(b)(4).

II. THE ORDER ON THE JURISDICTIONAL QUESTION SHOULD NOT BE CERTIFIED FOR INTERLOCUTORY APPEAL

A. An Adjudication for Remedial Action on a Defective Product that Creates a Substantial Risk of Injury to the Public Under the CPSA Must Proceed Without Unnecessary Delay

The general rule under the CPSC's Rules of Practice for Adjudicative Proceedings (hereinafter, "Rules of Practice"), 16 C.F.R. § 1025 *et seq.*, is that rulings of the Presiding Officer may not be appealed to the Commission prior to the Initial Decision. *See* 16 C.F.R. § 1025.24(a) (emphasis added). The policy underlying this rule is akin to the final judgment rule applied by the federal court system, which the Supreme Court has stated "serves the important purpose of promoting efficient judicial administration." *Firestone Tire & Rubber Co. v. Risjord*, 449 U.S. 368, 374 (1981) (holding that Order denying motions to disqualify party's opposing counsel was not appealable final decision under 28 U.S.C. § 1291 and did not fall within collateral order exception because petitioners had not shown that such Order was unreviewable on appeal from final judgment on the merits).

The need for efficient judicial administration is magnified in an adjudicative proceeding under the Consumer Product Safety Act (hereinafter, "CPSA"), 15 U.S.C. § 2051

et seq., because Congress intended the CPSA to "protect the public against unreasonable risks of injury associated with consumer products." 15 U.S.C. § 2051(b)(1) (1997). The Commission's Rules of Practice recognize the need for efficient judicial administration. *See* 16 C.F.R. § 1025.1 ("A major concern of the Commission is that all matters in adjudication move forward in a timely manner, consistent with the Constitutional right of all parties . . . ."); 16 C.F.R. § 1025.2 ("[T]he Presiding Officer and all parties shall make every effort at each stage of any proceeding to avoid unnecessary delay.").

Interlocutory appeals often cause a significant delay in litigation. Charles A. Wright, *The Law of Federal Courts*, § 101, at 697 (4th ed. 1983); *See Long Island Lighting Co. v. Transamerica Delaval, Inc.*, 648 F. Supp. 988, 991 (interlocutory appeal more likely to delay its conclusion than to materially advance the ultimate termination of the litigation). In the instant matter, the staff is seeking to compel public notice and remedial action necessary to protect the public from a substantial risk of injury and/or death created by Respondents' defective Omega fire sprinklers. Certainly, this proceeding involves a matter of considerable national concern that needs to be addressed expeditiously.

B. This Is Not One Of The Rare Circumstances Where An Interlocutory Appeal Should Be Certified

Respondents have moved for an interlocutory appeal pursuant to 16 C.F.R. § 1025.24(b)(4), which provides an exception to the general rule regarding appeal of the Presiding Officer's rulings to the Commission prior to the Initial Decision. Complaint Counsel agrees with Respondents that 16 C.F.R. § 1025.24(b)(b) closely patterns The Interlocutory Appeals Act of 1958, 28 U.S.C. § 1292(b) (hereinafter, "the IAA"), providing for interlocutory appeal from a district court to a court of appeals. The case law interpreting

the IAA and the policies underlying it prove instructive in considering a motion under 16 C.F.R. § 1025.24(b)(4).

The IAA was not designed as a broad loophole to the final judgment rule, and the courts have allowed certification only in rare circumstances.[1,2] The Supreme Court has stated that even if a district court judge certifies an order under 28 U.S.C. § 1292(b), the appellant "has the burden of persuading the court of appeals that exceptional circumstances justify a departure from the basic policy of postponing appellate review until after entry of a final judgment." *Coopers & Lybrand v. Livesay*, 437 U.S. 463, 475 (1978) (quoting *Fisons, Ltd. v. United States*, 458 F.2d 1241, 1248 (7th Cir. 1972)). The CPSC's interlocutory appeal exception, 16 C.F.R. § 1025.24(b)(4), was written with a similar intention: interlocutory appeals are to be granted only under exceptional circumstances in order to prevent unnecessary delay in the protection of the American public from the unreasonable risks of injury associated with consumer products. *See* 16 C.F.R. §§ 1025.1-.2; 15 U.S.C. § 2051(b)(1) (1997).

---

[1]Statistics reveal that only a few more than a hundred cases per year seek permission to appeal under Section 1292(b) and that review is granted for only about one half the applications. Jack H. Friedenthal et al., *Civil Procedure*, § 13.3, at 596 n.18 (2d ed. 1993).

[2]*Katz v. Carte Blanche Corp.*, 496 F.2d 747, (3d Cir.), *cert. denied*, 419 U.S. 885 (1974), is a case where the Third Circuit allowed an interlocutory appeal, pursuant to 28 U.S.C. § 1292(b). Other courts commenting on *Katz* have stated that it should be limited to the type of unique circumstances and prejudices that would have befallen the defendant had class certification been allowed. *See Bates v. Tenco Services, Inc.*, 132 F.R.D. 165, 166 (D.S.C. 1990) ("[T]he prejudice found to have befallen on the defendant in Katz was of a nature unique to the defendant's type of business and to the particular cause of action"); *See also Kramer v. Scientific Control Corp.*, 534 F.2d 1085, 1087 (3d Cir. 1976) (emphasizing the limited scope of *Katz*, holding that "[t]o qualify for interlocutory review in this circuit, a class certification must be attended by special factors which take it outside the ambit of the general rule").

C. The Requirements For Certification Specified By 16 C.F.R. § 1025.24(b)(4) Are Not Met

In order to qualify for interlocutory appeal certification, Respondents bear the heavy burden of proving that Judge Moran's Order falls within the bounds of the narrow exception provided by 16 C.F.R. § 1025.24(b)(4).[3] This exception provides:

> Interlocutory appeals from all other rulings by the Presiding Officer may proceed only upon motion to the Presiding Officer and a determination by the Presiding Officer in writing that the ruling involves a controlling question of law or policy as to which there is substantial ground for differences of opinion and that an immediate appeal from the ruling may materially advance the ultimate termination of the litigation, or that subsequent review will be an inadequate remedy. The Presiding Officer's certification shall state the reasons for the determination.

16 C.F.R. § 1025.24(b)(4).

1. The Jurisdictional Ruling Does Not Involve A Controlling Question Of Law Or Policy As To Which There Is Substantial Ground For Differences Of Opinion

The jurisdictional ruling in this case does not satisfy the requirements of the first criterion of the interlocutory appeal exception, as stated in 16 C.F.R. § 1025.24(b)(4). Simply, there is not a "substantial ground for differences of opinion" regarding whether Omegas are "consumer products" under 15 U.S.C. § 2052 (1997).[4] Respondents have not

---

[3]*See Department of Labor v. Greenwich Collieries*, 512 U.S. 267, 280-281 (1994) (holding that under section 7(c) of the APA, 5 U.S.C. § 556(c), the proponent of an order bears both the burden of production and the burden of persuasion).

[4]Moreover, contrary to Respondents' assertion, the jurisdictional question does not involve a controlling question of policy relating to federalism. As Complaint Counsel demonstrated in its Opposition and Surreply to Respondents' Motion to Dismiss, the CPSC's jurisdiction over defective consumer products that create a substantial risk of injury to the public preempts state and local authority. *See* Complaint Counsel's Opposition to Respondents' Motion to Dismiss at 18-21; Complaint Counsel's Surreply in Opposition to Respondents' Motion to Dismiss at 9-12; *see also* Judge Moran's Order at 15-16.

cited any authority finding that a similarly-situated article, or component part thereof, is not a consumer product under the CPSA.

Respondents cite the distinction between the holdings of *Consumer Prod. Safety Comm'n v. The Anaconda Co.*, 593 F.2d 1314 (D.C. Cir. 1979) and *Kaiser Alum. & Chem. Corp. v. Consumer Prod. Safety Comm'n*, 574 F.2d 178 (3rd Cir.), *cert. denied*, 439 U.S. 881 (1978), to support their premise that there exists a substantial ground for differences of opinion regarding whether fire sprinklers are consumer products. However, as the *Anaconda* and *Kaiser* opinions demonstrate, the distinction between their holdings lies in the different articles they consider -- aluminum wiring systems (*Anaconda)*, versus aluminum wiring (*Kaiser)*. Respondents acknowledge this distinction. See Memorandum in Support of Respondents' Motion for Certification (hereinafter, "Respondents' Memorandum") at 13. That the cases are not contradictory is best demonstrated by the fact that *Anaconda* cites *Kaiser* and explains the different holdings as a difference between the system and its components. *See Anaconda*, 593 F.2d at 1322 (stating that "the jurisdictional question in this case is whether aluminum branch circuit wiring systems are "consumer products." This was not the issue before the Delaware district court. A fair reading of Judge Stapleton's decision makes clear that the only issue actually litigated in Delaware related to aluminum wiring, a distinct product from the one involved in this case.") In the instant case, there is simply no substantial ground for differences of opinion on the question of jurisdiction. In fact, the case law overwhelmingly supports the Commission's jurisdiction over fire sprinklers.

2. An Immediate Appeal Of Judge Moran's Order Will Not Materially Advance The Ultimate Termination Of The Litigation

An immediate appeal from Judge Moran's Order also fails to satisfy the requirements of the second criterion of the interlocutory appeal exception provided by 16 C.F.R. § 1025.24(b)(4) -- that an immediate appeal from the ruling may materially advance the ultimate termination of the litigaiton, or that subsequent review will be an inadequate remedy. *See* 16 C.F.R. § 1025.24(b)(4). Application of this criterion involves a balancing of whether allowing piecemeal review may delay or hinder a trial against the need for immediate appellate guidance on the issue presented by the order. Friedenthal et al., *Civil Procedure*, § 13.3, at 597 (2d ed. 1993). In the instant matter, where the Commission staff has conducted nearly a two-year investigation of Respondents, reviewed thousands of pages of documents, and produced substantial discovery, certification for an interlocutory appeal "is not likely to stem the flow of paper or bring the case to a speedy conclusion." *Long Island Lighting Co.* at 991. Moreover, and most importantly, the Commission, through its General Counsel and by voting to issue the Complaint against Respondents herein, made a preliminary determination of the existence of its jurisdiction over automatic fire sprinklers. Respondents' appeal to the Commission is highly ulikely to terminate this case.

III. CONCLUSION

Based on the foregoing, Complaint Counsel respectfully requests that Respondents' Motion for Certification Pursuant to 16 C.F.R. § 1025.24(b)(4) be DENIED.[5]

---

[5]If Respondents' Motion is granted, Complaint Counsel respectfully requests that the proceedings not be stayed, as provided by 16 C.F.R. § 1025.24(c), because any delay in the preceedings may pose a threat to public safety.

Dated: 6/8/98

Respectfully submitted,

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Of Counsel
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Director, Legal Division
Alan H. Schoem, Esq.
Assistant Executive Director
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UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents	)	

ORDER

AND NOW, this _____ day of _____, 1998, it is hereby ORDERED that Respondents' Motion for Certification Pursuant to 16 C.F.R. § 1025.24(b)(4) is DENIED.

_____
The Hon. William B. Moran
Administrative Law Judge

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, **COMPLAINT COUNSEL'S OPPOSITION TO RESPONDENTS' MOTION FOR CERTIFICATION FOR INTERLOCUTORY APPEAL** was filed with the Secretary of the Commission and deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

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Emily J. Lawrence, Esq.
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Attorneys for Central Sprinkler Corporation and Central Sprinkler Company

The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
401 M St., S.W.
Mail Code 1900 L
Washington, DC 20460
fax (202) 565-0044

Signed: _____

Dated: 6/18/98

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp.	:	
	:	
and	:	**CPSC Docket No. 98-2**
	:	
Central Sprinkler Co.,	:	
	:	
Respondents.	:	
	:	

ORDER

AND NOW, this _____ day of _____, 1998, upon consideration of Complaint Counsel's Motion To Exclude Respondents' Unfiled Oppositions, Respondents' Opposition To Complaint Counsel's Motion To Exclude Oppositions, and all other evidence before the Court, it is hereby ORDERED that Complaint Counsel's motion is DENIED.

BY THE PRESIDING OFFICER:

_____
The Hon. William B. Moran
United States Administrative Law Judge

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UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION
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In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents	)	

COMPLAINT COUNSEL'S OPPOSITION TO RESPONDENTS' MOTION FOR CERTIFICATION FOR INTERLOCUTORY APPEAL

COMES NOW Complaint Counsel and respectfully submits its Opposition to Respondents' Motion for Certification for Interlocutory Appeal to the CPSC.

I. INTRODUCTION

On March 3, 1998, the staff of the Consumer Product Safety Commission filed an Administrative Complaint against Respondents Central Sprinkler Corp. and Central Sprinkler Co. The Complaint seeks a nationwide recall of approximately 10 million "Omega" automatic fire sprinklers manufactured by Respondents since 1982.

On March 26, 1998, Respondents filed a Motion to Dismiss and Supporting Memorandum. On April 6, 1998, Complaint Counsel filed its Opposition to Respondents' Motion to Dismiss. On May 15, 1998, Respondents' Motion to Dismiss was denied by Order of the Presiding Officer (hereinafter, "Judge Moran's Order"). On May 26, 1998, Respondents filed a Motion for Reconsideration of the Presiding Officer's Order or, in the

alternative, for Certification Pursuant to 16 C.F.R. § 1025.24(b)(4) (interlocutory appeal). Via teleconference on May 29, 1998, the Presiding Officer informed the parties that Respondents' Motion for Reconsideration was denied. Therefore, Complaint Counsel files this Opposition to Respondents' Motion for Certification.

As detailed below, Respondents' Motion should be denied because it does not meet the narrowly construed requirements for interlocutory appeal certification specified in 16 C.F.R. § 1025.24(b)(4).

II. THE ORDER ON THE JURISDICTIONAL QUESTION SHOULD NOT BE CERTIFIED FOR INTERLOCUTORY APPEAL

A. An Adjudication for Remedial Action on a Defective Product that Creates a Substantial Risk of Injury to the Public Under the CPSA Must Proceed Without Unnecessary Delay

The general rule under the CPSC's Rules of Practice for Adjudicative Proceedings (hereinafter, "Rules of Practice"), 16 C.F.R. § 1025 *et seq.*, is that rulings of the Presiding Officer may not be appealed to the Commission prior to the Initial Decision. *See* 16 C.F.R. § 1025.24(a) (emphasis added). The policy underlying this rule is akin to the final judgment rule applied by the federal court system, which the Supreme Court has stated "serves the important purpose of promoting efficient judicial administration." *Firestone Tire & Rubber Co. v. Risjord*, 449 U.S. 368, 374 (1981) (holding that Order denying motions to disqualify party's opposing counsel was not appealable final decision under 28 U.S.C. § 1291 and did not fall within collateral order exception because petitioners had not shown that such Order was unreviewable on appeal from final judgment on the merits).

The need for efficient judicial administration is magnified in an adjudicative proceeding under the Consumer Product Safety Act (hereinafter, "CPSA"), 15 U.S.C. § 2051

et seq., because Congress intended the CPSA to "protect the public against unreasonable risks of injury associated with consumer products." 15 U.S.C. § 2051(b)(1) (1997). The Commission's Rules of Practice recognize the need for efficient judicial administration. *See* 16 C.F.R. § 1025.1 ("A major concern of the Commission is that all matters in adjudication move forward in a timely manner, consistent with the Constitutional right of all parties . . . ."); 16 C.F.R. § 1025.2 ("[T]he Presiding Officer and all parties shall make every effort at each stage of any proceeding to avoid unnecessary delay.").

Interlocutory appeals often cause a significant delay in litigation. Charles A. Wright, *The Law of Federal Courts*, § 101, at 697 (4th ed. 1983); *See Long Island Lighting Co. v. Transamerica Delaval, Inc.*, 648 F. Supp. 988, 991 (interlocutory appeal more likely to delay its conclusion than to materially advance the ultimate termination of the litigation). In the instant matter, the staff is seeking to compel public notice and remedial action necessary to protect the public from a substantial risk of injury and/or death created by Respondents' defective Omega fire sprinklers. Certainly, this proceeding involves a matter of considerable national concern that needs to be addressed expeditiously.

B. This Is Not One Of The Rare Circumstances Where An Interlocutory Appeal Should Be Certified

Respondents have moved for an interlocutory appeal pursuant to 16 C.F.R. § 1025.24(b)(4), which provides an exception to the general rule regarding appeal of the Presiding Officer's rulings to the Commission prior to the Initial Decision. Complaint Counsel agrees with Respondents that 16 C.F.R. § 1025.24(b)(b) closely patterns The Interlocutory Appeals Act of 1958, 28 U.S.C. § 1292(b) (hereinafter, "the IAA"), providing for interlocutory appeal from a district court to a court of appeals. The case law interpreting

the IAA and the policies underlying it prove instructive in considering a motion under 16 C.F.R. § 1025.24(b)(4).

The IAA was not designed as a broad loophole to the final judgment rule, and the courts have allowed certification only in rare circumstances.[1,2] The Supreme Court has stated that even if a district court judge certifies an order under 28 U.S.C. § 1292(b), the appellant "has the burden of persuading the court of appeals that exceptional circumstances justify a departure from the basic policy of postponing appellate review until after entry of a final judgment." *Coopers & Lybrand v. Livesay*, 437 U.S. 463, 475 (1978) (quoting *Fisons, Ltd. v. United States*, 458 F.2d 1241, 1248 (7th Cir. 1972)). The CPSC's interlocutory appeal exception, 16 C.F.R. § 1025.24(b)(4), was written with a similar intention: interlocutory appeals are to be granted only under exceptional circumstances in order to prevent unnecessary delay in the protection of the American public from the unreasonable risks of injury associated with consumer products. *See* 16 C.F.R. §§ 1025.1-.2; 15 U.S.C. § 2051(b)(1) (1997).

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In order to qualify for interlocutory appeal certification, Respondents bear the heavy burden of proving that Judge Moran's Order falls within the bounds of the narrow exception provided by 16 C.F.R. § 1025.24(b)(4).[3] This exception provides:

> Interlocutory appeals from all other rulings by the Presiding Officer may proceed only upon motion to the Presiding Officer and a determination by the Presiding Officer in writing that the ruling involves a controlling question of law or policy as to which there is substantial ground for differences of opinion and that an immediate appeal from the ruling may materially advance the ultimate termination of the litigation, or that subsequent review will be an inadequate remedy. The Presiding Officer's certification shall state the reasons for the determination.

16 C.F.R. § 1025.24(b)(4).

1. The Jurisdictional Ruling Does Not Involve A Controlling Question Of Law Or Policy As To Which There Is Substantial Ground For Differences Of Opinion

The jurisdictional ruling in this case does not satisfy the requirements of the first criterion of the interlocutory appeal exception, as stated in 16 C.F.R. § 1025.24(b)(4). Simply, there is not a "substantial ground for differences of opinion" regarding whether Omegas are "consumer products" under 15 U.S.C. § 2052 (1997).[4] Respondents have not

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[4]Moreover, contrary to Respondents' assertion, the jurisdictional question does not involve a controlling question of policy relating to federalism. As Complaint Counsel demonstrated in its Opposition and Surreply to Respondents' Motion to Dismiss, the CPSC's jurisdiction over defective consumer products that create a substantial risk of injury to the public preempts state and local authority. *See* Complaint Counsel's Opposition to Respondents' Motion to Dismiss at 18-21; Complaint Counsel's Surreply in Opposition to Respondents' Motion to Dismiss at 9-12; *see also* Judge Moran's Order at 15-16.

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Respondents cite the distinction between the holdings of *Consumer Prod. Safety Comm'n v. The Anaconda Co.*, 593 F.2d 1314 (D.C. Cir. 1979) and *Kaiser Alum. & Chem. Corp. v. Consumer Prod. Safety Comm'n*, 574 F.2d 178 (3rd Cir.), *cert. denied*, 439 U.S. 881 (1978), to support their premise that there exists a substantial ground for differences of opinion regarding whether fire sprinklers are consumer products. However, as the *Anaconda* and *Kaiser* opinions demonstrate, the distinction between their holdings lies in the different articles they consider -- aluminum wiring systems (*Anaconda)*, versus aluminum wiring (*Kaiser)*. Respondents acknowledge this distinction. See Memorandum in Support of Respondents' Motion for Certification (hereinafter, "Respondents' Memorandum") at 13. That the cases are not contradictory is best demonstrated by the fact that *Anaconda* cites *Kaiser* and explains the different holdings as a difference between the system and its components. *See Anaconda*, 593 F.2d at 1322 (stating that "the jurisdictional question in this case is whether aluminum branch circuit wiring systems are "consumer products." This was not the issue before the Delaware district court. A fair reading of Judge Stapleton's decision makes clear that the only issue actually litigated in Delaware related to aluminum wiring, a distinct product from the one involved in this case.") In the instant case, there is simply no substantial ground for differences of opinion on the question of jurisdiction. In fact, the case law overwhelmingly supports the Commission's jurisdiction over fire sprinklers.

2. An Immediate Appeal Of Judge Moran's Order Will Not Materially Advance The Ultimate Termination Of The Litigation

An immediate appeal from Judge Moran's Order also fails to satisfy the requirements of the second criterion of the interlocutory appeal exception provided by 16 C.F.R. § 1025.24(b)(4) -- that an immediate appeal from the ruling may materially advance the ultimate termination of the litigaiton, or that subsequent review will be an inadequate remedy. *See* 16 C.F.R. § 1025.24(b)(4). Application of this criterion involves a balancing of whether allowing piecemeal review may delay or hinder a trial against the need for immediate appellate guidance on the issue presented by the order. Friedenthal et al., *Civil Procedure*, § 13.3, at 597 (2d ed. 1993). In the instant matter, where the Commission staff has conducted nearly a two-year investigation of Respondents, reviewed thousands of pages of documents, and produced substantial discovery, certification for an interlocutory appeal "is not likely to stem the flow of paper or bring the case to a speedy conclusion." *Long Island Lighting Co.* at 991. Moreover, and most importantly, the Commission, through its General Counsel and by voting to issue the Complaint against Respondents herein, made a preliminary determination of the existence of its jurisdiction over automatic fire sprinklers. Respondents' appeal to the Commission is highly ulikely to terminate this case.

III. CONCLUSION

Based on the foregoing, Complaint Counsel respectfully requests that Respondents' Motion for Certification Pursuant to 16 C.F.R. § 1025.24(b)(4) be DENIED.[5]

---

[5]If Respondents' Motion is granted, Complaint Counsel respectfully requests that the proceedings not be stayed, as provided by 16 C.F.R. § 1025.24(c), because any delay in the preceedings may pose a threat to public safety.

Dated: 6/8/98

Respectfully submitted,

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Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.
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United States Consumer Product Safety Commission
Office of Compliance
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(301) 504-0626

Of Counsel
Eric L. Stone, Esq.
Director, Legal Division
Alan H. Schoem, Esq.
Assistant Executive Director
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UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents	)	

ORDER

AND NOW, this _____ day of _____, 1998, it is hereby ORDERED that Respondents' Motion for Certification Pursuant to 16 C.F.R. § 1025.24(b)(4) is DENIED.

_____
The Hon. William B. Moran
Administrative Law Judge

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, **COMPLAINT COUNSEL'S OPPOSITION TO RESPONDENTS' MOTION FOR CERTIFICATION FOR INTERLOCUTORY APPEAL** was filed with the Secretary of the Commission and deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

J. Gordon Cooney, Jr., Esq.
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The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
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Mail Code 1900 L
Washington, DC 20460
fax (202) 565-0044

Signed: _____

Dated: 6/18/98

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp.	:	
	:	
and	:	**CPSC Docket No. 98-2**
	:	
Central Sprinkler Co.,	:	
	:	
Respondents.	:	
	:	

ORDER

AND NOW, this _____ day of _____, 1998, upon consideration of Complaint Counsel's Motion To Exclude Respondents' Unfiled Oppositions, Respondents' Opposition To Complaint Counsel's Motion To Exclude Oppositions, and all other evidence before the Court, it is hereby ORDERED that Complaint Counsel's motion is DENIED.

BY THE PRESIDING OFFICER:

_____
The Hon. William B. Moran
United States Administrative Law Judge

RECEIVED 6/10/98

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp.	:	
	:	
and	:	**CPSC Docket No. 98-2**
	:	
Central Sprinkler Co.,	:	
	:	
Respondents.	:	
	:	

RESPONDENTS' OPPOSITION TO
COMPLAINT COUNSEL'S SECOND MOTION
FOR PROTECTIVE ORDER AND IN CAMERA SUBMISSION

Presently before the Presiding Officer is Complaint Counsel's Second Motion For Protective Order And In Camera Submission ("Complaint Counsel's Motion"). Pursuant to this motion, Complaint Counsel has submitted certain materials in camera to the Presiding Officer. These materials allegedly are comprised of documents provided to Complaint Counsel by former employees of Respondents regarding Omega sprinklers and letters sent by Complaint Counsel to such former employees (collectively, the "Withheld Materials"). See Complaint Counsel's Motion, p. 1.

Complaint Counsel's Motion requests that the Presiding Officer order these materials shielded from Respondents in discovery. Complaint Counsel argues that the Withheld Materials are protected from discovery by the "informant's privilege," or that the former employees should be considered non-testifying expert consultants who are protected from discovery by the work product doctrine and the rules governing discovery of experts. See Complaint Counsel's Motion, pp. 3-5.

Pursuant to 16 C.F.R. § 1045(c)(2), Respondents Central Sprinkler Corporation and Central Sprinkler Company hereby request that the Court order Complaint Counsel to produce the Withheld Materials. As conceded in Complaint Counsel's Motion, the Withheld Materials are both relevant and responsive to Respondents' discovery requests. Moreover, the Withheld Materials are not protected from discovery by the "informant's privilege" for several reasons: (1) the former employees are not "informants," they are simply fact witnesses; (2) Complaint Counsel's invocation of the privilege is based on a claim of potential retaliation which is unsupported by any evidence; (3) the "informant's privilege" is overcome here by the critical nature of the information allegedly contained in the Withheld Materials; and (4) under any legal or factual scenario, the information contained in the Withheld Materials must be produced. In addition, the Withheld Materials are not covered by the rules regarding discovery from experts or the work product doctrine -- Respondents' former employees are simply fact witnesses, not "experts" or agents of Complaint Counsel. Therefore the Court should order Complaint Counsel to produce the Withheld Materials.

II. ARGUMENT

A. Complaint Counsel's Repeated Submission Of Documents In Camera Is Impermissible and Highly Prejudicial.

Complaint Counsel's Motion represents the fourth time in the last two weeks that Complaint Counsel has submitted documents to the Presiding Officer on an in camera basis. According to the Bates numbering of Complaint Counsel's documents, Complaint Counsel has produced approximately 3,000 pages of documents to Respondents, and has submitted approximately 10,000 pages of documents in camera to the Presiding Officer.

Respondents hereby renew their objections to Complaint Counsel's improper and impermissible tactic of presenting their case in camera. Complaint Counsel is attempting to conduct an ex parte trial of this matter by slowly exposing the Presiding Officer to Complaint Counsel's substantive evidence, without permitting Respondents to oppose, comment on, or even know the contents of the documents submitted. Complaint Counsel's refusal even to consider a Confidentiality Agreement proposed by Respondents, which addresses all of Complaint Counsel's concerns regarding the documents submitted in camera, reveals that Complaint Counsel's stated concerns about confidentiality are thinly veiled excuses to prejudice the Presiding Officer while providing Respondents no opportunity to respond.

That Complaint Counsel adopted this strategy for purposes of prejudicing the Presiding Officer is clear from comparing the manner in which Complaint Counsel approached these documents as opposed to other documents for which they have asserted a claim of privilege. On June 1, 1998, Complaint Counsel provided Respondents' counsel with a privilege log, identifying 118 documents that they are withholding on some claim of privilege. Obviously, the

overwhelming majority of these documents were not provided to the Presiding Officer. There was absolutely no reason for Complaint Counsel to treat these so-called "informant's documents" any differently from other allegedly privileged documents, apart from Complaint Counsel's desire to place them before the Presiding Officer on an ex parte basis. Particularily since Respondents expressly requested Complaint Counsel not to engage in such improper tactics, the conduct at issue is inexcusable.

Respondents' objections to Complaint Counsel's improper tactics are expressed at greater length in the Proposed Protective Order and Opposition of Respondents To Complaint Counsel's Submission of Documents In Camera, served May 19, 1998. Respondents hereby reiterate those objections.

B. Complaint Counsel Concedes That The Withheld Material Is Both Relevant And Responsive To Respondents' Discovery Requests.

The CPSC rules of practice define the scope of acceptable discovery very broadly. The rules provide that parties may obtain discovery regarding any information "relevant to the subject matter involved in the proceedings," or any information that "appears reasonably calculated to lead to the discovery of admissible evidence." 16 C.F.R. § 1025.31(c)(1).

In the instant case, the Withheld Materials clearly constitute discoverable information. Complaint Counsel describes the Withheld Materials as information "regarding Omega sprinklers, Omega sprinkler failures, and Respondents' knowledge of same." Complaint Counsel's Motion, p. 1. Thus, Complaint Counsel essentially concedes that the Withheld Materials are directly relevant to matters centrally in dispute in this case. This point is reinforced when Complaint Counsel admits that "Complaint Counsel is using the information contained in

[the Withheld Materials] to further its investigation into the Omega problem, and to channel its discovery in this matter." Id. at p. 3. Thus, it appears that the Withheld Materials are not merely relevant, they are sufficiently important that Complaint Counsel is using such materials to guide their own litigation efforts.

Complaint Counsel's Motion also admits that the Withheld Materials are responsive to Respondents' discovery requests. Complaint Counsel states that the Withheld Materials are responsive to at least 10 of Respondents' document requests, without even addressing Respondents' interrogatories. See Complaint Counsel's Motion, pp. 1-2.

Therefore, Complaint Counsel's Motion has made critical admissions regarding the Withheld Materials. Complaint Counsel admits that the information is relevant in general and important to Complaint Counsel's case specifically. Complaint Counsel also concedes that the Withheld Materials are responsive to Respondents' discovery requests.

Nevertheless, Complaint Counsel is refusing to produce the Withheld Materials. Complaint Counsel makes several baseless arguments for refusing to produce this material.

C. The Withheld Materials Are Not Protected By The "Informant's Privilege."

Complaint Counsel's first argument for not making the Withheld Materials available to Respondents is reliance on the so-called "informant's privilege." See Complaint Counsel's Motion, pp. 3-4. This is the same argument raised by Complaint Counsel in an attempt to withhold from Respondents an anonymous letter from a current employee of Respondents. See Respondents' Opposition To Complaint Counsel's Motion For Protective Order Regarding Anonymous Letter, served May 19, 1998.

The "informant's privilege" is not a valid objection regarding the Withheld Materials for a number of reasons. First, the former employees of Respondents are not "informants," they are simply fact witnesses. Second, the informant's privilege cannot be invoked here because Complaint Counsel has introduced no evidence of potential retaliation; furthermore, any such concern easily could be addressed if Complaint Counsel merely agreed to the Confidentiality Agreement proposed by Respondents. Third, the informant's privilege, which is a qualified privilege, has been easily overcome in this case by the admitted importance of the Withheld Materials. Finally, because the informant's privilege only protects the identity of an informant, at the very least Complaint Counsel should be required to produce all of the information contained in the Withheld Materials.

1. The Former Employees Are Fact Witnesses, Not "Informants."

As an initial matter, Complaint Counsel's invocation of the informant's privilege is invalid here because the former employees of Respondents who supplied the Withheld Materials do not qualify as informants. The former employees are simply potential fact witnesses in this case, subject to discovery like any other fact witness.

"Informants" are generally considered to be persons with whom law enforcement officials have an established relationship for the purposes of obtaining confidential information. In the instant case, it appears that Complaint Counsel is attempting to classify any person who provides information to Complaint Counsel as an "informant." This is simply a misdirected attempt to obstruct discovery in this case.

If Complaint Counsel is permitted to classify as an "informant" anyone who has provided information to them and who had any type of past commercial relationship with Respondents,

then the "informant's privilege" effectively would cover every potential witness for Complaint Counsel. Such a result and such an interpretation of the "informant's privilege" would be absurd.

The former employees who supplied the Withheld Materials to Complaint Counsel are mere fact witnesses here. Complaint Counsel cannot shield such materials from discovery simply by calling the former employees "informants." Therefore, Complaint Counsel's Motion should be denied.

2. Complaint Counsel Has Provided No Evidence Of Potential Retaliation.

Complaint Counsel attempts to justify invoking the informant's privilege based on protecting the former employees at issue from any potential retaliation by Respondents. See Complaint Counsel's Motion, p. 3. However, this argument lacks any validity because Complaint Counsel has presented no evidence of potential retaliation, and any such concern easily is cured under Respondents' proposed Confidentiality Agreement.

As an initial matter, Complaint Counsel has presented no credible evidence of any potential retaliation in this case. Complaint Counsel has not provided any indication that Respondents ever have engaged in such retaliatory activities. Nor has Complaint Counsel provided any evidence that would demonstrate that the former employees at issue are peculiarly vulnerable to any retaliation. Moreover, Respondents previously have assured the Presiding Officer, and hereby restate those assurances, that Respondents will not "retaliate" against any person for providing truthful information to the CPSC.

Moreover, Complaint Counsel's refusal to enter into a Confidentiality Agreement demonstrates that Complaint Counsel is more concerned about withholding pertinent information

from Respondents than protecting the former employees from any hypothetical retaliation. Respondents provided a draft Confidentiality Agreement to Complaint Counsel on May 1. See Exhibit "A", attached hereto. Complaint Counsel refused to enter into or even comment on this Confidentiality Agreement.[1/] However, the Confidentiality Agreement contains the solution to Complaint Counsel's concerns about "retaliation."

The Confidentiality Agreement contains provisions that would permit Complaint Counsel to designate the Withheld Materials as "Outside Counsel Only." See Exhibit "A", ¶¶ 1-3. Such a designation would limit those who could view the Withheld Materials to "the undersigned outside counsel" for Respondents, which does not include any counsel with any relationship to Respondents besides lawyer-client. Id., ¶ 3.[2/] Thus, any threat of potential "retaliation" against the former employees would be nullified, as Respondents would not be aware of the identity of these former employees; only Respondents' outside counsel would have such information.

However, Complaint Counsel has refused to consider the Confidentiality Agreement and/or this course of action. Thus, it is apparent that Complaint Counsel is simply attempting to delay and limit discovery for Respondents, not acting out of concern for the well-being of the former employees.

1/ Not having received any response from Complaint Counsel, Respondents have submitted the Confidentiality Agreement to the Presiding Officer as a proposed protective order. See Proposed Protective Order and Opposition of Respondents to Complaint Counsel's Submission of Documents In Camera, served May 19, 1998.

2/ Outside counsel could then review the materials, and if appropriate, seek permission from the Court to share the documents with their client if necessary to prepare a defense. Id., ¶ 9.

Because Complaint Counsel has produced no evidence of potential retaliation and has refused to consider a reasonable resolution to this issue via a Confidentiality Agreement, there is no basis for Complaint Counsel to invoke the "informant's privilege." Therefore, the Presiding Officer should order Complaint Counsel to produce the Withheld Materials to Respondents.

3. The Informant's Privilege Is Easily Overcome Based On The Admitted Importance Of The Withheld Materials.

The "informant's privilege" is not absolute -- it is, at most, a qualified privilege. The Supreme Court has clearly stated: "Where the disclosure of an informant's identity, or the contents of his communication, is relevant and helpful to the defense of an accused, or is essential to a fair determination of a cause, the privilege must give way. In these situations the trial court may require disclosure and, if the government withholds the information, dismiss the action." Rovario v. United States, 353 U.S. 56, 60-61 (1957) (emphasis added).

As admitted by Complaint Counsel, the contents of the Withheld Materials fall squarely within the circumstances where "the privilege must give way." Complaint Counsel concedes that they are "using the information contained in these documents to further its investigation . . . and to channel its discovery in this matter." Complaint Counsel's Motion, p. 3. Thus, Complaint Counsel is treating the contents of the Withheld Materials as extremely important information for purposes of this case. There should be little doubt that knowledge of this information would be "relevant and helpful" in the defense of this case for Respondents, and that giving Respondents equal access to this important information would be "essential to a fair determination" of this case. Rovario, 353 U.S. at 60-61.

Moreover, given the fact that Complaint Counsel has now provided these documents to the fact-finder in this case (and deprived Respondents and the Presiding Officer of the opportunity to develop a means of resolving this issue without providing the fact-finder with the documents at issue), Respondents must have access to the documents to enable them to address any factual or other inaccuracies in those documents.

Complaint Counsel argues that it still should not be required to produce the Withheld Materials because it does not intend to use the documents themselves at trial. See Complaint Counsel's Motion, p. 2. This argument simply misses the point. The proper issue is whether Complaint Counsel intends to use the information contained in the Withheld Materials and the investigatory fruits of that information in the trial of this case. The answer to that question clearly is "Yes," as Complaint Counsel had stated that it is using the information for investigatory and discovery purposes. Id. at p. 3. Therefore, Respondents should have equal access to these documents, to be given an equal opportunity to use such documents to "further [Respondents'] investigation" and "channel [Respondents'] discovery," in order to prepare for trial. Id.[3/]

Furthermore, public safety dictates that Respondents and their counsel be advised of the contents of the Withheld Materials. Central Sprinkler Company manufactures the Omega sprinkler heads in question. To the extent that the Withheld Materials reveal or explain any

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3/ If, on the other hand, Complaint Counsel successfully maintained a claim to the informant's privilege here, such a ruling logically would restrict Complaint Counsel's use of such information. Complaint Counsel would not be permitted to use the information contained in the Withheld Materials at trial, and certainly could not call the former employees in question as witnesses.

potential problems with the Omegas, Central, its Board of Directors, and its counsel affirmatively want to receive such information to address any potential problems appropriately. Central, its Board of Directors, and its counsel are committed to addressing properly any problems with the Omegas. If there are any identifiable problems with the Omegas, nobody has a greater interest in or right to address those problems than Respondents. Complaint Counsel's decision to deny Respondents access to the Withheld Materials is thus both procedurally unsound and contrary to Complaint Counsel's statutory mandate.[4/]

As was the case with the "anonymous letter," when viewed from an objective perspective, the course of action requested by Complaint Counsel here should not be followed. Complaint Counsel requests that documents in their possession be withheld from Respondents even though such documents admittedly are important, will be used to prepare for trial, and have been provided to the fact-finding Presiding Officer. Thus, everyone involved in the trial of this matter with the exception of Respondents, who are defending their product, would have access to these materials. Such a situation would be highly prejudicial to Respondents, a basic denial of due process rights, and fundamentally unfair.

Thus, in the instant case, the qualified "informant's privilege" is easily overcome. The contents of the Withheld Materials, as conceded by Complaint Counsel, are important enough to

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4/ The Court should not assume that Respondents are unwilling to take corrective action. To the contrary, Respondents have proposed to Complaint Counsel several alternative corrective action proposals, the future cost of which has been estimated to exceed $13.2 million. Complaint Counsel has rejected these proposals. Nor should the Court assume that Central, its counsel, or its Board of Directors are aware of each alleged fact claimed to be known by a third party. To the extent a third party has provided important information to Complaint Counsel, Respondents should be given the opportunity to address that information and take it into account in resolving this matter.

Respondents' defense in this matter and a fair determination of this case that "the privilege must give way." Rovario, 353 U.S. at 60-61. Therefore, the Court should order Complaint Counsel to produce the Withheld Materials to Respondents.[5/]

4. The Informant's Privilege Does Not Protect The Contents Of The Withheld Materials.

The "informant's privilege" is not a total shield to discovery. This privilege protects only the identity of an informant, not the information provided by the informant. Rovario, 353 U.S. at 60; see also Wright & Graham, Federal Practice and Procedure: Evidence § 5740 (The privilege does not protect "information provided by the informer . . . . Communications of an informant are not privileged . . . .").

Thus, under any factual or legal scenario, Complaint Counsel should be required to produce to Respondents all of the information contained in the Withheld Materials. This could be accomplished simply by redacting the name of the author, if necessary. The informant's privilege, even where applicable, does not protect the information provided by an informant.[6/]

5/ To the extent that any work product protection applied to such materials, the same logic applies -- the work product doctrine would be overcome by Respondents' "substantial need" for the materials. See 16 C.F.R. § 1025.31(c)(3).

6/ This same legal analysis also applies to Complaint Counsel's assertion of the work product doctrine. Because the work product doctrine only protects "documents and tangible things," 16 C.F.R. § 1025.31(c)(3), Complaint Counsel would be required to produce the information contained in the Withheld Materials regardless of such an objection.

D. The Withheld Materials Are Not Protected By The Work Product Doctrine Or As Materials Provided By Non-Testifying Experts.

Perhaps realizing that the informant's privilege does not shield the Withheld Materials from discovery, Complaint Counsel makes an entirely different argument in an attempt to deny Respondents access to such documents. In a move that is wholly at odds with their characterization of the authors as "informants," Complaint Counsel alternatively argues that the former employees are "non-testifying consultants" who are acting as experts for and/or agents of Complaint Counsel. See Complaint Counsel's Motion, p. 4. Thus, argues Complaint Counsel, the Withheld Materials are protected from discovery by the work product doctrine (Fed. R. Civ. P. 26(b)(3)) and special discovery rules applying to non-testifying experts (16 C.F.R. § 1025.31(c)(4)(ii)). Id.

This argument is both specious and reinforces the baseless nature of Complaint Counsel's attempt to label the former employees at issue "informants." The former employees at issue are not "experts" under 16 C.F.R. § 1025.31(c)(4)(ii). An expert offers opinions "involving scientific or technical knowledge" based on the expert's unique training or technical expertise. 16 C.F.R. § 1025.44(a). Complaint Counsel are not using the former employees as experts, but as fact witnesses regarding "Omega sprinklers, Omega sprinkler failures, and Respondents' knowledge of same." Complaint Counsel's Motion, p. 1. There is no indication in Complaint Counsel's Motion and no conceivable factual or legal basis for classifying the former employees at issue as non-testifying experts pursuant to 16 C.F.R. § 1025.31(c)(4)(ii). Complaint Counsel's attempt to make this argument is a disingenuous and desperate effort to avoid producing the Withheld Materials.

Similarly, Complaint Counsel's attempt to rely upon Fed. R. Civ. P. 26(b)(3) for some sort of work product protection is invalid. First, this rule does not apply to the instant administrative proceedings, which are governed by the CPSC rules of practice. Second, for purposes of the instant dispute, Rule 26(b)(3) would only provide work product protection for documents and tangible things prepared for trial by the CPSC or the CPSC's representatives, such as the CPSC's "attorney, consultant, surety, indemnitor, insurer, or agent." See Fed. R. Civ. P. 26(b)(3). The former employees at issue are mere fact witnesses, not the CPSC's representatives. Once again, there is no basis in Complaint Counsel's Motion and no conceivable factual or legal basis for arguing that the former employees are some sort of legal agent for the CPSC. In essence, Complaint Counsel is attempting to obtain the same work product protection for the materials generated by the former employees as is afforded the mental impressions and strategies of the CPSC's lawyers, Complaint Counsel. Such an argument is unprecedented, unsupported, and simply incredible.

Complaint Counsel is willing to raise any argument in an attempt to prevent Respondents from gaining crucial information via discovery. Complaint Counsel attempts to classify the former employees at issue here first as independent "informants," then as non-testifying "experts," then as some sort of agents of the CPSC. These arguments are internally inconsistent and fundamentally unsound. The former employees are simply potential fact witnesses, and materials related to them are discoverable.

III. CONCLUSION

At present, Complaint Counsel is engaging in a carefully choreographed two-pronged strategy. First, Complaint Counsel is periodically submitting inflammatory and highly prejudicial materials on an in camera basis to the Presiding Officer, thereby attempting to engage in an ex parte trial of this matter and unfairly influence the Presiding Officer. Second, Complaint Counsel is withholding materials from Respondents based on spurious objections. This course of action by Complaint Counsel is delaying these proceedings, causing tremendous prejudice to Respondents, and imperiling the appearance of propriety of these proceedings.

Complaint Counsel's Motion is a further example of this strategy. Complaint Counsel admits that the Withheld Materials are relevant and responsive, but insisted on submitting them for in camera review based on a series of specious objections. Because the former employees in question are simply fact witnesses, Complaint Counsel cannot shield from discovery the materials related to them by pretending that the former employees are informants, experts, or employees of the CPSC.

Based on all of the foregoing, pursuant to 16 C.F.R. § 1045(c)(2), Respondents respectfully request that the Court deny Complaint Counsel's Motion and order Complaint Counsel to produce the Withheld Materials to Respondents. At a minimum, Respondents request that the Court direct Complaint Counsel to state with specificity the factual or other information provided in the Withheld Materials so that Respondents may prepare for trial and address any public safety issues raised in the materials.

Respectfully submitted,

Dated: June 8, 1998

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May 1, 1998

VIA TELECOPIER

Deborah S. Orlove
Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4430 East West Highway
Bethesda, MD 20814

Re: In the Matter of Central Sprinkler Corp., et al. (CPSC Docket No. 98-2)

Dear Ms. Orlove:

On Wednesday, April 29, 1998, we received Complaint Counsel's written discovery responses. However, to date, we still have not received any documents. Please immediately address this matter. In addition, in the future, please arrange for prompt and reliable service of any documents and/or pleadings.

Regarding your discovery responses, a quick reading reveals that these responses are highly deficient. In essence, the Staff has failed to provide any evidence or requested information supporting the Complaint in this matter. We will provide a detailed analysis of the deficiencies in the Staff's discovery responses once we receive the documents you are producing, and hope that you will make a good faith attempt to provide meaningful supplemental responses. In the absence of such supplemental responses, we will be forced to file a motion to compel.

There are several preliminary matters regarding the Staff's discovery responses which must be addressed immediately. First, regarding all claims of documents or information allegedly protected by the attorney-client privilege or work product doctrine, please immediately produce a privilege log as required by the discovery requests and applicable practice and procedure. Given the expedited nature of these proceedings, we will expect to receive such a log no later than May 8, 1998.

Second, the Staff has delayed providing certain documents pending the entry of a Confidentiality Agreement. Unfortunately, you did not choose to raise this issue with us prior to raising such an objection, nor have you suggested any agreement. To remedy this problem, attached is a draft Confidentially Agreement. Please provide me with any comments by the end of the day on May 5, 1998. In the absence of any comments, given the expedited nature of these proceedings, we will submit the Confidentiality Agreement for Court approval.

Third, your discovery responses reveal that the CPSC has been in contact with not only former Central employees, but also current Central employees. Such ex parte contacts are a clear breach of ethical obligations and are contrary to the Staff's prior written representations that no such contacts had occurred. Please immediately produce all evidence related to such contacts, which clearly cannot be considered privileged in any manner. Under no circumstances should the Staff engage in ex parte contacts with the Court regarding these contacts, which appears to be the course of action you suggest in your discovery responses. In this regard, please immediately confirm that you will not make any ex parte submissions to Judge Moran without substantial prior notice that would give us an opportunity to object to any such one-sided factual submissions to the Court.

Regards,

Thomas P. Hogan, Jr.

TPH/lgh

Enclosure

DRAFT

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446	:	**CPSC Docket No. 98-2**
	:	
and	:	
	:	
Central Sprinkler Co., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446,	:	
	:	
Respondents.	:	
	:	

CONFIDENTIALITY AGREEMENT

Respondents Central Sprinkler Corporation and Central Sprinkler Company (collectively, "Central") and Petitioner the Consumer Product Safety Commission (the "CPSC"), through undersigned counsel, hereby agree:

1. Petitioner and Respondents shall have the right to limit access to any document or other item relevant to this litigation, including without limitation answers to interrogatories and any portion of deposition testimony or other testimony by a witness, to the undersigned outside counsel for the parties.

2. Such documents or other tangible items must be designated by conspicuously stamping the words "OUTSIDE COUNSEL ONLY" on each page of the designated material or by notifying the other party in writing of the material to be considered so designated. With regard to testimony, a party may limit access to such testimony to the undersigned outside counsel by notifying the other party of the portion of testimony to be designated on the record at the deposition or in writing no later than two days after the transcript is received.

3. Information designated for "OUTSIDE COUNSEL ONLY" shall not be disclosed or disseminated to anyone, except:

a. the undersigned outside counsel for any party, and the employees of such counsel to whom it is necessary that the information be disclosed for purposes of this litigation only; or

b. any expert engaged by a party for the purposes of assisting in the preparation of this litigation, provided, however, that no such information shall be disseminated to any expert who is employed by a direct business competitor of Central or its affiliates; or

c. any person, entity, or firm with the prior written consent of all parties.

4. Petitioner and Respondents shall have the right to designate as CONFIDENTIAL any document or other item relevant to this litigation, including without limitation answers to interrogatories and any portion of deposition testimony or other testimony by a witness.

5. Such documents or other tangible items must be designated by conspicuously stamping the words "CONFIDENTIAL" on each page of the designated material or by notifying the other party in writing of the material to be considered so designated. With regard to testimony, a party may designate portions of the record CONFIDENTIAL by notifying the other party on the record at the deposition or in writing no later than two days after the transcript is received.

6. Information designated "CONFIDENTIAL" shall not be disclosed or disseminated to anyone, except:

a. a party, counsel for any party, and the employees of such counsel to whom it is necessary that the information be disclosed for purposes of this litigation only; or

b. any expert engaged by a party for the purpose of assisting in the preparation of this litigation, provided, however, that no CONFIDENTIAL information shall be disseminated to any expert who is employed by a direct business competitor of Central or its affiliates; or

c. any person who was involved in the preparation of the document or information; or

d. any other person, entity, or firm with the prior written consent of all parties.

7. Any party that provides documents or other discovery obtained from the other party in the course of this litigation to any person (other than the Court, court personnel, and court reporters) will first obtain from such person, prior to any such dissemination, a written statement in the form attached as Exhibit "A" hereto, that such person agrees to be bound by this Confidentiality Agreement. The undersigned counsel shall maintain a list of all such persons along with the written agreement of each person. Upon request of any party at any time, counsel in possession of the written agreements shall immediately either: (a) provide copies of the written agreements to the requesting party; or (b) submit the written agreements to the Court to determine whether any aspect of the written agreements are protected from discovery by any privilege.

8. When any document or information designated "CONFIDENTIAL" or "OUTSIDE COUNSEL ONLY," or other pleadings or papers disclosing or referring to such information are used in connection with any motion, hearing, filing or other submission to the Court, they shall be filed in an envelope under seal pursuant to the rules of this Court and shall be marked as follows:

> CONFIDENTIAL/RESTRICTED:
> The contents of this envelope are not to be revealed to anyone except the Court, or with the prior consent of all the parties herein, or pursuant to any other Order of this Court. If the contents are thus revealed, they shall thereafter be resealed.

9. a. Nothing in this Agreement shall preclude any party from challenging a designation of "CONFIDENTIAL" OR "OUTSIDE COUNSEL ONLY" by another party. If any party elects to challenge a designation of any document, deposition testimony, or

information pursuant to this order, that party must provide at least five days advance notice to afford the designating party an opportunity to remove voluntarily such designation.

b. If, after the five-day period has expired, the designating party has not agreed to remove the designation and the parties are otherwise unable to resolve the challenge to the designation, the challenging and designating parties shall contact the Court for a determination of whether the challenged designation is appropriate. The challenging party shall provide the Court with one copy of each document, response, or portion of transcript challenged. The challenging party has the burden of proving the inapplicability and/or incorrectness of any designation.

c. If the challenge is not resolved by agreement, or by voluntary removal, and if the Court is not contacted, then the designation shall remain in effect and shall continue to apply to such document or information.

10. All documents and other discovery produced or obtained in the course of this litigation, whether designated "CONFIDENTIAL" or "OUTSIDE COUNSEL ONLY" or not, shall be used for the sole and limited purpose of preparation for and trial of this action and shall not be used for any other purpose. "For purposes of preparation and trial of this action," as used in this Order, means that individuals obtaining access to discovery: (i) can read and review such discovery to become knowledgeable about this litigation; and (ii) can comment on such discovery to counsel for the parties if they so choose. All other uses, including but not limited to (1) making such discovery available to any person who has not signed Exhibit "A" hereto and (2) causing such discovery to be published in any trade journal, newspaper, or other written

publication other than filings with this Court connected with this litigation, shall fall outside the definition of "For purposes of preparation for and trial of this action." Nothing in this Confidentiality Agreement shall preclude persons wishing to use discovery from this litigation for purposes other than "For purposes of preparation for and trial of this action" from moving this Court, upon reasonable notice to the parties, for appropriate relief.

11. Within thirty days of the close of this litigation for any reason, each party shall retrieve all copies of materials designated "CONFIDENTIAL" or "OUTSIDE COUNSEL ONLY" from his or its own files, and from experts or other persons to whom he or it has provided such materials consistent with this Confidentiality Agreement, and shall do one of the following: (1) return to the designating party all such materials, including all copies thereof, produced by such designating party during this action; or (2) certify in writing to the designating party that all materials designated "CONFIDENTIAL" or "OUTSIDE COUNSEL ONLY" produced by such other party during this action have been destroyed. All material protected by this Confidentiality Agreement which has been placed in any computer databank, hard drive, or disk shall be completely erased, and any documents listing or summarizing information protected by this Confidentiality Agreement shall be destroyed within the same period.

12. Nothing herein contained shall be construed to preclude or limit any party from opposing any discovery on any grounds that would otherwise be available. This Agreement shall not, in and of itself, prejudice any contention of any party upon any motion, nor shall this Agreement constitute a waiver of any right to seek relief from the Court from any and all of the provisions hereof or other modifications of the terms hereof. This Agreement shall not limit any party's

right to seek judicial review or to seek further and additional protection against or limitation upon production or dissemination of information and documents or their contents.

13. Nothing herein shall be construed to preclude or limit the presence of any individual at any hearings in or the trial of this action.

DRAFT

Dated: _____

_____

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DRAFT

Dated: _____

_____

Deborah S. Orlove
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(301) 504-0626

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446	:	**CPSC Docket No. 98-2**
	:	
and	:	
	:	
Central Sprinkler Co., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446,	:	
	:	
Respondents.	:	
	:	

EXHIBIT "A" TO CONFIDENTIALITY AGREEMENT

I hereby certify that I have read the CONFIDENTIALITY AGREEMENT entered into by the parties in the above-captioned litigation. I hereby agree to be bound by the terms of the CONFIDENTIALITY AGREEMENT and to submit personally to the jurisdiction of the Administrative Law Judge assigned to this action for purposes of enforcing my agreement to be bound by the terms of the CONFIDENTIALITY AGREEMENT.

I hereby agree that I will use any documents or other discovery produced or provided by a party in the above-captioned litigation for the sole and limited purposes of preparation for and trial of the above-captioned litigation.

DRAFT

Date: _____ Signature: _____

CERTIFICATE OF SERVICE

I, Thomas P. Hogan, Jr., hereby certify that on this date a true and correct copy of the foregoing Respondents' Opposition to Complaint Counsel's Second Motion For Protective Order And In Camera Submission was served via telecopier and regular mail upon the following:

The Honorable William B. Moran
Offices of the Administrative Law Judges
Environmental Protection Agency
401 M Street, S.W.
Mail Code 1900 L
Washington, DC 20460

Eric L. Stone
Director
Division of Administrative Litigation
U.S. Consumer Product Safety Commission
4430 East West Highway
Bethesda, MD 20814

Alan H. Schoem
Assistant Executive Director
Office of Compliance
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Complaint Counsel
Division of Administrative Litigation
U.S. Consumer Product Safety Commission
4430 East West Highway
Bethesda, MD 20814

Dated: June 8, 1998

Thomas P. Hogan, Jr.

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION

1998 JUN 10 P 2:31

In the Matter of	:	
	:	
Central Sprinkler Corp.	:	
	:	
and	:	**CPSC Docket No. 98-2**
	:	
Central Sprinkler Co.,	:	
	:	
Respondents.	:	
	:	

ORDER

AND NOW, this _____ day of _____, 1998, upon consideration of Complaint Counsel's Second Motion For Protective Order And In Camera Submission, Respondents' Opposition to Complaint Counsel's Second Motion For Protective Order And In Camera Submission, and all other evidence before the Court, it is hereby ORDERED that Complaint Counsel's motion is DENIED.

Complaint Counsel is hereby ordered to produce to Respondents forthwith Complaint Counsel's documents identified by Bates numbers 0012903 - 0012976.

BY THE PRESIDING OFFICER:

_____
The Hon. William B. Moran
United States Administrative Law Judge

RECEIVED 6/10/98

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp.	:	
	:	
and	:	**CPSC Docket No. 98-2**
	:	
Central Sprinkler Co.,	:	
	:	
Respondents.	:	
	:	

RESPONDENTS' OPPOSITION TO
COMPLAINT COUNSEL'S SECOND MOTION
FOR PROTECTIVE ORDER AND IN CAMERA SUBMISSION

Presently before the Presiding Officer is Complaint Counsel's Second Motion For Protective Order And In Camera Submission ("Complaint Counsel's Motion"). Pursuant to this motion, Complaint Counsel has submitted certain materials in camera to the Presiding Officer. These materials allegedly are comprised of documents provided to Complaint Counsel by former employees of Respondents regarding Omega sprinklers and letters sent by Complaint Counsel to such former employees (collectively, the "Withheld Materials"). See Complaint Counsel's Motion, p. 1.

Complaint Counsel's Motion requests that the Presiding Officer order these materials shielded from Respondents in discovery. Complaint Counsel argues that the Withheld Materials are protected from discovery by the "informant's privilege," or that the former employees should be considered non-testifying expert consultants who are protected from discovery by the work product doctrine and the rules governing discovery of experts. See Complaint Counsel's Motion, pp. 3-5.

Pursuant to 16 C.F.R. § 1045(c)(2), Respondents Central Sprinkler Corporation and Central Sprinkler Company hereby request that the Court order Complaint Counsel to produce the Withheld Materials. As conceded in Complaint Counsel's Motion, the Withheld Materials are both relevant and responsive to Respondents' discovery requests. Moreover, the Withheld Materials are not protected from discovery by the "informant's privilege" for several reasons: (1) the former employees are not "informants," they are simply fact witnesses; (2) Complaint Counsel's invocation of the privilege is based on a claim of potential retaliation which is unsupported by any evidence; (3) the "informant's privilege" is overcome here by the critical nature of the information allegedly contained in the Withheld Materials; and (4) under any legal or factual scenario, the information contained in the Withheld Materials must be produced. In addition, the Withheld Materials are not covered by the rules regarding discovery from experts or the work product doctrine -- Respondents' former employees are simply fact witnesses, not "experts" or agents of Complaint Counsel. Therefore the Court should order Complaint Counsel to produce the Withheld Materials.

II. ARGUMENT

A. Complaint Counsel's Repeated Submission Of Documents In Camera Is Impermissible and Highly Prejudicial.

Complaint Counsel's Motion represents the fourth time in the last two weeks that Complaint Counsel has submitted documents to the Presiding Officer on an in camera basis. According to the Bates numbering of Complaint Counsel's documents, Complaint Counsel has produced approximately 3,000 pages of documents to Respondents, and has submitted approximately 10,000 pages of documents in camera to the Presiding Officer.

Respondents hereby renew their objections to Complaint Counsel's improper and impermissible tactic of presenting their case in camera. Complaint Counsel is attempting to conduct an ex parte trial of this matter by slowly exposing the Presiding Officer to Complaint Counsel's substantive evidence, without permitting Respondents to oppose, comment on, or even know the contents of the documents submitted. Complaint Counsel's refusal even to consider a Confidentiality Agreement proposed by Respondents, which addresses all of Complaint Counsel's concerns regarding the documents submitted in camera, reveals that Complaint Counsel's stated concerns about confidentiality are thinly veiled excuses to prejudice the Presiding Officer while providing Respondents no opportunity to respond.

That Complaint Counsel adopted this strategy for purposes of prejudicing the Presiding Officer is clear from comparing the manner in which Complaint Counsel approached these documents as opposed to other documents for which they have asserted a claim of privilege. On June 1, 1998, Complaint Counsel provided Respondents' counsel with a privilege log, identifying 118 documents that they are withholding on some claim of privilege. Obviously, the

overwhelming majority of these documents were not provided to the Presiding Officer. There was absolutely no reason for Complaint Counsel to treat these so-called "informant's documents" any differently from other allegedly privileged documents, apart from Complaint Counsel's desire to place them before the Presiding Officer on an ex parte basis. Particularily since Respondents expressly requested Complaint Counsel not to engage in such improper tactics, the conduct at issue is inexcusable.

Respondents' objections to Complaint Counsel's improper tactics are expressed at greater length in the Proposed Protective Order and Opposition of Respondents To Complaint Counsel's Submission of Documents In Camera, served May 19, 1998. Respondents hereby reiterate those objections.

B. Complaint Counsel Concedes That The Withheld Material Is Both Relevant And Responsive To Respondents' Discovery Requests.

The CPSC rules of practice define the scope of acceptable discovery very broadly. The rules provide that parties may obtain discovery regarding any information "relevant to the subject matter involved in the proceedings," or any information that "appears reasonably calculated to lead to the discovery of admissible evidence." 16 C.F.R. § 1025.31(c)(1).

In the instant case, the Withheld Materials clearly constitute discoverable information. Complaint Counsel describes the Withheld Materials as information "regarding Omega sprinklers, Omega sprinkler failures, and Respondents' knowledge of same." Complaint Counsel's Motion, p. 1. Thus, Complaint Counsel essentially concedes that the Withheld Materials are directly relevant to matters centrally in dispute in this case. This point is reinforced when Complaint Counsel admits that "Complaint Counsel is using the information contained in

[the Withheld Materials] to further its investigation into the Omega problem, and to channel its discovery in this matter." Id. at p. 3. Thus, it appears that the Withheld Materials are not merely relevant, they are sufficiently important that Complaint Counsel is using such materials to guide their own litigation efforts.

Complaint Counsel's Motion also admits that the Withheld Materials are responsive to Respondents' discovery requests. Complaint Counsel states that the Withheld Materials are responsive to at least 10 of Respondents' document requests, without even addressing Respondents' interrogatories. See Complaint Counsel's Motion, pp. 1-2.

Therefore, Complaint Counsel's Motion has made critical admissions regarding the Withheld Materials. Complaint Counsel admits that the information is relevant in general and important to Complaint Counsel's case specifically. Complaint Counsel also concedes that the Withheld Materials are responsive to Respondents' discovery requests.

Nevertheless, Complaint Counsel is refusing to produce the Withheld Materials. Complaint Counsel makes several baseless arguments for refusing to produce this material.

C. The Withheld Materials Are Not Protected By The "Informant's Privilege."

Complaint Counsel's first argument for not making the Withheld Materials available to Respondents is reliance on the so-called "informant's privilege." See Complaint Counsel's Motion, pp. 3-4. This is the same argument raised by Complaint Counsel in an attempt to withhold from Respondents an anonymous letter from a current employee of Respondents. See Respondents' Opposition To Complaint Counsel's Motion For Protective Order Regarding Anonymous Letter, served May 19, 1998.

The "informant's privilege" is not a valid objection regarding the Withheld Materials for a number of reasons. First, the former employees of Respondents are not "informants," they are simply fact witnesses. Second, the informant's privilege cannot be invoked here because Complaint Counsel has introduced no evidence of potential retaliation; furthermore, any such concern easily could be addressed if Complaint Counsel merely agreed to the Confidentiality Agreement proposed by Respondents. Third, the informant's privilege, which is a qualified privilege, has been easily overcome in this case by the admitted importance of the Withheld Materials. Finally, because the informant's privilege only protects the identity of an informant, at the very least Complaint Counsel should be required to produce all of the information contained in the Withheld Materials.

1. The Former Employees Are Fact Witnesses, Not "Informants."

As an initial matter, Complaint Counsel's invocation of the informant's privilege is invalid here because the former employees of Respondents who supplied the Withheld Materials do not qualify as informants. The former employees are simply potential fact witnesses in this case, subject to discovery like any other fact witness.

"Informants" are generally considered to be persons with whom law enforcement officials have an established relationship for the purposes of obtaining confidential information. In the instant case, it appears that Complaint Counsel is attempting to classify any person who provides information to Complaint Counsel as an "informant." This is simply a misdirected attempt to obstruct discovery in this case.

If Complaint Counsel is permitted to classify as an "informant" anyone who has provided information to them and who had any type of past commercial relationship with Respondents,

then the "informant's privilege" effectively would cover every potential witness for Complaint Counsel. Such a result and such an interpretation of the "informant's privilege" would be absurd.

The former employees who supplied the Withheld Materials to Complaint Counsel are mere fact witnesses here. Complaint Counsel cannot shield such materials from discovery simply by calling the former employees "informants." Therefore, Complaint Counsel's Motion should be denied.

2. Complaint Counsel Has Provided No Evidence Of Potential Retaliation.

Complaint Counsel attempts to justify invoking the informant's privilege based on protecting the former employees at issue from any potential retaliation by Respondents. See Complaint Counsel's Motion, p. 3. However, this argument lacks any validity because Complaint Counsel has presented no evidence of potential retaliation, and any such concern easily is cured under Respondents' proposed Confidentiality Agreement.

As an initial matter, Complaint Counsel has presented no credible evidence of any potential retaliation in this case. Complaint Counsel has not provided any indication that Respondents ever have engaged in such retaliatory activities. Nor has Complaint Counsel provided any evidence that would demonstrate that the former employees at issue are peculiarly vulnerable to any retaliation. Moreover, Respondents previously have assured the Presiding Officer, and hereby restate those assurances, that Respondents will not "retaliate" against any person for providing truthful information to the CPSC.

Moreover, Complaint Counsel's refusal to enter into a Confidentiality Agreement demonstrates that Complaint Counsel is more concerned about withholding pertinent information

from Respondents than protecting the former employees from any hypothetical retaliation. Respondents provided a draft Confidentiality Agreement to Complaint Counsel on May 1. See Exhibit "A", attached hereto. Complaint Counsel refused to enter into or even comment on this Confidentiality Agreement.[1/] However, the Confidentiality Agreement contains the solution to Complaint Counsel's concerns about "retaliation."

The Confidentiality Agreement contains provisions that would permit Complaint Counsel to designate the Withheld Materials as "Outside Counsel Only." See Exhibit "A", ¶¶ 1-3. Such a designation would limit those who could view the Withheld Materials to "the undersigned outside counsel" for Respondents, which does not include any counsel with any relationship to Respondents besides lawyer-client. Id., ¶ 3.[2/] Thus, any threat of potential "retaliation" against the former employees would be nullified, as Respondents would not be aware of the identity of these former employees; only Respondents' outside counsel would have such information.

However, Complaint Counsel has refused to consider the Confidentiality Agreement and/or this course of action. Thus, it is apparent that Complaint Counsel is simply attempting to delay and limit discovery for Respondents, not acting out of concern for the well-being of the former employees.

1/ Not having received any response from Complaint Counsel, Respondents have submitted the Confidentiality Agreement to the Presiding Officer as a proposed protective order. See Proposed Protective Order and Opposition of Respondents to Complaint Counsel's Submission of Documents In Camera, served May 19, 1998.

2/ Outside counsel could then review the materials, and if appropriate, seek permission from the Court to share the documents with their client if necessary to prepare a defense. Id., ¶ 9.

Because Complaint Counsel has produced no evidence of potential retaliation and has refused to consider a reasonable resolution to this issue via a Confidentiality Agreement, there is no basis for Complaint Counsel to invoke the "informant's privilege." Therefore, the Presiding Officer should order Complaint Counsel to produce the Withheld Materials to Respondents.

3. The Informant's Privilege Is Easily Overcome Based On The Admitted Importance Of The Withheld Materials.

The "informant's privilege" is not absolute -- it is, at most, a qualified privilege. The Supreme Court has clearly stated: "Where the disclosure of an informant's identity, or the contents of his communication, is relevant and helpful to the defense of an accused, or is essential to a fair determination of a cause, the privilege must give way. In these situations the trial court may require disclosure and, if the government withholds the information, dismiss the action." Rovario v. United States, 353 U.S. 56, 60-61 (1957) (emphasis added).

As admitted by Complaint Counsel, the contents of the Withheld Materials fall squarely within the circumstances where "the privilege must give way." Complaint Counsel concedes that they are "using the information contained in these documents to further its investigation . . . and to channel its discovery in this matter." Complaint Counsel's Motion, p. 3. Thus, Complaint Counsel is treating the contents of the Withheld Materials as extremely important information for purposes of this case. There should be little doubt that knowledge of this information would be "relevant and helpful" in the defense of this case for Respondents, and that giving Respondents equal access to this important information would be "essential to a fair determination" of this case. Rovario, 353 U.S. at 60-61.

Moreover, given the fact that Complaint Counsel has now provided these documents to the fact-finder in this case (and deprived Respondents and the Presiding Officer of the opportunity to develop a means of resolving this issue without providing the fact-finder with the documents at issue), Respondents must have access to the documents to enable them to address any factual or other inaccuracies in those documents.

Complaint Counsel argues that it still should not be required to produce the Withheld Materials because it does not intend to use the documents themselves at trial. See Complaint Counsel's Motion, p. 2. This argument simply misses the point. The proper issue is whether Complaint Counsel intends to use the information contained in the Withheld Materials and the investigatory fruits of that information in the trial of this case. The answer to that question clearly is "Yes," as Complaint Counsel had stated that it is using the information for investigatory and discovery purposes. Id. at p. 3. Therefore, Respondents should have equal access to these documents, to be given an equal opportunity to use such documents to "further [Respondents'] investigation" and "channel [Respondents'] discovery," in order to prepare for trial. Id.[3/]

Furthermore, public safety dictates that Respondents and their counsel be advised of the contents of the Withheld Materials. Central Sprinkler Company manufactures the Omega sprinkler heads in question. To the extent that the Withheld Materials reveal or explain any

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3/ If, on the other hand, Complaint Counsel successfully maintained a claim to the informant's privilege here, such a ruling logically would restrict Complaint Counsel's use of such information. Complaint Counsel would not be permitted to use the information contained in the Withheld Materials at trial, and certainly could not call the former employees in question as witnesses.

potential problems with the Omegas, Central, its Board of Directors, and its counsel affirmatively want to receive such information to address any potential problems appropriately. Central, its Board of Directors, and its counsel are committed to addressing properly any problems with the Omegas. If there are any identifiable problems with the Omegas, nobody has a greater interest in or right to address those problems than Respondents. Complaint Counsel's decision to deny Respondents access to the Withheld Materials is thus both procedurally unsound and contrary to Complaint Counsel's statutory mandate.[4/]

As was the case with the "anonymous letter," when viewed from an objective perspective, the course of action requested by Complaint Counsel here should not be followed. Complaint Counsel requests that documents in their possession be withheld from Respondents even though such documents admittedly are important, will be used to prepare for trial, and have been provided to the fact-finding Presiding Officer. Thus, everyone involved in the trial of this matter with the exception of Respondents, who are defending their product, would have access to these materials. Such a situation would be highly prejudicial to Respondents, a basic denial of due process rights, and fundamentally unfair.

Thus, in the instant case, the qualified "informant's privilege" is easily overcome. The contents of the Withheld Materials, as conceded by Complaint Counsel, are important enough to

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4/ The Court should not assume that Respondents are unwilling to take corrective action. To the contrary, Respondents have proposed to Complaint Counsel several alternative corrective action proposals, the future cost of which has been estimated to exceed $13.2 million. Complaint Counsel has rejected these proposals. Nor should the Court assume that Central, its counsel, or its Board of Directors are aware of each alleged fact claimed to be known by a third party. To the extent a third party has provided important information to Complaint Counsel, Respondents should be given the opportunity to address that information and take it into account in resolving this matter.

Respondents' defense in this matter and a fair determination of this case that "the privilege must give way." Rovario, 353 U.S. at 60-61. Therefore, the Court should order Complaint Counsel to produce the Withheld Materials to Respondents.[5/]

4. The Informant's Privilege Does Not Protect The Contents Of The Withheld Materials.

The "informant's privilege" is not a total shield to discovery. This privilege protects only the identity of an informant, not the information provided by the informant. Rovario, 353 U.S. at 60; see also Wright & Graham, Federal Practice and Procedure: Evidence § 5740 (The privilege does not protect "information provided by the informer . . . . Communications of an informant are not privileged . . . .").

Thus, under any factual or legal scenario, Complaint Counsel should be required to produce to Respondents all of the information contained in the Withheld Materials. This could be accomplished simply by redacting the name of the author, if necessary. The informant's privilege, even where applicable, does not protect the information provided by an informant.[6/]

5/ To the extent that any work product protection applied to such materials, the same logic applies -- the work product doctrine would be overcome by Respondents' "substantial need" for the materials. See 16 C.F.R. § 1025.31(c)(3).

6/ This same legal analysis also applies to Complaint Counsel's assertion of the work product doctrine. Because the work product doctrine only protects "documents and tangible things," 16 C.F.R. § 1025.31(c)(3), Complaint Counsel would be required to produce the information contained in the Withheld Materials regardless of such an objection.

D. The Withheld Materials Are Not Protected By The Work Product Doctrine Or As Materials Provided By Non-Testifying Experts.

Perhaps realizing that the informant's privilege does not shield the Withheld Materials from discovery, Complaint Counsel makes an entirely different argument in an attempt to deny Respondents access to such documents. In a move that is wholly at odds with their characterization of the authors as "informants," Complaint Counsel alternatively argues that the former employees are "non-testifying consultants" who are acting as experts for and/or agents of Complaint Counsel. See Complaint Counsel's Motion, p. 4. Thus, argues Complaint Counsel, the Withheld Materials are protected from discovery by the work product doctrine (Fed. R. Civ. P. 26(b)(3)) and special discovery rules applying to non-testifying experts (16 C.F.R. § 1025.31(c)(4)(ii)). Id.

This argument is both specious and reinforces the baseless nature of Complaint Counsel's attempt to label the former employees at issue "informants." The former employees at issue are not "experts" under 16 C.F.R. § 1025.31(c)(4)(ii). An expert offers opinions "involving scientific or technical knowledge" based on the expert's unique training or technical expertise. 16 C.F.R. § 1025.44(a). Complaint Counsel are not using the former employees as experts, but as fact witnesses regarding "Omega sprinklers, Omega sprinkler failures, and Respondents' knowledge of same." Complaint Counsel's Motion, p. 1. There is no indication in Complaint Counsel's Motion and no conceivable factual or legal basis for classifying the former employees at issue as non-testifying experts pursuant to 16 C.F.R. § 1025.31(c)(4)(ii). Complaint Counsel's attempt to make this argument is a disingenuous and desperate effort to avoid producing the Withheld Materials.

Similarly, Complaint Counsel's attempt to rely upon Fed. R. Civ. P. 26(b)(3) for some sort of work product protection is invalid. First, this rule does not apply to the instant administrative proceedings, which are governed by the CPSC rules of practice. Second, for purposes of the instant dispute, Rule 26(b)(3) would only provide work product protection for documents and tangible things prepared for trial by the CPSC or the CPSC's representatives, such as the CPSC's "attorney, consultant, surety, indemnitor, insurer, or agent." See Fed. R. Civ. P. 26(b)(3). The former employees at issue are mere fact witnesses, not the CPSC's representatives. Once again, there is no basis in Complaint Counsel's Motion and no conceivable factual or legal basis for arguing that the former employees are some sort of legal agent for the CPSC. In essence, Complaint Counsel is attempting to obtain the same work product protection for the materials generated by the former employees as is afforded the mental impressions and strategies of the CPSC's lawyers, Complaint Counsel. Such an argument is unprecedented, unsupported, and simply incredible.

Complaint Counsel is willing to raise any argument in an attempt to prevent Respondents from gaining crucial information via discovery. Complaint Counsel attempts to classify the former employees at issue here first as independent "informants," then as non-testifying "experts," then as some sort of agents of the CPSC. These arguments are internally inconsistent and fundamentally unsound. The former employees are simply potential fact witnesses, and materials related to them are discoverable.

III. CONCLUSION

At present, Complaint Counsel is engaging in a carefully choreographed two-pronged strategy. First, Complaint Counsel is periodically submitting inflammatory and highly prejudicial materials on an in camera basis to the Presiding Officer, thereby attempting to engage in an ex parte trial of this matter and unfairly influence the Presiding Officer. Second, Complaint Counsel is withholding materials from Respondents based on spurious objections. This course of action by Complaint Counsel is delaying these proceedings, causing tremendous prejudice to Respondents, and imperiling the appearance of propriety of these proceedings.

Complaint Counsel's Motion is a further example of this strategy. Complaint Counsel admits that the Withheld Materials are relevant and responsive, but insisted on submitting them for in camera review based on a series of specious objections. Because the former employees in question are simply fact witnesses, Complaint Counsel cannot shield from discovery the materials related to them by pretending that the former employees are informants, experts, or employees of the CPSC.

Based on all of the foregoing, pursuant to 16 C.F.R. § 1045(c)(2), Respondents respectfully request that the Court deny Complaint Counsel's Motion and order Complaint Counsel to produce the Withheld Materials to Respondents. At a minimum, Respondents request that the Court direct Complaint Counsel to state with specificity the factual or other information provided in the Withheld Materials so that Respondents may prepare for trial and address any public safety issues raised in the materials.

Respectfully submitted,

Dated: June 8, 1998

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Thomas P. Hogan, Jr.
215-963-5253

May 1, 1998

VIA TELECOPIER

Deborah S. Orlove
Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4430 East West Highway
Bethesda, MD 20814

Re: In the Matter of Central Sprinkler Corp., et al. (CPSC Docket No. 98-2)

Dear Ms. Orlove:

On Wednesday, April 29, 1998, we received Complaint Counsel's written discovery responses. However, to date, we still have not received any documents. Please immediately address this matter. In addition, in the future, please arrange for prompt and reliable service of any documents and/or pleadings.

Regarding your discovery responses, a quick reading reveals that these responses are highly deficient. In essence, the Staff has failed to provide any evidence or requested information supporting the Complaint in this matter. We will provide a detailed analysis of the deficiencies in the Staff's discovery responses once we receive the documents you are producing, and hope that you will make a good faith attempt to provide meaningful supplemental responses. In the absence of such supplemental responses, we will be forced to file a motion to compel.

There are several preliminary matters regarding the Staff's discovery responses which must be addressed immediately. First, regarding all claims of documents or information allegedly protected by the attorney-client privilege or work product doctrine, please immediately produce a privilege log as required by the discovery requests and applicable practice and procedure. Given the expedited nature of these proceedings, we will expect to receive such a log no later than May 8, 1998.

Second, the Staff has delayed providing certain documents pending the entry of a Confidentiality Agreement. Unfortunately, you did not choose to raise this issue with us prior to raising such an objection, nor have you suggested any agreement. To remedy this problem, attached is a draft Confidentially Agreement. Please provide me with any comments by the end of the day on May 5, 1998. In the absence of any comments, given the expedited nature of these proceedings, we will submit the Confidentiality Agreement for Court approval.

Third, your discovery responses reveal that the CPSC has been in contact with not only former Central employees, but also current Central employees. Such ex parte contacts are a clear breach of ethical obligations and are contrary to the Staff's prior written representations that no such contacts had occurred. Please immediately produce all evidence related to such contacts, which clearly cannot be considered privileged in any manner. Under no circumstances should the Staff engage in ex parte contacts with the Court regarding these contacts, which appears to be the course of action you suggest in your discovery responses. In this regard, please immediately confirm that you will not make any ex parte submissions to Judge Moran without substantial prior notice that would give us an opportunity to object to any such one-sided factual submissions to the Court.

Regards,

Thomas P. Hogan, Jr.

TPH/lgh

Enclosure

DRAFT

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446	:	**CPSC Docket No. 98-2**
	:	
and	:	
	:	
Central Sprinkler Co., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446,	:	
	:	
Respondents.	:	
	:	

CONFIDENTIALITY AGREEMENT

Respondents Central Sprinkler Corporation and Central Sprinkler Company (collectively, "Central") and Petitioner the Consumer Product Safety Commission (the "CPSC"), through undersigned counsel, hereby agree:

1. Petitioner and Respondents shall have the right to limit access to any document or other item relevant to this litigation, including without limitation answers to interrogatories and any portion of deposition testimony or other testimony by a witness, to the undersigned outside counsel for the parties.

2. Such documents or other tangible items must be designated by conspicuously stamping the words "OUTSIDE COUNSEL ONLY" on each page of the designated material or by notifying the other party in writing of the material to be considered so designated. With regard to testimony, a party may limit access to such testimony to the undersigned outside counsel by notifying the other party of the portion of testimony to be designated on the record at the deposition or in writing no later than two days after the transcript is received.

3. Information designated for "OUTSIDE COUNSEL ONLY" shall not be disclosed or disseminated to anyone, except:

a. the undersigned outside counsel for any party, and the employees of such counsel to whom it is necessary that the information be disclosed for purposes of this litigation only; or

b. any expert engaged by a party for the purposes of assisting in the preparation of this litigation, provided, however, that no such information shall be disseminated to any expert who is employed by a direct business competitor of Central or its affiliates; or

c. any person, entity, or firm with the prior written consent of all parties.

4. Petitioner and Respondents shall have the right to designate as CONFIDENTIAL any document or other item relevant to this litigation, including without limitation answers to interrogatories and any portion of deposition testimony or other testimony by a witness.

5. Such documents or other tangible items must be designated by conspicuously stamping the words "CONFIDENTIAL" on each page of the designated material or by notifying the other party in writing of the material to be considered so designated. With regard to testimony, a party may designate portions of the record CONFIDENTIAL by notifying the other party on the record at the deposition or in writing no later than two days after the transcript is received.

6. Information designated "CONFIDENTIAL" shall not be disclosed or disseminated to anyone, except:

a. a party, counsel for any party, and the employees of such counsel to whom it is necessary that the information be disclosed for purposes of this litigation only; or

b. any expert engaged by a party for the purpose of assisting in the preparation of this litigation, provided, however, that no CONFIDENTIAL information shall be disseminated to any expert who is employed by a direct business competitor of Central or its affiliates; or

c. any person who was involved in the preparation of the document or information; or

d. any other person, entity, or firm with the prior written consent of all parties.

7. Any party that provides documents or other discovery obtained from the other party in the course of this litigation to any person (other than the Court, court personnel, and court reporters) will first obtain from such person, prior to any such dissemination, a written statement in the form attached as Exhibit "A" hereto, that such person agrees to be bound by this Confidentiality Agreement. The undersigned counsel shall maintain a list of all such persons along with the written agreement of each person. Upon request of any party at any time, counsel in possession of the written agreements shall immediately either: (a) provide copies of the written agreements to the requesting party; or (b) submit the written agreements to the Court to determine whether any aspect of the written agreements are protected from discovery by any privilege.

8. When any document or information designated "CONFIDENTIAL" or "OUTSIDE COUNSEL ONLY," or other pleadings or papers disclosing or referring to such information are used in connection with any motion, hearing, filing or other submission to the Court, they shall be filed in an envelope under seal pursuant to the rules of this Court and shall be marked as follows:

> CONFIDENTIAL/RESTRICTED:
> The contents of this envelope are not to be revealed to anyone except the Court, or with the prior consent of all the parties herein, or pursuant to any other Order of this Court. If the contents are thus revealed, they shall thereafter be resealed.

9. a. Nothing in this Agreement shall preclude any party from challenging a designation of "CONFIDENTIAL" OR "OUTSIDE COUNSEL ONLY" by another party. If any party elects to challenge a designation of any document, deposition testimony, or

information pursuant to this order, that party must provide at least five days advance notice to afford the designating party an opportunity to remove voluntarily such designation.

b. If, after the five-day period has expired, the designating party has not agreed to remove the designation and the parties are otherwise unable to resolve the challenge to the designation, the challenging and designating parties shall contact the Court for a determination of whether the challenged designation is appropriate. The challenging party shall provide the Court with one copy of each document, response, or portion of transcript challenged. The challenging party has the burden of proving the inapplicability and/or incorrectness of any designation.

c. If the challenge is not resolved by agreement, or by voluntary removal, and if the Court is not contacted, then the designation shall remain in effect and shall continue to apply to such document or information.

10. All documents and other discovery produced or obtained in the course of this litigation, whether designated "CONFIDENTIAL" or "OUTSIDE COUNSEL ONLY" or not, shall be used for the sole and limited purpose of preparation for and trial of this action and shall not be used for any other purpose. "For purposes of preparation and trial of this action," as used in this Order, means that individuals obtaining access to discovery: (i) can read and review such discovery to become knowledgeable about this litigation; and (ii) can comment on such discovery to counsel for the parties if they so choose. All other uses, including but not limited to (1) making such discovery available to any person who has not signed Exhibit "A" hereto and (2) causing such discovery to be published in any trade journal, newspaper, or other written

publication other than filings with this Court connected with this litigation, shall fall outside the definition of "For purposes of preparation for and trial of this action." Nothing in this Confidentiality Agreement shall preclude persons wishing to use discovery from this litigation for purposes other than "For purposes of preparation for and trial of this action" from moving this Court, upon reasonable notice to the parties, for appropriate relief.

11. Within thirty days of the close of this litigation for any reason, each party shall retrieve all copies of materials designated "CONFIDENTIAL" or "OUTSIDE COUNSEL ONLY" from his or its own files, and from experts or other persons to whom he or it has provided such materials consistent with this Confidentiality Agreement, and shall do one of the following: (1) return to the designating party all such materials, including all copies thereof, produced by such designating party during this action; or (2) certify in writing to the designating party that all materials designated "CONFIDENTIAL" or "OUTSIDE COUNSEL ONLY" produced by such other party during this action have been destroyed. All material protected by this Confidentiality Agreement which has been placed in any computer databank, hard drive, or disk shall be completely erased, and any documents listing or summarizing information protected by this Confidentiality Agreement shall be destroyed within the same period.

12. Nothing herein contained shall be construed to preclude or limit any party from opposing any discovery on any grounds that would otherwise be available. This Agreement shall not, in and of itself, prejudice any contention of any party upon any motion, nor shall this Agreement constitute a waiver of any right to seek relief from the Court from any and all of the provisions hereof or other modifications of the terms hereof. This Agreement shall not limit any party's

right to seek judicial review or to seek further and additional protection against or limitation upon production or dissemination of information and documents or their contents.

13. Nothing herein shall be construed to preclude or limit the presence of any individual at any hearings in or the trial of this action.

DRAFT

Dated: _____

_____

J. Gordon Cooney, Jr.
Thomas P. Hogan, Jr.
Emily J. Lawrence
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2000 One Logan Square
Philadelphia, PA 19103
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Attorneys for Respondents
CENTRAL SPRINKLER CORP. and
CENTRAL SPRINKLER COMPANY

DRAFT

Dated: _____

_____

Deborah S. Orlove
Eric H. Singer
Howard N. Tarnoff

Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4430 East West Highway
Bethesda, MD 20814
(301) 504-0626

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446	:	**CPSC Docket No. 98-2**
	:	
and	:	
	:	
Central Sprinkler Co., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446,	:	
	:	
Respondents.	:	
	:	

EXHIBIT "A" TO CONFIDENTIALITY AGREEMENT

I hereby certify that I have read the CONFIDENTIALITY AGREEMENT entered into by the parties in the above-captioned litigation. I hereby agree to be bound by the terms of the CONFIDENTIALITY AGREEMENT and to submit personally to the jurisdiction of the Administrative Law Judge assigned to this action for purposes of enforcing my agreement to be bound by the terms of the CONFIDENTIALITY AGREEMENT.

I hereby agree that I will use any documents or other discovery produced or provided by a party in the above-captioned litigation for the sole and limited purposes of preparation for and trial of the above-captioned litigation.

DRAFT

Date: _____ Signature: _____

CERTIFICATE OF SERVICE

I, Thomas P. Hogan, Jr., hereby certify that on this date a true and correct copy of the foregoing Respondents' Opposition to Complaint Counsel's Second Motion For Protective Order And In Camera Submission was served via telecopier and regular mail upon the following:

The Honorable William B. Moran
Offices of the Administrative Law Judges
Environmental Protection Agency
401 M Street, S.W.
Mail Code 1900 L
Washington, DC 20460

Eric L. Stone
Director
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U.S. Consumer Product Safety Commission
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Dated: June 8, 1998

Thomas P. Hogan, Jr.

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION

1998 JUN 10 P 2:31

In the Matter of	:	
	:	
Central Sprinkler Corp.	:	
	:	
and	:	**CPSC Docket No. 98-2**
	:	
Central Sprinkler Co.,	:	
	:	
Respondents.	:	
	:	

ORDER

AND NOW, this _____ day of _____, 1998, upon consideration of Complaint Counsel's Second Motion For Protective Order And In Camera Submission, Respondents' Opposition to Complaint Counsel's Second Motion For Protective Order And In Camera Submission, and all other evidence before the Court, it is hereby ORDERED that Complaint Counsel's motion is DENIED.

Complaint Counsel is hereby ordered to produce to Respondents forthwith Complaint Counsel's documents identified by Bates numbers 0012903 - 0012976.

BY THE PRESIDING OFFICER:

_____
The Hon. William B. Moran
United States Administrative Law Judge

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION
1998 JUN 11 P 2:55

In the Matter of	:	
	:	
Central Sprinkler Corp., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446	:	**CPSC Docket No. 98-2**
	:	
and	:	**Response of Respondents to Response Of**
	:	**Factory Mutual Research Corporation In**
Central Sprinkler Co., a Corporation,	:	**Regard To Disclosure Of Documents**
451 North Cannon Avenue	:	
Lansdale, PA 19446,	:	
	:	
Respondents.	:	
	:	

RESPONSE OF CENTRAL SPRINKLER CORPORATION AND CENTRAL SPRINKLER COMPANY TO RESPONSE OF FACTORY MUTUAL RESEARCH CORPORATION IN REGARD TO DISCLOSURE OF DOCUMENTS

Respondents Central Sprinkler Corporation and Central Sprinkler Company (collectively, "Central") hereby respond to Factory Mutual Research Corporation's Response To Complaint Counsel's Request For Disclosure Determination Of Factory Mutual Research Corporation Documents. Central concurs with Factory Mutual Research Corporation ("Factory Mutual") that Factory Mutual's documents produced to the Consumer Product Safety Commission ("CPSC") pursuant to subpoena and pertaining to Central should be produced to Central. Further, Factory Mutual's documents produced to the CPSC and pertaining to companies other than Central should also be produced to Central in response to Central's document requests served on the CPSC.

With regard to disclosure to the public of Factory Mutual's documents, Central does not take a position regarding public disclosure of other companies' documents. With regard to Central's documents, however, no public disclosure of either the documents or information

pertaining to them should be made unless in accordance with law and regulations; to wit, that the documents or information are provided to Central, Central is given the opportunity to comment on the proposed disclosure, and the CPSC has taken reasonable steps to assure that the information to be disclosed is accurate.

Further support for this Response is contained in the attached Memorandum Of Law, which is incorporated by reference herein.

Respectfully submitted,

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Attorneys for Central Sprinkler Corporation and Central Sprinkler Company

DATED: June 9, 1998

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp., a Corporation,	:	
451 North Cannon Avenue	:	**CPSC Docket No. 98-2**
Lansdale, PA 19446	:	
	:	**Memorandum of Law In Support Of**
and	:	**Response of Respondents To Response Of**
	:	**Factory Mutual Research Corporation In**
Central Sprinkler Co., a Corporation,	:	**Regard To Disclosure Of Documents**
451 North Cannon Avenue	:	
Lansdale, PA 19446,	:	
	:	
Respondents.	:	
	:	

MEMORANDUM OF LAW IN SUPPORT OF RESPONSE OF CENTRAL SPRINKLER CORPORATION AND CENTRAL SPRINKLER COMPANY TO RESPONSE OF FACTORY MUTUAL RESEARCH CORPORATION IN REGARD TO DISCLOSURE OF DOCUMENTS

I. INTRODUCTION

Respondents Central Sprinkler Corporation and Central Sprinkler Company (collectively, "Central") concur with Factory Mutual Research Corporation's ("Factory Mutual") position that Factory Mutual's documents produced to the Consumer Product Safety Commission ("CPSC") pursuant to subpoena served on Factory Mutual by the CPSC, and pertaining to Central, should be produced to Central. Further, Factory Mutual's documents produced to the CPSC and pertaining to companies other than Central should also be produced to Central in response to Central's document requests served on the CPSC. Not only does the Consumer Product Safety Act not prohibit disclosure of information when relevant to administrative proceedings before the CPSC, but the Protective Order proposed by Central, with provisions for "Outside Counsel

Only" and "Confidential" designations, more than sufficiently protects any trade secret or confidential information contained within the documents.

With regard to public dissemination of Factory Mutual's information regarding Central or any other company, neither Complaint Counsel nor the CPSC can make such public disclosure unless it is in accordance with statutory and regulatory law. In particular, no disclosure should take place until and unless the documents or information are provided to Central, Central has had the opportunity to comment on the proposed disclosure, and the CPSC has taken reasonable steps to assure that the information to be disclosed is accurate.

II. FACTUAL BACKGROUND

It would appear that, in May 1997, the CPSC issued subpoenas to various third parties, including Factory Mutual. On April 27, 1998, following Complaint Counsel's filing an Administrative Complaint against Central in the above-captioned matter, Central served Complaint Counsel with Central's First Request for Production of Documents. Among the documents requested were, inter alia, (a) all documents in the CPSC's administrative file regarding Central's Omega fire sprinklers; (b) all documents produced to the CPSC in response to CPSC subpoenas regarding Omega sprinklers; (c) all documents produced to the CPSC regarding Omega sprinklers; (d) all documents regarding testing of Omega sprinklers; (e) all documents regarding the manufacture, sale or marketing of Omega sprinklers; (f) all documents regarding certain allegations of the Administrative Complaint filed by Complaint Counsel; and (g) and all documents concerning silicone or EPDM o-rings. Complaint Counsel objected to the document requests, in part because of alleged confidentiality concerns.

On May 1, 1998, Central submitted a proposed Confidentiality Agreement to Complaint Counsel. The proposed Confidentiality Agreement provided for two kinds of confidentiality designation: "Outside Counsel Only," which would preclude disclosure to the parties, and "Confidential," which would permit disclosure to the parties, but would place restrictions on how the parties could use that information. Documents with either designation could be used only for the purpose of preparation and trial of this action, and would be required to be returned to the designating party or destroyed at the end of the litigation.[1/] Without responding to Central regarding the proposed Confidentiality Agreement, Complaint Counsel on May 15, 1998 instead submitted documents in camera and requested a disclosure determination from the Administrative Law Judge. On May 19, 1998, Central filed a motion requesting that the proposed Confidentiality Agreement be entered as a protective order.

On May 28, 1998, Factory Mutual filed a Response to Complaint Counsel's Request For Disclosure Determination Of Factory Mutual Research Corporation Documents. In its Response and supporting affidavit, Factory Mutual explained that it must preserve the confidentiality of information supplied by its customers, as well as testing information generated while testing customers' products. Factory Mutual stated that it had no objection to Complaint Counsel's

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1/ This type of Confidentiality Agreement is widely used in large-scale document productions where the withholding and designation of individual documents is neither preferred nor feasible due to the large number of documents that would therefore be withheld. Proceeding with an "umbrella" confidentiality agreement that provides for specific designations and a method for challenging any designation is an acceptable and regular way of proceeding when a massive volume of documents is produced, as it enables the attorneys or parties to use the documents in the prosecution or defense of the case, protects the designating party, and enables a receiving party to challenge any claim of confidentiality with full knowledge of the contents of the documents. Complaint Counsel's refusal to so proceed is surprising and unwarranted.

producing to Central documents that Central had provided to Factory Mutual in the first place, or that Factory Mutual had prepared regarding Central's products. Factory Mutual objected, however, to Complaint Counsel's producing to Central or to the public all other documents that Factory Mutual provided to the CPSC in response to the CPSC's subpoena.

III. LEGAL ARGUMENT

As Factory Mutual has explained in its Response, there are two types of documents that it has produced to the CPSC: (1) those regarding Central; and (2) those regarding other customers of Factory Mutual. Likewise, there are two possible recipients of the documents from Complaint Counsel or the CPSC: (1) Central, in response to its document requests in the above-captioned action; and (2) the public, either through CPSC dissemination or, perhaps, in response to requests under the Freedom of Information Act ("FOIA"), 5 U.S.C. § 552.

For the reasons stated in further detail below, Central is entitled to all of the documents provided to the CPSC by Factory Mutual. Further, it is inappropriate for the CPSC to disclose to the public, either through CPSC dissemination or in response to FOIA requests, trade secret or confidential information received from either Central or Factory Mutual. Complaint Counsel or the CPSC must adhere to the Act's requirements before any public disclosure of any other information can take place outside of these judicial proceedings.

A. Complaint Counsel Must Immediately Produce To Central All Documents Received From Factory Mutual That Concern Central Or Central's Products.

When Complaint Counsel refused to produce documents to Central in response to Central's document requests, one of the bases for its refusal was that it had received confidential

documents from third parties and was not at liberty to disclose the documents. Central recognized that its, and others', documents relevant to this matter may contain confidential or trade secret information. Therefore, Central proposed to Complaint Counsel a Confidentiality Agreement that would address confidentiality concerns by providing for a two-tier designation of confidentiality, with the more restrictive designation prohibiting disclosure to parties and allowing for disclosure only to outside counsel, experts, or persons to whom all parties consent to disclosure. Complaint Counsel failed to respond to Central's proposed agreement.

Although Complaint Counsel purported to be protecting the confidential nature of third parties' documents, one of those third parties, Factory Mutual, has now stated that it "does not object to the Commission producing those documents [those either provided to Factory Mutual by Central or prepared by Factory Mutual in response to Central's request for Factory Mutual testing of its products] to Central Sprinkler because such production is not inconsistent with [Factory Mutual's] obligations of confidentiality." (Factory Mutual Response, p. 3.) Given Factory Mutual's acquiescence to disclosure of its Central-related documents to Central, Complaint Counsel has no basis for not immediately producing those documents to Central.

B. Central Is Entitled To Receive All Other Documents Provided To The CPSC By Factory Mutual In Response To The CPSC's Subpoena.

Citing confidentiality concerns, Factory Mutual objects to Complaint Counsel's production to Central of information provided to the CPSC by Factory Mutual regarding non-Central products or testing. In contrast to Complaint Counsel, however, Factory Mutual may be willing to discuss with Central the proposed Confidentiality Agreement, as well as redaction of customer identification. Thus, this entire issue may be obviated if Factory Mutual, like

Underwriters Laboratories ("UL"), agrees that documents can be produced to Central subject to Central's proposed Confidentiality Agreement. Indeed, as UL stated in a letter to Judge Moran dated May 27, 1998,

> UL has no objection to the disclosure to Respondents of the documents that UL has produced to the CPSC . . . . Complaint Counsel's statement in its motion that 'the staff has been unable to obtain the third's party's (i.e., UL) agreement to disclose the documents in discovery in this matter' is incorrect . . . . It is UL's understanding that Central is willing to enter into a Confidentiality Agreement with the CPSC which it has rejected.

(Ltr. to Hon. William B. Moran, May 27, 1998, p. 2.) (emphasis added).

If Factory Mutual, like UL, accepts Central's proposed Confidentiality Agreement regarding disclosure of Factory Mutual documents to Central, Complaint Counsel will have no basis for refusing to produce to Central the documents produced to the CPSC by Factory Mutual.

Even without Factory Mutual's acquiescence, however, Central is still entitled to all other documents produced by Factory Mutual to the CPSC. The Consumer Product Safety Act, 15 U.S.C. § 2051 et seq., ("the Act") does not prohibit disclosure of information when relevant to administrative proceedings before the CPSC. To the contrary, the Act provides that

> The provisions of paragraphs (2) through (6) shall not prohibit the disclosure of information . . . when relevant in any administrative proceeding under this Act . . . . Any disclosure of relevant information --
>
> (A) in Commission administrative proceedings . . .
>
> shall be governed by the rules of the Commission . . . .

15 U.S.C. § 2055(a)(8).

Paragraph (2), cited in the passage above, provides that all information "reported to or otherwise obtained by the Commission or its representative under this Act which information

contains or relates to trade secret or other matter referred to in section 1905 of Title 18 [the Trade Secrets Act] or subject to section 552(b)(4) of Title 5 [FOIA] shall be considered confidential and shall not be disclosed." 15 U.S.C. § 2055(a)(2). The Trade Secrets Act, in turn, prohibits any United States employee, under penalty of imprisonment or a fine, from disclosing "in any manner or to any extent not authorized by law" information relating to trade secrets. 18 U.S.C. § 1905. Similarly, FOIA, while mandating open disclosure from government agencies of agency information, states that its disclosure provisions do not apply to matters that are "trade secrets and commercial or financial information obtained from a person and privileged or confidential." 5 U.S.C. § 552(b)(4).

By specifically providing in Section 2055(a)(8) that these provisions "shall not prohibit the disclosure" of relevant information, the Act recognizes that such disclosures are required when relevant to administrative proceedings before the CPSC. Statutory provisions protecting information from publication are meant to address disclosure of sensitive information to the general public. They are not intended to restrict the limited kind of disclosure experienced in judicial proceedings. See Culligan v. Yamaha Motor Corp., 110 F.R.D. 122, 127 (S.D.N.Y. 1986) (although Yamaha could expect that its communication of trade secrets to the CPSC would not be disseminated by the CPSC, it could not expect that they would be insulated from the discovery process).

The documents requested by Central are clearly relevant to the proceedings at bar. For example, to the extent that information contained in non-Central documents from Factory Mutual shows that other companies' sprinklers experienced similar issues, the documents are relevant to Central's defense. Similarly, Factory Mutual's documents concerning test results from other

companies' sprinklers are relevant to addressing whether Complaint Counsel's assertions of high "failure rates" with Omega sprinklers are based on correct standards. In short, even if Complaint Counsel does not intend to use the Factory Mutual documents in the case against Central, Central is nonetheless entitled to the documents because they are relevant to Central's defense of its sprinklers against allegations that they pose a substantial product hazard to consumers.

Complaint Counsel cannot seriously claim that the Factory Mutual documents are not relevant to this matter. Were that the case, then there is no need for Complaint Counsel to have submitted them for in camera review and, likewise, no reason for Complaint Counsel to use the documents in its case against Central. As stated above, Central is entitled to the documents whether or not Complaint Counsel intend to use the documents against Central, because the documents are relevant to Central's defense. Moreover, especially if Complaint Counsel intends to use the documents, they must be produced to Central. Simply, it exceeds the limits of procedural fairness and due process for Complaint Counsel to use against Central documents that it has refused to produce to Central.

Central does not disagree with Factory Mutual that Factory Mutual's information should not be widely disseminated. The Confidentiality Agreement/Protective Order proposed by Central, with its provisions for "Outside Counsel Only" and "Confidential" designations and its restrictions on use of the designated documents, more than sufficiently protects the trade secret or confidential information contained within the documents. Indeed, Underwriters Laboratories ("UL"), a testing organization similar to Factory Mutual, has indicated that the two-tier confidentiality designations and provisions for post-litigation return or destruction of designated

documents adequately protects its documents that have been produced to the CPSC and which are responsive to Central's documents requests.

Because Factory Mutual has agreed that the Central-related documents it has provided to the CPSC should be produced to Central, those documents must be immediately produced by Complaint Counsel to Central. In addition, Factory Mutual's non-Central documents must be produced to Central because they are relevant to the administrative proceedings against Central before the CPSC, and the proposed Confidentiality Agreement/Protective Order provides sufficient protection against disclosure to competing clients of Factory Mutual.

C. Although Complaint Counsel Must Produce The Documents To Central In This Administrative Proceeding, The CPSC Cannot Disclose The Documents To The Public Without Adhering To Applicable Law And Regulations.

As discussed above, the Act does not prohibit disclosure of trade secret or confidential information when relevant in administrative proceedings before the Commission. With regard to disclosures to the public at large, however -- as opposed to disclosures to a party in an administrative proceedings -- the Act recognizes and incorporates the disclosure limitations of FOIA.

Thus, the Act provides that "[n]othing contained in this Act shall be construed to require the release of any information described by subsection (b) of section 552 of Title 5 [FOIA] or which is otherwise protected by law from disclosure to the public." 15 U.S.C. § 2055(a)(1). Therefore, if the CPSC is called upon to release Central-related documents under FOIA, it is not required to release information contained within FOIA's exemptions. GTE Sylvania, Inc. v. Consumer Product Safety Comm'n, 598 F.2d 790, 803 (3d Cir. 1979), aff'd, 447 U.S. 102, 100 S.Ct. 2051 (1980). Among those exemptions are trade secret and commercial or financial

information. 5 U.S.C. § 552(b)(4). Hence, the CPSC is not required -- and is, indeed, prohibited by the Trade Secrets Act -- to release to the public Central's trade secret or commercial and financial information in response to a FOIA request.[2/]

With regard to information pertaining to Central that is not a trade secret or confidential, the Act nonetheless governs disclosure to the public of the information. 15 U.S.C. § 2055(b). The section applies to any CPSC disclosures, whether initiated by the CPSC or in response to a FOIA request. See Consumer Product Safety Comm'n v. GET Sylvania, Inc., 447 U.S. 102, 108, 100 S.Ct. 2051, 2056 (1980) (nothing in the Act supports CPSC's claim that section applies only to disclosures initiated by the CPSC). Thus, Complaint Counsel or the CPSC must provide Central with adequate notice and opportunity to comment before disclosing any Central documents to the public. 15 U.S.C. § 2055(b)(1). At a minimum, this requires that Complaint Counsel provide Central with the actual documents it seeks to release to the public in order to enable Central to comment on the propriety of such release. Indeed, it is quite ironic that Complaint Counsel has denied Central the opportunity to review the documents while simultaneously taking the position that the same documents should be provided to the general public.[3/]

2/ Central takes no position regarding the CPSC's disclosure to the public of Factory Mutual information concerning other companies, but notes that provisions regarding the dissemination of information to the public at large, where such information is not constrained by judicial proceedings and are not protected by a confidentiality agreement, must adhere to statutory and regulatory requirements described previously.

3/ Moreover, to the extent that the CPSC intends to comment on, or provide information regarding, Central's documents, the CPSC "shall take reasonable steps to assure, prior to its public disclosure thereof, that information from which the identity of such manufacturer . . . may (continued...)

III. CONCLUSION

For all of the reasons stated herein, Complaint Counsel must immediately produce to Central all information concerning Central that Factory Mutual provided to the CPSC. Further, Complaint Counsel must produce Factory Mutual's non-Central information with an appropriate Confidentiality Agreement/Protective Order in place, as the Act's provisions regarding "public" disclosure do not apply to disclosures to Central during this administrative proceeding. With regard to public disclosures, however, either initiated by the CPSC or in response to FOIA requests, no trade secret or confidential or financial information can be disseminated, and public disclosure of any other information must adhere to the pre-disclosure requirements of the Act.

Respectfully submitted,

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(215) 639-4070

DATED: June 9, 1998

Attorneys for Central Sprinkler Corporation and Central Sprinkler Company

---

3/(...continued)
be readily ascertained is accurate, and that such disclosure is fair in the circumstances and reasonably related to effectuating the purposes of this Act." 15 U.S.C. § 2055(b)(1) (emphasis added).

CERTIFICATE OF SERVICE

I, Emily J. Lawrence, hereby certify that I have served the attached document, Response of Respondents To Response Of Factory Mutual Research Corporation In Regard To Disclosure Of Documents, and accompanying Memorandum of Law, upon all parties and participants of record in these proceedings by First Class U.S. mail, postage prepaid, copy to each on June 9, 1998.

Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.
U. S. Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
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The Honorable William B. Moran
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401 M. Street, S.W.
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Ms. Sadye E. Dunn, Secretary
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4330 East West Highway, Building 4340
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Director
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Emily J. Lawrence

Emily J. Lawrence

For: Respondents Central Sprinkler Corporation and Central Sprinkler Company

50

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

OFFICE OF THE SECRETARY
FREEDOM OF INFORMATION

1998 JUN 12 P 12:34

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents.	)	

COMPLAINT COUNSEL'S NOTICE OF SERVICE OF FIFTH SET OF SUPPLEMENTAL DOCUMENTS IN RESPONSE TO RESPONDENTS' FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS

Pursuant to its continuing duty to supplement discovery responses as mandated by 16 C.F.R. § 1025.31(f), Complaint Counsel hereby provides the following supplemental documents in response to Respondents' First Request for Production of Documents and Things, that were inadvertently omitted in its SECOND SET of supplemental documents in response to Respondents' First Request for Production of Documents and Things:

Bates pages 12234, 12244, 12246, 12335, 12337, 12345, 12353, 12977 - 12988.

DATED: June 12, 1998

Deborah S. Orlove

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Howard N. Tarnoff, Esq.
Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, Maryland 20814
301-504-0626

supp5.doc

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, **COMPLAINT COUNSEL'S NOTICE OF SERVICE OF FIFTH SET OF SUPPLEMENTAL DOCUMENTS IN RESPONSE TO RESPONDENTS' FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS** was filed with the Secretary of the Commission, and deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

J. Gordon Cooney, Jr., Esq.
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Attorneys for Central Sprinkler Corporation and Central Sprinkler Company

The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
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Washington, DC 20460
fax (202) 565-0044

The documents at issue were hand-delivered to the Secretary of the Commission on this day, and forwarded via telecopier and certified mail to the Presiding Officer, and, pursuant to Respondents' instructions, to Respondents addressed to J. Gordon Cooney, Jr., Esq., et al., at the above address.

Signed: Kevin Kerr

Dated: 6/12/98

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6/12/98

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents	)	

COMPLAINT COUNSEL'S NOTICE OF WITHDRAWAL
OF MOTION TO EXCLUDE RESPONDENTS' UNFILED OPPOSITIONS

COMES NOW Complaint Counsel and voluntarily, without prejudice, withdraws its Motion to Exclude Respondents' Unfiled Oppositions, filed and served June 1, 1998. The Motion is now moot, as the issues raised in the pleadings it sought to exclude were decided in the Presiding Officer's June 5, 1998 Confidentiality Order and Order Regarding Complaint Counsel's *In Camera* Submission of Documents and Request for Disclosure Determinations, and June 9, 1998 Order Granting Complaint Counsel's Motion for Protective Order.

DATED: June 12, 1998

Deborah S. Orlove

Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.
Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, Maryland 20814
301-504-0626

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, **COMPLAINT COUNSEL'S NOTICE OF WITHDRAWAL OF MOTION TO EXCLUDE RESPONDENTS' UNFILED OPPOSITIONS** was filed with the Secretary of the Commission, and deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

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The Honorable William B. Moran
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Signed: Deborah S. Mori

Dated: June 12, 1998

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UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

SEC/OFC OF THE SECRETARY
PERSON OF INFORMATION

1998 JUN 15 · A 11: 50

In the Matter of	:	
	:	
Central Sprinkler Corp.	:	
	:	
and	:	**CPSC Docket No. 98-2**
	:	
Central Sprinkler Co.,	:	
	:	
Respondents.	:	
	:	

RESPONDENTS' PROPOSED DISCOVERY SCHEDULE AND SUPPORTING MEMORANDUM

I. INTRODUCTION

The Presiding Officer has scheduled a pre-hearing conference in this matter for June 16, 1998. In anticipation of the pre-hearing conference, counsel for both parties participated in a conference call on May 28, 1998, to discuss issues relevant to the pre-hearing conference. Counsel mutually agreed to exchange proposed discovery schedules on June 3, 1998, and promised to work together thereafter in an attempt to reach agreement on such scheduling issues before the pre-hearing conference.

On June 3, as agreed, Respondents submitted a proposed discovery schedule to Complaint Counsel. See Letter of June 3 and Respondents' Proposed Discovery Schedule (the "Discovery Schedule"), attached hereto as Exhibit "A". The Discovery Schedule set forth in detail proposed obligations and corresponding dates for each party regarding discovery issues; the accompanying letter summarized the rationale for these obligations and dates. Id.

Complaint Counsel did not provide a proposed discovery schedule on June 3. On June 9, Respondents reminded Complaint Counsel via a letter of their agreement to exchange proposed discovery schedules. See Letter of May 9, attached hereto as Exhibit "B". To date, Complaint Counsel has neither submitted a proposed discovery schedule to Respondents nor offered any explanation for failing to do so.

In the absence of any comments from Complaint Counsel, and in anticipation of the pre-hearing conference, Respondents hereby submit the Discovery Schedule for consideration by the Presiding Officer. Respondents briefly explain the purpose of each suggested element of the Discovery Schedule in the following discussion. The overall time-line represented by the Discovery Schedule is summarized at Exhibit "C".

II. DISCUSSION

A. Identification/Clarification of Issues

Rule 1025.21 of the CPSC rules of practice provides that the pre-hearing conference should address "[i]dentification, simplification and clarification of the issues," 16 C.F.R. § 1025.21(a)(3), and the Presiding Officer specifically stated during the May 29, 1998 telephone conference that this is one of the matters to be addressed during the June 16, 1998 pre-hearing conference. Section 1 of the Discovery Schedule proposes such identification/clarification of the issues presented in the instant case. See Discovery Schedule, § 1.

Section 1 proposes that Complaint Counsel will advise Respondents by June 15, 1998 of the issues and contentions that Complaint Counsel intend to attempt to prove at trial.[1/] Such potential issues includes: (1) whether Complaint Counsel intend to establish the cause of any alleged Omega defect; (2) whether Omega sprinklers "fail" at a comparably greater rate than other brands of sprinkler heads; (3) whether any of the small number of non-activations by an Omega sprinkler in a fire was the result of an alleged defect; (4) whether any personal injuries resulted from an alleged Omega non-activation; (5) whether Central's proposed remediation program is adequate; and (6) whether Omegas using silicone o-rings are defective. Id.

Identification and/or clarification of whether Complaint Counsel intends to put any of these subjects into issue in this case is a crucial first step in shaping discovery and the eventual trial in this matter. To date, Complaint Counsel's allegations and discovery responses have focused on a relatively narrow issue -- whether laboratory test results allegedly demonstrate that Omegas do not activate at a certain minimal amount of water pressure (5 or 7 psi). If this is the sole issue that Complaint Counsel intends to attempt to prove in support of their case, then discovery proceedings and the trial of this matter may be relatively simple.[2/]

1/ By selecting June 15, Respondents had hoped that the scope of the issues to be raised by Complaint Counsel would be clarified before the pre-hearing conference in order to allow for a more meaningful discussion at the conference. Because such a date will have passed by the time of the pre-hearing conference, Respondents respectfully suggest that Complaint Counsel make the identification/clarification of issues within one week of the pre-hearing conference, by June 23, 1998.

2/ Respondents do not suggest that Complaint Counsel can meet their burden of proof through this evidence alone. Indeed, Complaint Counsel's burden of proof is a complex legal issue that should be resolved at an appropriate stage only after thorough briefing and argument.

On the other hand, if Complaint Counsel plans to address or offer proof regarding any of the other issues mentioned in Section 1 of the Discovery Schedule, it will have a dramatic impact on discovery, trial preparation, and the hearing in this matter. Such expanded allegations would require Respondents to seek further discovery from Complaint Counsel, and would require more extensive third party discovery. Such allegations would critically affect the affirmative defenses offered by Respondents, the type and number of experts required, and the particular fact witnesses involved. Obviously, all of these issues also would then affect the required length of discovery and trial.

Respondents have been pressing Complaint Counsel to clarify the issues in this matter from the outset. Fairness and efficiency dictate that this be done properly. Just by way of example, if Complaint Counsel intend to prove that any of the relatively small number of alleged inactivations of an Omega was caused by a defect, discovery will need to focus on the circumstances of the particular inactivation. This discovery would include an evaluation of the propriety of the design of the sprinkler system, whether the sprinkler was properly installed, whether prohibited substances were introduced into the sprinkler system or water supply, whether the water supply was particularly corrosive or filled with sludge, whether the water supply was shut down or impaired, and whether adjacent sprinklers controlled the fire. If Complaint Counsel identifies and/or clarifies the subjects that are at issue in this case, it will dramatically improve the ability of the parties and the Presiding Officer to establish a reasonable plan for discovery and trial. Therefore, Respondents respectfully request that the Court include Section 1 of the Discovery Schedule as part of any scheduling order in this matter.

B. Identification Of Persons Having Knowledge

Section 1025.21 of the CPSC rules of practice anticipates that the pre-hearing conference will address the identification of witnesses. See 16 C.F.R. § 1025.21(a)(11). Section 2 of the Discovery Schedule addresses such identification, proposing that "By June 15, 1998, Complaint Counsel shall identify the names of all persons having knowledge about the allegations they intend to prove at trial that are not identified in the documents produced by Respondents to date." See Discovery Schedule, § 2.[3/]

The identification of "persons having knowledge" of any potentially relevant information is explicitly required by the rules of practice, where a party requests such information. See 16 C.F.R. § 1025.31(c)(1). Respondents have requested this information in discovery, but Complaint Counsel has not identified such "persons having knowledge" to date, aside from referring Respondents to the documents that have been produced. A proper identification is vital in order to permit Respondents to proceed with depositions in this case. It is self-evident that Respondents cannot depose potential witnesses known only to Complaint Counsel -- in order to discover the nature of their knowledge, test the validity of their information, and consider their credibility -- unless Respondents know exactly who such persons are.

The CPSC rules of practice require the identification of "persons having knowledge" of potentially relevant information. Respondents have requested such information from Complaint

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3/ As with the identification/clarification of issues, Respondents selected June 15 in the hope that this threshold issue could be resolved prior to the pre-hearing conference, thereby providing important information for that conference. Respondents now suggest that Complaint Counsel make their identification of persons having knowledge on the same newly proposed date for the identification/clarification of issues -- June 23. See supra n.1.

Counsel, and this information is necessary in establishing a discovery schedule and trial plan in this matter. Therefore, as part of a comprehensive discovery plan, Respondents request that the Presiding Officer order Complaint Counsel to identify such persons with knowledge by June 15, or be barred from presenting at trial any witnesses not disclosed in this list of persons with knowledge.[4/]

C. Production Of Documents By Respondents

Respondents are in the process of conducting an exhaustive review of documents, spanning a period of more than 15 years, in response to Complaint Counsel's very broad discovery requests. Section 3 of the Discovery Schedule sets forth procedures for the completion of Respondents' document production to Complaint Counsel. See Discovery Schedule, § 3. This section recites that Respondents already have made available for inspection by Complaint Counsel an initial set of 100 boxes of documents, subject to execution of a confidentiality agreement. Respondents are making their best efforts to make available the remaining additional 300 boxes (approximately) by June 24, 1998.

D. Fact Discovery Period

Sections 4 - 7 of the Discovery Schedule propose procedures for the identification of witnesses and documents to be introduced at trial, third party discovery, and fact depositions. Under the Discovery Schedule, this "fact discovery period" takes place June 29 - August 3, 1998.

4/ Respondents are prepared to provide names of persons with knowledge regarding the issues to be tried in this case as well. Respondents submit, however, that they should not be required to do so until after Complaint Counsel specifies the issues that it intends to try in this case.

See Discovery Schedule, §§ 4-7.[5/] Such issues are properly considered at a pre-hearing conference. See 16 C.F.R. § 1025.21(8), (11), (14).

Sections 6 and 7 of the Discovery Schedule provide for an orderly process of third party discovery and deposition scheduling. It has come to Respondents' attention that Complaint Counsel apparently has been serving subpoenas and attempting to schedule deposition testimony from third parties without serving or otherwise notifying Respondents. The Discovery Schedule provides for notice to all parties, a reasonable period of time to conduct depositions (June 24 - August 3), and an orderly procedure for counsel to meet and confer in order to establish a mutually convenient schedule for depositions. Given the complexity and tight deadlines involved in this litigation, these provisions are designed to keep the proceedings efficient, timely, and fair.

Regarding the disclosure of witnesses and documents, the Discovery Schedule proposes a phased plan that will occur after the fact discovery period has closed. Since Complaint Counsel has the burden of proof to substantiate their Complaint, 16 C.F.R. § 1025.43(b)(1), Complaint Counsel first discloses their proposed witnesses and documents for trial use. Respondents then can evaluate Complaint Counsel's list and avoid duplication and/or repetition in producing Respondents' disclosures, which are due one week after Complaint Counsel's disclosures. If a witness or document is not disclosed by a party during this procedure, that party may not introduce the non-disclosed witness or document at trial. See Discovery Schedule, §§ 4-5.

5/ The proposal is based, however, on the assumption that the trial will be limited to issues relating to test results and whether these test results establish the existence of a "product defect which poses a substantial product hazard." If Complaint Counsel intends to broaden the issues, the Discovery Schedule should be adjusted accordingly.

E. Expert Discovery Period

The CPSC rules of practice anticipate that the Presiding Officer may address at the pre-hearing conference issues related to the testimony of expert witnesses. See 16 C.F.R. § 1025.21(a)(9), (13), (14). Sections 8 - 12 of the Discovery Schedule address discovery and testimony of experts in this matter. The "expert discovery period" anticipated in the Discovery Schedule occurs July 1 - September 25. See Discovery Schedule, §§ 8-12.

Similar to the fact discovery period, the expert discovery period would be a phased procedure under the Discovery Schedule. First, on July 1, Complaint Counsel identifies their experts and provides basic background information on such experts. Id. at § 8. Then, on July 15, Respondents provide reciprocal information. Again, since Complaint Counsel has the burden of proof and can control the issues it intends to raise, it is appropriate to require Complaint Counsel to identify their experts before Respondents are required to do so. This phased procedure prevents duplicate expert witnesses and allows Respondents the opportunity to decide what experts appropriately respond to the experts proposed by Complaint Counsel. Such a procedure also avoids the supplemental designation of experts that usually occurs when parties are forced to designate expert witnesses simultaneously.

After the experts have been designated, the Discovery Schedule sets forth a procedure for the exchange of expert testimony and supporting materials. See Discovery Schedule, §§ 10-11. Pursuant to 16 C.F.R. § 1025.44, the testimony of the experts shall be reduced to writing. Under the Discovery Schedule, Complaint Counsel submits their experts' testimony to Respondents after the close of fact discovery, by August 10. Respondents are required to respond with their experts' testimony by August 24. Then, with both parties fully informed regarding the expert

testimony, the Discovery Schedule provides for a reasonable period of time for the depositions of all experts: August 24 - September 25.

This procedure assures that the parties will have all relevant information before expert depositions commence. It also provides for an efficient and concise submission of prepared expert testimony at trial. Accordingly, Respondents request that the Presiding Officer adopt the procedures set forth in Sections 8-12 of the Discovery Schedule.

F. Exchange Of Final Witness and Exhibit Lists

Pursuant to 16 C.F.R. § 1025.21(a)(13), the Discovery Schedule proposes that the parties exchange final trial witness and exhibit lists on or before October 5, 1998. See Discovery Schedule, § 13. This date allows a sufficient period of time after the close of all discovery (September 25) for the parties to prepare a final list of witnesses and exhibits.

G. Location of Hearing

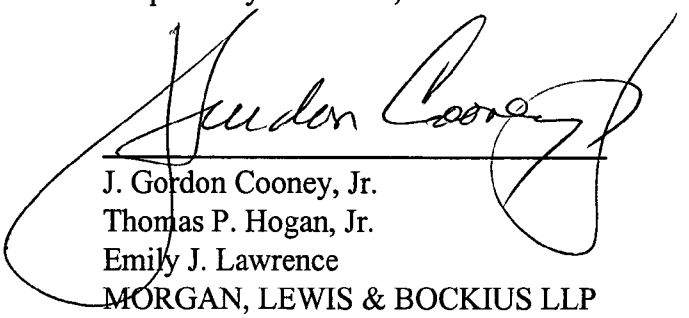
The CPSC rules of practice provide that the Presiding Officer may determine the location of the hearing at the pre-hearing conference, "with due regard to the convenience of the parties." 16 C.F.R. § 1025.21(a)(13). The Discovery Schedule designates Philadelphia, Pennsylvania as the location of the hearing. See Discovery Schedule, § 14.

Respondents respectfully maintain that a Philadelphia location would be most convenient for the parties. Respondents are located in the Philadelphia area, as, presumably, are most of Respondents' potential witnesses. Complaint Counsel's witnesses either are from the Philadelphia area or are from a diverse set of locations around the country, all of which are easily accessible to Philadelphia by plane, train, or automobile. Therefore, Philadelphia represents a logical and convenient location for the hearing of this matter.

III. CONCLUSION

For all of the foregoing reasons, Respondents respectfully request that the Presiding Officer adopt and incorporate the provisions contained in the Discovery Schedule into any comprehensive discovery order in this matter. Respondents will be prepared to discuss any of these proposed provisions and any other matters deemed relevant by the Presiding Officer at the pre-hearing conference.

Respectfully submitted,



Dated: June 12, 1998

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Attorneys for Respondents
CENTRAL SPRINKLER CORP. and
CENTRAL SPRINKLER COMPANY

CERTIFICATE OF SERVICE

I, Thomas P. Hogan, Jr., hereby certify that on this date a true and correct copy of the foregoing Respondents' Proposed Discovery Schedule And Supporting Memorandum was served via telecopier and regular mail upon the following:

The Honorable William B. Moran
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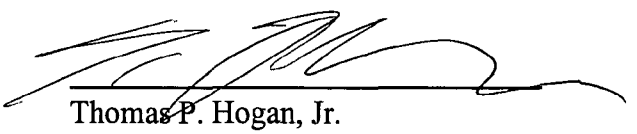
Dated: June 12, 1998



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June 3, 1998

VIA TELECOPY

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Deborah S. Orlove, Esquire
Complaint Counsel
United States Consumer Product
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4330 East West Highway
Bethesda, MD 20814

Re: In the Matter of Central Sprinkler Corporation, et al.
CPSC Docket No. 98-2

Dear Eric and Deborah:

Pursuant to our conversation of last week, attached is Respondents' Proposed Discovery Schedule. In presenting this proposal to you, we believe some preliminary observations are appropriate.

First, the scope of discovery in this matter--including the amount of time required, the identity of witnesses that need to be deposed and the areas in which expert testimony will be required--is heavily dependent upon the scope of matters you intend to put at issue in this matter. Nearly all of the discovery we have received from you to date has concerned laboratory test results. If your proof at trial will concern only those test results and testimony regarding their significance, that should enable us to complete discovery within the time periods set forth in Respondents' Proposal. On the other hand, the scope of discovery will be very different if you intend to prove such matters as: (a) the cause or causes of the alleged defect; (b) that some or all of the actual alleged inactivations in the handful of fires were caused by a defect as opposed to some other system-related issue; (c) that personal injuries actually resulted from an alleged defect; (d) that Omega sprinklers "fail" at a rate greater than other sprinklers; (e) the bases, if any, for concluding that Central's remediation program does not constitute a complete remedy under the Act; or (f) any of the other areas identified in

paragraph 1 of our Proposal. For obvious reasons, it is imperative that we understand the scope of your contentions at the earliest possible date so that fact and expert discovery can proceed accordingly. See, e.g., 16 C.F.R. § 1025.21(a)(3) (requiring the Presiding Officer to consider at the Prehearing Conference means to identify, simplify and clarify the issues).

Second, in order to proceed with depositions, respondents need information from Complaint Counsel regarding the names of persons having knowledge of matters that Complaint Counsel intends to prove at trial. For the most part, your discovery responses to date concern only test results and requests for information by Complaint Counsel to third parties. These discovery responses shed little light on the names of persons with knowledge in this matter. Our concern in this regard is particularly amplified by two of your in camera motions which suggest that you may be developing witnesses and areas of proof about which we have received no information. In order to enable us to prepare for trial, we believe that Complaint Counsel must identify persons with relevant knowledge or be barred from using those persons as witnesses at trial. See, e.g., 16 C.F.R. § 1025.21(a)(11) (requiring the Presiding Officer to consider requiring the parties to disclose the names of witnesses and physical evidence prior to the submission of final witness and exhibit lists).

We look forward to receiving your proposal by the end of the day today and hearing from you about resolving any of our differences as soon as possible, so that we can prepare for, and make a clear presentation of the issues during our June 16, 1998 prehearing conference.

Very truly yours,

J. Gordon Cooney, Jr.

JGC/ss

Attachment

cc: John C. Fenningham, Esquire (w/attachment)
Michael F. Healy, Esquire (w/attachment)

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
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CENTRAL SPRINKLER CORP.	:	**CPSC DOCKET NO. 98-2**
	:	
and	:	
	:	
CENTRAL SPRINKLER CO.,	:	
	:	
Respondents	:	
	:	

RESPONDENTS' PROPOSED DISCOVERY SCHEDULE

Subject to the statements set forth in the June 3, 1998 letter from J. Gordon Cooney, Jr. to Eric L. Stone, Respondents Central Sprinkler Corporation and Central Sprinkler Co. hereby propose the following discovery schedule:

1. By June 15, 1998, Complaint Counsel will advise Respondents whether they intend to attempt to establish facts in addition to those relating to results from laboratory tests, and, if so, they will articulate those facts and contentions they intend to prove. Without limitation, this will include whether Complaint Counsel intend to prove:

a. The cause or causes that they believe underlie their contention that Omega sprinklers contain a defect which poses a substantial product hazard;

b. Whether Omega sprinklers "fail" at a rate that is greater than comparable quick response or other sprinklers;

c. Whether they intend to establish that any of the instances where an Omega sprinkler allegedly did not activate in a fire was the result of a product defect as opposed to some other system-related or other problem, and, if so, which such instances;

d. Whether they intend to establish that, in any of the above instances, they intend to prove that the alleged defect resulted in personal injury, and, if so, shall identify the person allegedly injured and the alleged injuries suffered;

e. Whether Complaint Counsel contend that the remediation program established by Central in the Settlement Agreement dated May 11, 1998 constitutes an inadequate program of replacement and repair, and, if so, they shall specify the reasons for such a contention;

f. Whether Complaint Counsel contend that Omega sprinklers containing silicone o-rings contain a defect which poses a substantial product hazard, and if so, the bases upon which this contention rests in light of the test data produced to date showing no test failures for such products.

2. By June 15, 1998, Complaint Counsel shall identify the names of all persons having knowledge about the allegations they intend to prove at trial that are not identified in the documents produced to Respondents to date.

3. Respondents have identified and are prepared to produce for inspection by Complaint Counsel approximately 100 boxes of documents upon the execution of the Confidentiality Agreement forwarded to Complaint Counsel on May 1, 1998. Respondents estimate that they will produce an additional 300 boxes of documents and will make additional documents available for inspection on a rolling basis. By June 24, 1998, Respondents intend to

produce all documents referenced in their Response to Complaint Counsel's Request for Production of Documents, dated May 26, 1998.

4. On or before June 29, 1998, Complaint Counsel shall disclose the names of witnesses and of documents or other physical evidence which they intend to introduce into evidence. Failure to provide such information by June 29, 1998 shall result in Complaint Counsel's being precluded from offering the testimony of any such non-identified person at the administrative trial.

5. On or before July 6, 1998, Respondents shall disclose the names of witnesses and of documents or other physical evidence which they intend to introduce into evidence. Failure to provide such information by July 6, 1998 shall result in Respondents' being precluded from offering the testimony of any such non-identified person at the administrative trial.

6. Complaint Counsel and Respondents must comply with, inter alia, 16 C.F.R. §§ 1025.35 and 1025.38 regarding notice to all parties regarding depositions and subpoenas directed to non-parties.

7. The parties shall conduct fact depositions in this matter between June 24, 1998 and August 3, 1998. As soon as Complaint Counsel have provided the information set forth in paragraph 1 above, the parties shall meet and confer on the identity of fact witnesses to be deposed and shall attempt to agree on a schedule for taking those depositions. Depending on the scope of issues that Complaint Counsel intend to raise pursuant to paragraph 1 above, the deadline of August 3, 1998 may be extended.

8. On or before July 1, 1998, Complaint Counsel shall identify each expert witness they intend to call at trial, including for each such expert a curriculum vitae and a brief

description of the areas in which that expert is expected to testify sufficient to enable Respondents to determine whether to counter-designate their own experts in those areas.

9. On or before July 15, 1998, Respondents shall identify each expert witness they intend to call at trial, including for each such witness a curriculum vitae and a brief description of the areas in which that expert is expected to testify.

10. On or before August 10, 1998, Complaint Counsel shall furnish Respondents with the prepared testimony of each expert witness they intend to call at trial, together with: all data or other information considered by the witness in forming the opinions; any exhibits to be used as a summary or support for the opinions; the qualifications of the witness, including a list of all publications authored by the witness within the preceding ten years; the compensation to be paid for the study and testimony; and a listing of any other cases in which the witness has testified as an expert at trial or by deposition within the preceding four years.

11. On or before August 24, 1998, Respondents shall furnish Complaint Counsel with the prepared testimony of each expert witness they intend to call at trial, together with: all data or other information considered by the witness in forming the opinions; any exhibits to be used as a summary or support for the opinions; the qualifications of the witness, including a list of all publications authored by the witness within the preceding ten years; the compensation to be paid for the study and testimony; and a listing of any other cases in which the witness has testified as an expert at trial or by deposition within the preceding four years.

12. The parties shall conduct expert witness depositions between August 24, 1998 and September 25, 1998. Prior to doing so, the parties shall meet and confer in an attempt to arrive at a mutually agreeable expert deposition schedule.

13. On or before October 5, 1998, the parties shall exchange final witness and exhibit lists. Only those witnesses and exhibits that are listed will be permitted in each party's case-in-chief.

14. The hearing in this matter should be held in the Philadelphia, Pennsylvania area.

15. Respondents reserve the right to modify this Proposed Discovery Schedule upon review of Complaint Counsel's Proposed Discovery Schedule.

Dated: June 3, 1998

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June 9, 1998

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Safety Commission
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Re: In the Matter of Central Sprinkler Corporation, et al.
CPSC Docket No. 98-2

Dear Eric and Deborah:

On Thursday, May 28, 1998, we participated in a telephone conference in which we each agreed to exchange proposed discovery plans on Wednesday, June 3. As you know, on that date, Respondents provided you with such a discovery plan and expected to receive Complaint Counsel's version on that same date.

To date, we have not received Complaint Counsel's proposed discovery plan. Complaint Counsel's failure to provide Respondents with such a plan in accordance with our agreement has substantially impaired our ability to meet with you to discuss an intelligent discovery program prior to the June 16, 1998 pre-hearing conference. Please provide us with Complaint Counsel's proposed discovery plan immediately.

We look forward to hearing from you.

Very truly yours,

J. Gordon Cooney, Jr.

JGC/ss

cc: John C. Fenningham, Esquire (via telecopy)
Michael F. Healy, Esquire (via telecopy)

ALL-STATE® LEGAL 800-222-0510 EDR11 RECYCLED

TIME-LINE FOR DISCOVERY SCHEDULE

Date	Event
June 23	Identification/clarification of disputed issues and identification of persons with knowledge by Complaint Counsel
June 24	Respondents complete making all documents available to Complaint Counsel for inspection and copying
June 29 - August 3	Fact discovery period (disclosure of witnesses and documents, third party discovery, depositions of fact witnesses)
July 1 - August 24	Expert witness discovery and testimony
August 24 - September 25	Depositions of expert witnesses
October 5	Exchange of final witness and exhibit lists

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UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

SEC/OFC OF THE SECRETARY
PERSON OF INFORMATION

1998 JUN 15 · A 11: 50

In the Matter of	:	
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and	:	**CPSC Docket No. 98-2**
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RESPONDENTS' PROPOSED DISCOVERY SCHEDULE AND SUPPORTING MEMORANDUM

I. INTRODUCTION

The Presiding Officer has scheduled a pre-hearing conference in this matter for June 16, 1998. In anticipation of the pre-hearing conference, counsel for both parties participated in a conference call on May 28, 1998, to discuss issues relevant to the pre-hearing conference. Counsel mutually agreed to exchange proposed discovery schedules on June 3, 1998, and promised to work together thereafter in an attempt to reach agreement on such scheduling issues before the pre-hearing conference.

On June 3, as agreed, Respondents submitted a proposed discovery schedule to Complaint Counsel. See Letter of June 3 and Respondents' Proposed Discovery Schedule (the "Discovery Schedule"), attached hereto as Exhibit "A". The Discovery Schedule set forth in detail proposed obligations and corresponding dates for each party regarding discovery issues; the accompanying letter summarized the rationale for these obligations and dates. Id.

Complaint Counsel did not provide a proposed discovery schedule on June 3. On June 9, Respondents reminded Complaint Counsel via a letter of their agreement to exchange proposed discovery schedules. See Letter of May 9, attached hereto as Exhibit "B". To date, Complaint Counsel has neither submitted a proposed discovery schedule to Respondents nor offered any explanation for failing to do so.

In the absence of any comments from Complaint Counsel, and in anticipation of the pre-hearing conference, Respondents hereby submit the Discovery Schedule for consideration by the Presiding Officer. Respondents briefly explain the purpose of each suggested element of the Discovery Schedule in the following discussion. The overall time-line represented by the Discovery Schedule is summarized at Exhibit "C".

II. DISCUSSION

A. Identification/Clarification of Issues

Rule 1025.21 of the CPSC rules of practice provides that the pre-hearing conference should address "[i]dentification, simplification and clarification of the issues," 16 C.F.R. § 1025.21(a)(3), and the Presiding Officer specifically stated during the May 29, 1998 telephone conference that this is one of the matters to be addressed during the June 16, 1998 pre-hearing conference. Section 1 of the Discovery Schedule proposes such identification/clarification of the issues presented in the instant case. See Discovery Schedule, § 1.

Section 1 proposes that Complaint Counsel will advise Respondents by June 15, 1998 of the issues and contentions that Complaint Counsel intend to attempt to prove at trial.[1/] Such potential issues includes: (1) whether Complaint Counsel intend to establish the cause of any alleged Omega defect; (2) whether Omega sprinklers "fail" at a comparably greater rate than other brands of sprinkler heads; (3) whether any of the small number of non-activations by an Omega sprinkler in a fire was the result of an alleged defect; (4) whether any personal injuries resulted from an alleged Omega non-activation; (5) whether Central's proposed remediation program is adequate; and (6) whether Omegas using silicone o-rings are defective. Id.

Identification and/or clarification of whether Complaint Counsel intends to put any of these subjects into issue in this case is a crucial first step in shaping discovery and the eventual trial in this matter. To date, Complaint Counsel's allegations and discovery responses have focused on a relatively narrow issue -- whether laboratory test results allegedly demonstrate that Omegas do not activate at a certain minimal amount of water pressure (5 or 7 psi). If this is the sole issue that Complaint Counsel intends to attempt to prove in support of their case, then discovery proceedings and the trial of this matter may be relatively simple.[2/]

1/ By selecting June 15, Respondents had hoped that the scope of the issues to be raised by Complaint Counsel would be clarified before the pre-hearing conference in order to allow for a more meaningful discussion at the conference. Because such a date will have passed by the time of the pre-hearing conference, Respondents respectfully suggest that Complaint Counsel make the identification/clarification of issues within one week of the pre-hearing conference, by June 23, 1998.

2/ Respondents do not suggest that Complaint Counsel can meet their burden of proof through this evidence alone. Indeed, Complaint Counsel's burden of proof is a complex legal issue that should be resolved at an appropriate stage only after thorough briefing and argument.

On the other hand, if Complaint Counsel plans to address or offer proof regarding any of the other issues mentioned in Section 1 of the Discovery Schedule, it will have a dramatic impact on discovery, trial preparation, and the hearing in this matter. Such expanded allegations would require Respondents to seek further discovery from Complaint Counsel, and would require more extensive third party discovery. Such allegations would critically affect the affirmative defenses offered by Respondents, the type and number of experts required, and the particular fact witnesses involved. Obviously, all of these issues also would then affect the required length of discovery and trial.

Respondents have been pressing Complaint Counsel to clarify the issues in this matter from the outset. Fairness and efficiency dictate that this be done properly. Just by way of example, if Complaint Counsel intend to prove that any of the relatively small number of alleged inactivations of an Omega was caused by a defect, discovery will need to focus on the circumstances of the particular inactivation. This discovery would include an evaluation of the propriety of the design of the sprinkler system, whether the sprinkler was properly installed, whether prohibited substances were introduced into the sprinkler system or water supply, whether the water supply was particularly corrosive or filled with sludge, whether the water supply was shut down or impaired, and whether adjacent sprinklers controlled the fire. If Complaint Counsel identifies and/or clarifies the subjects that are at issue in this case, it will dramatically improve the ability of the parties and the Presiding Officer to establish a reasonable plan for discovery and trial. Therefore, Respondents respectfully request that the Court include Section 1 of the Discovery Schedule as part of any scheduling order in this matter.

B. Identification Of Persons Having Knowledge

Section 1025.21 of the CPSC rules of practice anticipates that the pre-hearing conference will address the identification of witnesses. See 16 C.F.R. § 1025.21(a)(11). Section 2 of the Discovery Schedule addresses such identification, proposing that "By June 15, 1998, Complaint Counsel shall identify the names of all persons having knowledge about the allegations they intend to prove at trial that are not identified in the documents produced by Respondents to date." See Discovery Schedule, § 2.[3/]

The identification of "persons having knowledge" of any potentially relevant information is explicitly required by the rules of practice, where a party requests such information. See 16 C.F.R. § 1025.31(c)(1). Respondents have requested this information in discovery, but Complaint Counsel has not identified such "persons having knowledge" to date, aside from referring Respondents to the documents that have been produced. A proper identification is vital in order to permit Respondents to proceed with depositions in this case. It is self-evident that Respondents cannot depose potential witnesses known only to Complaint Counsel -- in order to discover the nature of their knowledge, test the validity of their information, and consider their credibility -- unless Respondents know exactly who such persons are.

The CPSC rules of practice require the identification of "persons having knowledge" of potentially relevant information. Respondents have requested such information from Complaint

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3/ As with the identification/clarification of issues, Respondents selected June 15 in the hope that this threshold issue could be resolved prior to the pre-hearing conference, thereby providing important information for that conference. Respondents now suggest that Complaint Counsel make their identification of persons having knowledge on the same newly proposed date for the identification/clarification of issues -- June 23. See supra n.1.

Counsel, and this information is necessary in establishing a discovery schedule and trial plan in this matter. Therefore, as part of a comprehensive discovery plan, Respondents request that the Presiding Officer order Complaint Counsel to identify such persons with knowledge by June 15, or be barred from presenting at trial any witnesses not disclosed in this list of persons with knowledge.[4/]

C. Production Of Documents By Respondents

Respondents are in the process of conducting an exhaustive review of documents, spanning a period of more than 15 years, in response to Complaint Counsel's very broad discovery requests. Section 3 of the Discovery Schedule sets forth procedures for the completion of Respondents' document production to Complaint Counsel. See Discovery Schedule, § 3. This section recites that Respondents already have made available for inspection by Complaint Counsel an initial set of 100 boxes of documents, subject to execution of a confidentiality agreement. Respondents are making their best efforts to make available the remaining additional 300 boxes (approximately) by June 24, 1998.

D. Fact Discovery Period

Sections 4 - 7 of the Discovery Schedule propose procedures for the identification of witnesses and documents to be introduced at trial, third party discovery, and fact depositions. Under the Discovery Schedule, this "fact discovery period" takes place June 29 - August 3, 1998.

4/ Respondents are prepared to provide names of persons with knowledge regarding the issues to be tried in this case as well. Respondents submit, however, that they should not be required to do so until after Complaint Counsel specifies the issues that it intends to try in this case.

See Discovery Schedule, §§ 4-7.[5/] Such issues are properly considered at a pre-hearing conference. See 16 C.F.R. § 1025.21(8), (11), (14).

Sections 6 and 7 of the Discovery Schedule provide for an orderly process of third party discovery and deposition scheduling. It has come to Respondents' attention that Complaint Counsel apparently has been serving subpoenas and attempting to schedule deposition testimony from third parties without serving or otherwise notifying Respondents. The Discovery Schedule provides for notice to all parties, a reasonable period of time to conduct depositions (June 24 - August 3), and an orderly procedure for counsel to meet and confer in order to establish a mutually convenient schedule for depositions. Given the complexity and tight deadlines involved in this litigation, these provisions are designed to keep the proceedings efficient, timely, and fair.

Regarding the disclosure of witnesses and documents, the Discovery Schedule proposes a phased plan that will occur after the fact discovery period has closed. Since Complaint Counsel has the burden of proof to substantiate their Complaint, 16 C.F.R. § 1025.43(b)(1), Complaint Counsel first discloses their proposed witnesses and documents for trial use. Respondents then can evaluate Complaint Counsel's list and avoid duplication and/or repetition in producing Respondents' disclosures, which are due one week after Complaint Counsel's disclosures. If a witness or document is not disclosed by a party during this procedure, that party may not introduce the non-disclosed witness or document at trial. See Discovery Schedule, §§ 4-5.

5/ The proposal is based, however, on the assumption that the trial will be limited to issues relating to test results and whether these test results establish the existence of a "product defect which poses a substantial product hazard." If Complaint Counsel intends to broaden the issues, the Discovery Schedule should be adjusted accordingly.

E. Expert Discovery Period

The CPSC rules of practice anticipate that the Presiding Officer may address at the pre-hearing conference issues related to the testimony of expert witnesses. See 16 C.F.R. § 1025.21(a)(9), (13), (14). Sections 8 - 12 of the Discovery Schedule address discovery and testimony of experts in this matter. The "expert discovery period" anticipated in the Discovery Schedule occurs July 1 - September 25. See Discovery Schedule, §§ 8-12.

Similar to the fact discovery period, the expert discovery period would be a phased procedure under the Discovery Schedule. First, on July 1, Complaint Counsel identifies their experts and provides basic background information on such experts. Id. at § 8. Then, on July 15, Respondents provide reciprocal information. Again, since Complaint Counsel has the burden of proof and can control the issues it intends to raise, it is appropriate to require Complaint Counsel to identify their experts before Respondents are required to do so. This phased procedure prevents duplicate expert witnesses and allows Respondents the opportunity to decide what experts appropriately respond to the experts proposed by Complaint Counsel. Such a procedure also avoids the supplemental designation of experts that usually occurs when parties are forced to designate expert witnesses simultaneously.

After the experts have been designated, the Discovery Schedule sets forth a procedure for the exchange of expert testimony and supporting materials. See Discovery Schedule, §§ 10-11. Pursuant to 16 C.F.R. § 1025.44, the testimony of the experts shall be reduced to writing. Under the Discovery Schedule, Complaint Counsel submits their experts' testimony to Respondents after the close of fact discovery, by August 10. Respondents are required to respond with their experts' testimony by August 24. Then, with both parties fully informed regarding the expert

testimony, the Discovery Schedule provides for a reasonable period of time for the depositions of all experts: August 24 - September 25.

This procedure assures that the parties will have all relevant information before expert depositions commence. It also provides for an efficient and concise submission of prepared expert testimony at trial. Accordingly, Respondents request that the Presiding Officer adopt the procedures set forth in Sections 8-12 of the Discovery Schedule.

F. Exchange Of Final Witness and Exhibit Lists

Pursuant to 16 C.F.R. § 1025.21(a)(13), the Discovery Schedule proposes that the parties exchange final trial witness and exhibit lists on or before October 5, 1998. See Discovery Schedule, § 13. This date allows a sufficient period of time after the close of all discovery (September 25) for the parties to prepare a final list of witnesses and exhibits.

G. Location of Hearing

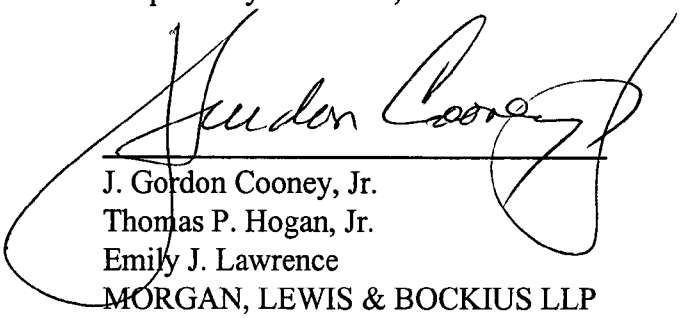
The CPSC rules of practice provide that the Presiding Officer may determine the location of the hearing at the pre-hearing conference, "with due regard to the convenience of the parties." 16 C.F.R. § 1025.21(a)(13). The Discovery Schedule designates Philadelphia, Pennsylvania as the location of the hearing. See Discovery Schedule, § 14.

Respondents respectfully maintain that a Philadelphia location would be most convenient for the parties. Respondents are located in the Philadelphia area, as, presumably, are most of Respondents' potential witnesses. Complaint Counsel's witnesses either are from the Philadelphia area or are from a diverse set of locations around the country, all of which are easily accessible to Philadelphia by plane, train, or automobile. Therefore, Philadelphia represents a logical and convenient location for the hearing of this matter.

III. CONCLUSION

For all of the foregoing reasons, Respondents respectfully request that the Presiding Officer adopt and incorporate the provisions contained in the Discovery Schedule into any comprehensive discovery order in this matter. Respondents will be prepared to discuss any of these proposed provisions and any other matters deemed relevant by the Presiding Officer at the pre-hearing conference.

Respectfully submitted,



Dated: June 12, 1998

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CENTRAL SPRINKLER CORP. and
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CERTIFICATE OF SERVICE

I, Thomas P. Hogan, Jr., hereby certify that on this date a true and correct copy of the foregoing Respondents' Proposed Discovery Schedule And Supporting Memorandum was served via telecopier and regular mail upon the following:

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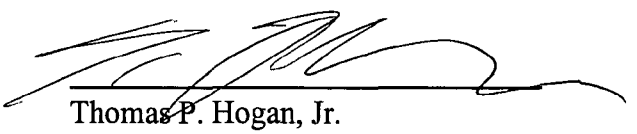
Dated: June 12, 1998



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June 3, 1998

VIA TELECOPY

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Re: In the Matter of Central Sprinkler Corporation, et al.
CPSC Docket No. 98-2

Dear Eric and Deborah:

Pursuant to our conversation of last week, attached is Respondents' Proposed Discovery Schedule. In presenting this proposal to you, we believe some preliminary observations are appropriate.

First, the scope of discovery in this matter--including the amount of time required, the identity of witnesses that need to be deposed and the areas in which expert testimony will be required--is heavily dependent upon the scope of matters you intend to put at issue in this matter. Nearly all of the discovery we have received from you to date has concerned laboratory test results. If your proof at trial will concern only those test results and testimony regarding their significance, that should enable us to complete discovery within the time periods set forth in Respondents' Proposal. On the other hand, the scope of discovery will be very different if you intend to prove such matters as: (a) the cause or causes of the alleged defect; (b) that some or all of the actual alleged inactivations in the handful of fires were caused by a defect as opposed to some other system-related issue; (c) that personal injuries actually resulted from an alleged defect; (d) that Omega sprinklers "fail" at a rate greater than other sprinklers; (e) the bases, if any, for concluding that Central's remediation program does not constitute a complete remedy under the Act; or (f) any of the other areas identified in

paragraph 1 of our Proposal. For obvious reasons, it is imperative that we understand the scope of your contentions at the earliest possible date so that fact and expert discovery can proceed accordingly. See, e.g., 16 C.F.R. § 1025.21(a)(3) (requiring the Presiding Officer to consider at the Prehearing Conference means to identify, simplify and clarify the issues).

Second, in order to proceed with depositions, respondents need information from Complaint Counsel regarding the names of persons having knowledge of matters that Complaint Counsel intends to prove at trial. For the most part, your discovery responses to date concern only test results and requests for information by Complaint Counsel to third parties. These discovery responses shed little light on the names of persons with knowledge in this matter. Our concern in this regard is particularly amplified by two of your in camera motions which suggest that you may be developing witnesses and areas of proof about which we have received no information. In order to enable us to prepare for trial, we believe that Complaint Counsel must identify persons with relevant knowledge or be barred from using those persons as witnesses at trial. See, e.g., 16 C.F.R. § 1025.21(a)(11) (requiring the Presiding Officer to consider requiring the parties to disclose the names of witnesses and physical evidence prior to the submission of final witness and exhibit lists).

We look forward to receiving your proposal by the end of the day today and hearing from you about resolving any of our differences as soon as possible, so that we can prepare for, and make a clear presentation of the issues during our June 16, 1998 prehearing conference.

Very truly yours,

J. Gordon Cooney, Jr.

JGC/ss

Attachment

cc: John C. Fenningham, Esquire (w/attachment)
Michael F. Healy, Esquire (w/attachment)

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
CENTRAL SPRINKLER CORP.	:	**CPSC DOCKET NO. 98-2**
	:	
and	:	
	:	
CENTRAL SPRINKLER CO.,	:	
	:	
Respondents	:	
	:	

RESPONDENTS' PROPOSED DISCOVERY SCHEDULE

Subject to the statements set forth in the June 3, 1998 letter from J. Gordon Cooney, Jr. to Eric L. Stone, Respondents Central Sprinkler Corporation and Central Sprinkler Co. hereby propose the following discovery schedule:

1. By June 15, 1998, Complaint Counsel will advise Respondents whether they intend to attempt to establish facts in addition to those relating to results from laboratory tests, and, if so, they will articulate those facts and contentions they intend to prove. Without limitation, this will include whether Complaint Counsel intend to prove:

a. The cause or causes that they believe underlie their contention that Omega sprinklers contain a defect which poses a substantial product hazard;

b. Whether Omega sprinklers "fail" at a rate that is greater than comparable quick response or other sprinklers;

c. Whether they intend to establish that any of the instances where an Omega sprinkler allegedly did not activate in a fire was the result of a product defect as opposed to some other system-related or other problem, and, if so, which such instances;

d. Whether they intend to establish that, in any of the above instances, they intend to prove that the alleged defect resulted in personal injury, and, if so, shall identify the person allegedly injured and the alleged injuries suffered;

e. Whether Complaint Counsel contend that the remediation program established by Central in the Settlement Agreement dated May 11, 1998 constitutes an inadequate program of replacement and repair, and, if so, they shall specify the reasons for such a contention;

f. Whether Complaint Counsel contend that Omega sprinklers containing silicone o-rings contain a defect which poses a substantial product hazard, and if so, the bases upon which this contention rests in light of the test data produced to date showing no test failures for such products.

2. By June 15, 1998, Complaint Counsel shall identify the names of all persons having knowledge about the allegations they intend to prove at trial that are not identified in the documents produced to Respondents to date.

3. Respondents have identified and are prepared to produce for inspection by Complaint Counsel approximately 100 boxes of documents upon the execution of the Confidentiality Agreement forwarded to Complaint Counsel on May 1, 1998. Respondents estimate that they will produce an additional 300 boxes of documents and will make additional documents available for inspection on a rolling basis. By June 24, 1998, Respondents intend to

produce all documents referenced in their Response to Complaint Counsel's Request for Production of Documents, dated May 26, 1998.

4. On or before June 29, 1998, Complaint Counsel shall disclose the names of witnesses and of documents or other physical evidence which they intend to introduce into evidence. Failure to provide such information by June 29, 1998 shall result in Complaint Counsel's being precluded from offering the testimony of any such non-identified person at the administrative trial.

5. On or before July 6, 1998, Respondents shall disclose the names of witnesses and of documents or other physical evidence which they intend to introduce into evidence. Failure to provide such information by July 6, 1998 shall result in Respondents' being precluded from offering the testimony of any such non-identified person at the administrative trial.

6. Complaint Counsel and Respondents must comply with, inter alia, 16 C.F.R. §§ 1025.35 and 1025.38 regarding notice to all parties regarding depositions and subpoenas directed to non-parties.

7. The parties shall conduct fact depositions in this matter between June 24, 1998 and August 3, 1998. As soon as Complaint Counsel have provided the information set forth in paragraph 1 above, the parties shall meet and confer on the identity of fact witnesses to be deposed and shall attempt to agree on a schedule for taking those depositions. Depending on the scope of issues that Complaint Counsel intend to raise pursuant to paragraph 1 above, the deadline of August 3, 1998 may be extended.

8. On or before July 1, 1998, Complaint Counsel shall identify each expert witness they intend to call at trial, including for each such expert a curriculum vitae and a brief

description of the areas in which that expert is expected to testify sufficient to enable Respondents to determine whether to counter-designate their own experts in those areas.

9. On or before July 15, 1998, Respondents shall identify each expert witness they intend to call at trial, including for each such witness a curriculum vitae and a brief description of the areas in which that expert is expected to testify.

10. On or before August 10, 1998, Complaint Counsel shall furnish Respondents with the prepared testimony of each expert witness they intend to call at trial, together with: all data or other information considered by the witness in forming the opinions; any exhibits to be used as a summary or support for the opinions; the qualifications of the witness, including a list of all publications authored by the witness within the preceding ten years; the compensation to be paid for the study and testimony; and a listing of any other cases in which the witness has testified as an expert at trial or by deposition within the preceding four years.

11. On or before August 24, 1998, Respondents shall furnish Complaint Counsel with the prepared testimony of each expert witness they intend to call at trial, together with: all data or other information considered by the witness in forming the opinions; any exhibits to be used as a summary or support for the opinions; the qualifications of the witness, including a list of all publications authored by the witness within the preceding ten years; the compensation to be paid for the study and testimony; and a listing of any other cases in which the witness has testified as an expert at trial or by deposition within the preceding four years.

12. The parties shall conduct expert witness depositions between August 24, 1998 and September 25, 1998. Prior to doing so, the parties shall meet and confer in an attempt to arrive at a mutually agreeable expert deposition schedule.

13. On or before October 5, 1998, the parties shall exchange final witness and exhibit lists. Only those witnesses and exhibits that are listed will be permitted in each party's case-in-chief.

14. The hearing in this matter should be held in the Philadelphia, Pennsylvania area.

15. Respondents reserve the right to modify this Proposed Discovery Schedule upon review of Complaint Counsel's Proposed Discovery Schedule.

Dated: June 3, 1998

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June 9, 1998

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Safety Commission
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Re: In the Matter of Central Sprinkler Corporation, et al.
CPSC Docket No. 98-2

Dear Eric and Deborah:

On Thursday, May 28, 1998, we participated in a telephone conference in which we each agreed to exchange proposed discovery plans on Wednesday, June 3. As you know, on that date, Respondents provided you with such a discovery plan and expected to receive Complaint Counsel's version on that same date.

To date, we have not received Complaint Counsel's proposed discovery plan. Complaint Counsel's failure to provide Respondents with such a plan in accordance with our agreement has substantially impaired our ability to meet with you to discuss an intelligent discovery program prior to the June 16, 1998 pre-hearing conference. Please provide us with Complaint Counsel's proposed discovery plan immediately.

We look forward to hearing from you.

Very truly yours,

J. Gordon Cooney, Jr.

JGC/ss

cc: John C. Fenningham, Esquire (via telecopy)
Michael F. Healy, Esquire (via telecopy)

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TIME-LINE FOR DISCOVERY SCHEDULE

Date	Event
June 23	Identification/clarification of disputed issues and identification of persons with knowledge by Complaint Counsel
June 24	Respondents complete making all documents available to Complaint Counsel for inspection and copying
June 29 - August 3	Fact discovery period (disclosure of witnesses and documents, third party discovery, depositions of fact witnesses)
July 1 - August 24	Expert witness discovery and testimony
August 24 - September 25	Depositions of expert witnesses
October 5	Exchange of final witness and exhibit lists

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UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION
1998 JUN 15 P 4:53

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents	)	

COMPLAINT COUNSEL'S PRELIMINARY PROPOSED DISCOVERY SCHEDULE AND INTERIM CONFIDENTIALITY AGREEMENT

COMES NOW Complaint Counsel, and submits its Preliminary Proposed Discovery Schedule in this matter. *See* Exhibit A, attached. Without having received proper responses to its Interrogatories and Requests for Production, and without having seen a proper index, much less any documents that Respondents have in response to Complaint Counsel's discovery, Complaint Counsel is unable, at this time, to propose a more definite discovery schedule, or to narrow the issues more than as stated herein.

Complaint Counsel telecopied its Proposed Discovery Schedule, as well as its Interim Confidentiality Agreement, to counsel for Respondents on June 12, 1998. *See* Letter from Deborah S. Orlove, Esq. to J. Gordon Cooney, Jr., Esq., June 12, 1998, Exhibit A. Several hours later, Respondents forwarded to Complaint Counsel and the Presiding Officer a Proposed Discovery Schedule and Supporting Memorandum. In their Schedule and Supporting Memorandum, Respondents request that Complaint Counsel advise them by today

of the issues and contentions we "intend to attempt to prove at trial." In Respondents' words, Respondents wish to know whether:

> (1) Complaint Counsel intend to establish the cause of any alleged Omega defect; (2) whether Omega sprinklers "fail" at a comparably greater rate than other brands of sprinkler heads; (3) whether any of the small number of non-activations by an Omega sprinkler in a fire was the result of an alleged defect; (4) whether any personal injuries resulted form an alleged Omega non-activation; (5) whether Central's proposed remediation program is adequate; and (6) whether Omegas using silicone o-rings are defective.

Although Complaint Counsel has not received complete or appropriate discovery responses from Respondents, and has been given no documents of the 400 boxes Respondents allegedly have, Complaint Counsel reiterates herein its previously-stated responses to Respondents' questions.[1]

First, under the statutes and regulations applicable to this proceeding, Complaint Counsel need only prove that Omega sprinklers are defective, and that the defect creates a substantial risk of injury to the public. If the documents that Respondents have (which Complaint Counsel has not seen), or any other information, tends to indicate what the source

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1 Respondents indicate that Complaint Counsel's allegations and discovery responses "have focused on a relatively narrow issue -- whether laboratory test results allegedly demonstrate that Omegas do not activate at a certain minimal amount of water pressure . . . " Complaint Counsel disagrees. The complaint in this matter, as well as the discovery herein, is not narrowly focused only upon laboratory tests. Complaint Counsel's complaint and discovery responses discuss the numerous fires and other evidence relating to defect and substantial hazard, and speak for themselves.

of the defect is, Complaint Counsel reserves its right to present such evidence at the hearing in this matter.

Second, Complaint Counsel does not believe that it is relevant whether Omegas fail more than other sprinklers. What is relevant herein is whether Omegas fail, and whether that failure creates a substantial risk of injury to the public. Respondents indicated to Complaint Counsel today via teleconference that they believe that to make a *prima facie* case, Complaint Counsel must prove that Omegas fail at a rate greater than other sprinklers. Complaint Counsel has suggested that the parties brief this issue to the Presiding Officer, and then focus their discovery according to the Judge's ruling.

Third, Respondents wish to know whether Complaint Counsel intends to prove that any of the Omega non-activations in fires resulted from a defect. Complaint Counsel has suggested to Respondents that they should include in their discovery efforts (and responses) all situations in which Omegas failed to activate in fires.

Fourth, Respondents wish to know whether Complaint Counsel intends to prove whether any personal injuries resulted from an alleged Omega non-activation. Complaint Counsel has suggested to Respondents that they should include this in their discovery efforts (and responses) as well.

Fifth, Respondents wish to know whether Complaint Counsel intends to prove whether Central's proposed remediation program is adequate. Complaint Counsel need not prove this element herein. Complaint Counsel adds, however, that Respondents have proposed numerous remediation programs to different parties in different litigations, and none of these of which Complaint Counsel is aware are an acceptable remedy.

Respondents also wish to know whether Complaint Counsel intends to prove whether Omegas with silicone o-rings are defective. Complaint Counsel has alleged in its Complaint, and, therefore, intends to prove, that all Omegas are defective, and create a substantial risk of injury to the public. The foregoing responses should assist Respondents in focusing their discovery in this matter.

Respondents have refused to supply to Complaint Counsel any documents responsive to discovery unless Complaint Counsel signs Respondents' proposed Confidentiality Stipulation -- the same Stipulation that has already been considered by the Judge. *See* Confidentiality Order and Order Regarding Complaint Counsel's *In Camera* Submission of Documents and Request for Disclosure Determination, June 5, 1998. Respondents wish Complaint Counsel, by today, to identify persons having knowledge about the allegations in the Complaint. Complaint Counsel has identified in its discovery responses numerous of its staff who have knowledge about the allegations in the Complaint, and will provide, with fact witness disclosures, the names of witnesses it intends to call at trial. Complaint Counsel has also provided numerous documents to Respondents, which contain scores of additional names of persons knowledgeable about the Omega and the problems associated therewith. Complaint Counsel expects that additional persons will be named in the documents Respondents have that are responsive to discovery, and plans to file a motion to compel Respondents to turn over those documents to Complaint Counsel immediately. In the interest of time, Complaint Counsel has drafted the attached Interim Confidentiality Stipulation in order to preserve the confidentiality of documents over which Respondents make claims of

trade secret and/or confidentiality, and asks Respondents to submit those documents to the Presiding Officer for *in camera* review and determination.

Complaint Counsel's proposed schedule provides a tight schedule for fact witness depositions (60 days). Respondents' proposed schedule, which allows only 8 business days to conduct depositions, cannot be realistic in light of the number of fires that have occurred to date, and the many witnesses involved in the Omega's design, investigation of the defect, testing of buildings, etc. Like their proposed confidentiality stipulation, which they have tried to force upon Complaint Counsel as a precondition to Respondents' compliance with discovery, Respondents' schedule appears to be an effort to thwart discovery, not enable it.

Respondents' effort to preclude the parties from introducing witnesses and documents that may arise after June 29 is also an attempt to keep pertinent information out of this proceeding. Even <u>if</u> Respondents were forced to give Complaint Counsel the responsive discovery documents and an appropriate index today, Complaint Counsel would have only 14 days under Respondents' proposed schedule to review 400 boxes, before being barred from noting additional names or documents. This is oppressive and obstructive.

Respondents also request that the hearing be held in Philadelphia, Pennsylvania, "for the convenience of the parties." Respondents are located in the Philadelphia area; however, they have counsel in the District of Columbia, not far from Complaint Counsel. All of the documents (400 boxes) have already been delivered to the District. Respondents have insisted that Complaint Counsel name all persons on its staff that are knowledgeable about the Omega and the problems associated therewith. These employees are all located in the Washington, DC area. Moreover, one of the fires in which an Omega failed to activate occurred in

Maryland. Further, Complaint Counsel has witnesses on its staff who are in the process of testing Omegas, and who assembled the data compilation of Omega failures, who Respondents have suggested they intend to cross examine, and who Complaint Counsel will likely call to testify at trial. Complaint Counsel also has consultants in the DC metropolitan area who have tested hundreds of Omegas and overseen the replacement of thousands of Omega sprinklers, as well as investigated the problem with these sprinklers, and who may be called to testify at trial. Holding the hearing in this matter in the District of Columbia will be convenient for both the parties and their witnesses.

Complaint Counsel agrees with Respondents that this case cannot be delayed, and that a steady and expedited progression to trial is necessary to protect the public. Assuming that Complaint Counsel received Respondents' documents, an index, and appropriate responses to discovery by today, Complaint Counsel's proposed schedule would take this case to trial by December.

Dated: June 15, 1998

Respectfully submitted,

Deborah S. Orlove

Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.
Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, MD 20814
(301) 504-0626

Of Counsel
Eric L. Stone, Esq.
Director, Legal Division
Alan H. Schoem, Esq.
Assistant Executive Director
Office of Compliance

dso\central\doc6.mot

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, **COMPLAINT COUNSEL'S PRELIMINARY PROPOSED DISCOVERY SCHEDULE AND INTERIM CONFIDENTIALITY AGREEMENT** was filed with the Secretary of the Commission, telecopied, and deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

J. Gordon Cooney, Jr., Esq.
Thomas P. Hogan, Jr., Esq.
Emily J. Lawrence, Esq.
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2000 One Logan Square
Philadelphia, PA 19103
(215) 963-5000
fax (215) 963-5299

Michael F. Healy, Esq.
MORGAN, LEWIS & BOCKIUS LLP
1800 M Street, NW
Washington, DC 20036-5869
(202) 467-7000
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John C. Fenningham, Esq.
CORR, STEVENS & FENNINGHAM
Five Neshaminy Interplex, Suite 315
Trevose, PA 19053
(215) 639-4070
fax (215) 639-8995

Attorneys for Central Sprinkler Corporation and Central Sprinkler Company

The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
401 M St., S.W.
Mail Code 1900 L
Washington, DC 20460
fax (202) 565-0044

Signed: _____

Dated: 6/15/98

Exhibit A

U.S. CONSUMER PRODUCT SAFETY COMMISSION
WASHINGTON, D.C. 20207-0001

OFFICE OF COMPLIANCE
Legal Division

Deborah S. Orlove
Trial Attorney
Tel: 301-504-0626 ext. 1347
Fax: 301-504-0359

June 12, 1998

VIA TELECOPIER AND FIRST CLASS MAIL

J. Gordon Cooney, Jr., Esq.
MORGAN, LEWIS & BOCKIUS LLP
2000 One Logan Square
Philadelphia, PA 19103
(215) 963-5299

Re: ***In the Matter of Central Sprinkler Corp. and Central Sprinkler Co.*****, CPSC Docket No. 98-2**
Service of Documents; Respondents' Responses to Complaint Counsel's First Interrogatories and First Requests for Production of Documents

Dear Gordon:

I am writing in response to your letter of June 9, 1998, and Mr. Hogan's letter of June 8, 1998.

In our prior conversations, Respondents had promised to submit to Complaint Counsel an index of the documents contained in Respondents' approximately 400 boxes of documents that may be responsive to Complaint Counsel's discovery herein. Respondents forwarded an index of documents that stated merely "operations" next to Boxes 1-29 (approximately 40,000 Bates pages); "purchasing" with respect to Boxes 30 - 46 (approximately 6500 Bates pages); "accounting" for boxes 133 - 140 (and no explanation of where boxes 47 - 132 are, or what is in them); "customer service" (boxes 220; boxes 1 - 5 second set); and other such broad descriptions as "engineering," "customer service," "quality control," "production" and "operations." As I am sure you understand, these terms provide no useful information that would point Complaint Counsel to which boxes of documents, and which Bates pages, are responsive to which of Complaint Counsel's Interrogatories and Requests for Production.

As Mr. Stone highlighted in his June 3, 1998 letter to you, the rules applicable to this proceeding provide that Respondents may only submit business records in response to Interrogatories if the burden of ascertaining the answer to the interrogatory from the business record is the same for the party serving the interrogatory as for the party served. Mr. Hogan stated in his June 8 letter that Respondents have conducted a "labor-intensive" and

"expensive" document search. Your index indicates that you have Bates-stamped each of the documents in the 400 boxes at issue. Respondents have also made claims of confidentiality and trade secret for some of the documents (though without specifying to which documents these claims apply). These representations indicate that Respondents have reviewed the documents, and that the issue of equal burden is moot -- the burden of discerning the response is much greater on Complaint Counsel than on Respondents (particularly without the benefit of a proper index), as Respondents have already reviewed the documents.

Your discovery responses were due to us on May 26th. It is now June 11, and we still have not received an appropriate index of documents, much less any documents, from Respondents. Considerable time has been lost. In light of the seriousness of the issues at hand, and of the hazards associated with defective fire sprinklers, we cannot afford to take any additional time to argue with Respondents about the improprieties of their discovery techniques. Additionally, as I am sure you understand, we also cannot agree to unnecessarily overbroad confidentiality stipulations such as that which you have proposed. We are a government agency whose mandate is to protect the public. Our processes and procedures are purposefully made public, and we cannot and will not block from the public information that pertains to a product that is neither privileged nor confidential, merely because Respondents would prefer it to be so. The Commission's rules regarding confidential financial and trade secret information are clear -- if you wish documents to be kept confidential and excluded from the public record, you must submit the documents with a request to the Presiding Officer for *in camera* treatment. 16 C.F.R. § 1025.45(b).

We request that you immediately submit those documents for which you make confidentiality and trade secret claims to the Presiding Officer for determination of whether and to what extent the information should be placed in the public record. In the interim, while we await a determination by the Presiding Officer, please forward a proper index of documents, as well as all responsive documents, to us under the attached confidentiality agreement in which we agree not to disclose them, except to counsel, our employees and our consultants, pending a decision by the Presiding Officer. We would be pleased to arrange for pickup of the index and the documents from your D.C. office, where I understand they are being held, this afternoon or on Monday, June 15. Please indicate what day and time you prefer, and to whom our drivers should report for the pickup.

Until we are able to examine the documents, we cannot provide you with a detailed proposed discovery and litigation schedule. However, in the interest of cooperation, we have attached a preliminary proposed schedule for your review.

Additionally, on June 2, 1998, we received a fax copy of a letter to Ms. Sadye Dunn, Secretary of the Commission, that purported to enclose the following documents: (1) Respondents' Opposition To Complaint Counsel's Motion for Protective Order Regarding Anonymous Letter; (2) Proposed Protective Order and Opposition of Respondents to

Complaint Counsel's Submission of Documents *In Camera*; (3) Respondents' Motion to Compel Full and Complete Responses to Interrogatories and Documents Requests (which the letter indicates was served May 20, 1998); (4) Respondents' Responses and Objections to Complaint Counsel's First Request for Production of Documents and Things; (5) Respondents' Responses and Objections to Complaint Counsel's First Set of Interrogatories; and (6) Respondents' Privilege Log. Our copy of the letter came without any of the documents purportedly sent to the Secretary for filing. The letter indicates that all the documents sent to Ms. Dunn for filing were previously served upon us. We therefore assume that the Motion to Compel filed June 2 with the letter is the same Motion to Compel that was served upon Complaint Counsel on or about May 20, 1998, and that it was filed on June 2 to cure the fact that it was never filed when originally served. If, however, you intended the June 2 filing to be a "resubmission" of your Motion to Compel, as requested by the Judge during our teleconference, please advise us immediately of such intention, and properly serve us with the refiled Motion at once.

Lastly, please be advised that we have received preliminary notice that a hotel guest suffered a heart attack when the Omega sprinkler in the guest's hotel room improperly and spontaneously activated. According to the information received by the staff, Central responded to this and other incidents by sending teams of employees to inject "Locktite" into over 12,000 Omega sprinklers to prevent leakage and premature activation. We are investigating this incident and others, and intend to supplement our responses to Respondents' Interrogatories with same. We would expect Respondents to have provided this information (and copies of the complaints filed against Central relating thereto) in submissions to the staff, and in response to Complaint Counsel's Interrogatories (including, but not limited to, Nos. 26, 30, 38, 49, 66, 110, 111, 113 and 114) and Requests for Production (including, but not limited to, Nos. 2, 13, 17, 21, 22, 27, 44, 62, 96, 97, 99 and 101) in this matter. We cannot afford to lose any additional time before reviewing Respondents' documents, and request immediate responses to our Interrogatories on these and all other issues addressed.

Please contact me at your earliest convenience regarding your document production.

Sincerely,

Deborah S. Orlove

Deborah S. Orlove, Esq.
Complaint Counsel

Attachments

cc: Thomas P. Hogan, Jr., Esq.
Emily J. Lawrence, Esq.
Michael F. Healy, Esq.
John C. Fenningham, Esq.

dso/discov9.ltr

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of CENTRAL SPRINKLER CORP., and CENTRAL SPRINKLER CO., Respondents	)	CPSC DOCKET NO. 98-2

INTERIM CONFIDENTIALITY STIPULATION

This interim confidentiality stipulation is entered into this date between Complaint Counsel for the staff of the Consumer Product Safety Commission and the undersigned counsel for Respondents, Central Sprinkler Corp. and Central Sprinkler Co.

WHEREAS the undersigned represent litigants in the action *In the Matter of Central Sprinkler Corp. and Central Sprinkler Co.*, pending before the Commission as Docket No. 98-2; and

WHEREAS Complaint Counsel served upon Respondents its First Interrogatories and First Requests for Production of Documents on April 20, 1998;

WHEREAS Respondents' responses to Complaint Counsel's First Interrogatories and First Requests for Production of Documents were due on May 26, 1998;

WHEREAS Respondents wish to provide business records in lieu of responses to Complaint Counsel's Interrogatories, and assuming that Respondents' provision of such records complies with 16 C.F.R. 1025.32(d); and

WHEREAS Respondents claim that certain documents responsive to Complaint Counsel's Interrogatories and Requests for Production contain confidential financial information and trade secret information regarding or belonging to Respondents;

THEREFORE Complaint Counsel and Respondents agree that:

1) Respondents will submit within five days of the date of this agreement all responsive documents that they claim contain confidential financial and trade secret information to the Presiding Officer for determination of whether and to what extent those documents shall be placed in the public record; and

2) Respondents will immediately provide to Complaint Counsel a proper index of all documents responsive to Complaint Counsel's Requests for Production and Interrogatories; and

3) Respondents will immediately provide to Complaint Counsel all responsive documents for which no claims of confidential financial information or trade secret are being made; and

4) Respondents will immediately provide to Complaint Counsel all responsive documents for which claims of confidential financial information or trade secret are being made, clearly indicating on those documents that such claims are made. Pending a determination on the claims by the Presiding Officer (see No. 1, above), Complaint Counsel agrees that it will not share the documents for which such claims are indicated with anyone but counsel, its employees, and consultants in this matter. Once a determination is made by the Presiding Officer as to the claims, Complaint Counsel will be bound by that determination; and

5) By signing this agreement and accepting documents from Respondents for review, Complaint Counsel does not in any way waive or limit any right it has or may have to object to any claims of confidentiality or trade secret Respondents make or may make with respect to the responsive documents. By signing this agreement and accepting documents from Respondents for review, Complaint Counsel does not in any way waive or limit any right it has or may have to move to compel Respondents to provide complete and proper responses to Complaint Counsel's discovery requests in this matter.

Dated: June 12, 1998

Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.
Complaint Counsel
United States Consumer Product Safety Comm'n
Office of Compliance
4330 East West Highway
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confid.stp

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents	)	

COMPLAINT COUNSEL'S PRELIMINARY PROPOSED DISCOVERY AND LITIGATION SCHEDULE

Having not received any documents in discovery from Respondents, Complaint Counsel submits to Counsel for Respondents this Preliminary Proposed Discovery and Litigation Schedule:

Production of Documents by Respondents to Complaint Counsel:

immediately (by June 15, 1998)

Respondents' Submission of Complete (and Meaningful) Index of Documents to Complaint Counsel:

immediately (by June 15, 1998)

Preliminary Disclosures of Fact Witnesses:

to be exchanged 14 days after receipt of all documents by Complaint Counsel (June 29, 1998), and supplemented thereafter in accordance with the rules of discovery

Depositions of fact witnesses:

to commence 45 days after documents are produced to Complaint Counsel (July 30, 1998), and continue for 60 days thereafter (ending September 28, 1998)

Preliminary Disclosure of Expert Witnesses:

(in accordance with applicable rules) to be exchanged 75 days after documents are produced to Complaint Counsel (Sat., August 29; therefore, Monday, August 31)

Depositions of expert witnesses:

to commence the day after the period for depositions of fact witnesses expires (Sept. 29, 1998), and continue for 30 days thereafter (October 29, 1998)

Motions in Limine: Due on or before November 10, 1998

Dispositive Motions: Due on or before November 25, 1998

Exchange of Final Exhibit Lists: November 25, 1998

Exchange of Final Witness Lists: November 25, 1998

Submission of Expert Testimony to be used at Trial:

December 1, 1998

Submission of Final Pre-Hearing Briefs:

December 1, 1998

Final Pre-Hearing Conference: December 7, 1998

Trial: to commence December 14, 1998
to take place in Washington, DC

litsch1.pro

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
	)	
CENTRAL SPRINKLER CORP.,	)	
	)	
and	)	**CPSC Docket No. 98-2**
	)	
CENTRAL SPRINKLER CO.,	)	
	)	
Respondents	)	

ORDER REGARDING COMPLAINT COUNSEL'S SECOND MOTION FOR PROTECTIVE ORDER AND *IN CAMERA* SUBMISSION

Having considered Complaint Counsel's Motion and Respondent's Opposition, the Motion is GRANTED, in part and DENIED, in part.

In various degrees of redacted form, ranging from no redaction to substantial redaction, pages Bate stamped 0012903-0012975 are being released to Respondent. Bate stamped pages 0012939 through 0012975 have no redactions. As reflected by the documents themselves, many of the pages clearly do not qualify for protection from discovery as they are published documents: a NFRA Safety Code; and a text on automatic sprinkler systems. In addition, the following observations and Orders are made:

- Bate stamped pages 0012909 and 0012910 appear to be duplicates of pages 0012907 and 0012908. Complaint Counsel should advise the Court as to the correctness of this assumption.

- With reference to Bate stamped pages 0012911, 0012912, 0012913, 0012914, 0012915, 0012916, 0012917, 0012931, Complaint Counsel is directed, within seven (7) days of this Order, to more particularly set forth the reason(s) for protecting discovery of the remaining

redacted portions of the pages identified above. A particularized and separate response must be made for each page. This submission is to be provided *in camera.*

William B. Moran
William B. Moran
United States Administrative Law Judge

Dated: June 16, 1998
Washington, D.C.

In the Matter of Central Sprinkler Corp. And Central Sprinkler Co., Respondents
CPSC Docket No. 98-2

CERTIFICATE OF SERVICE

I hereby certify that the foregoing **Order Regarding Complaint Counsel's Second Motion for Protective Order and *In Camera* Submission**, dated June 16, 1998, was served in the following manner to the individuals listed below.

By distribution at the June 16, 1998, Prehearing Conference to the following individuals or to representatives accepting for them:

J. Gordon Cooney, Jr., Esquire
Thomas P. Hogan, Esquire
Emily J. Lawrence, Esquire
MORGAN, LEWIS & BOCKIUS, LLP
2000 One Logan Square
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Michael F. Healy, Esquire
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4330 East West Highway
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Eric Stone, Esquire
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Sadye E. Dunn
Secretary
U.S. CONSUMER PRODUCT SAFETY COMMISSION
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Deborah S. Orlove, Esquire
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4330 East West Highway
Bethesda, Maryland 20814

William B. Moran
William B. Moran
United States Administrative Law Judge

Date: June 16, 1998

CONFIDENTIAL

Released
with redactions
AHT/6/12/98

United States
CONSUMER PRODUCT SAFETY COMMISSION
Washington, D.C. 20207

Release w/redactions
ALJ/6/16/98

MEMORANDUM

~~*****FOR OFFICIAL USE ONLY*****~~

DATE: May 8, 1998

TO:

SUBJECT: Central Sprinkler Corporation

called the Hotline to provide additional information regarding Central Sprinkler.

Central Sprinkler Corporation was aware of problems with their Omega series sprinkler systems as early as 1983.

after receiving over 60 individual court lawsuits from former Hilton Hotel guests who had been awaken in the middle of the night from Omega sprinkler systems erroneously going off, claims that Central Sprinkler Corporation paid each individual --settling out of court.

Central Sprinkler's team flown to 25 different Hilton Hotels across the United States, and to the Library of Congress to repair Omega sprinkler units. the team was instructed to inject a sealant with a syringe into the sprinkler head threads. The sealant was designed to then rise to the retaining nut and seal it along with the fiberglass bearing disk. This procedure would keep the fiberglass bearing disk and retaining nut locked so they would not prematurely open.

Central Sprinkler Corporation redesigned the sprinkler units with a ceramic bearing disk and installed approximately 50,000 units at $50 each at the Library of Congress in Washington, DC. believes the ceramic bearing disks are too hard which prevents them from properly activating in the event of a fire.

CONFIDENTIAL

Released
with redactions
MLR/ir/FB

[redacted]

Date: 3/31/98

From:
To: Eric Singer

Subject: Omega Discovery Ideas

Section I –NFPA Standards:

- NFPA-13 – Installation Standards

Question – does code expect all heads to operate at 7 psi when samples are taken from installed systems and tested? Ask following:

1. Rolf Jenson – Rolf Jenson and Associates – Past chairman of NFPA-13
2. Chet Shirmer – Shirmer Engineering – Past chairman of NFPA-13
3. Joe Hankins – Factory Mutual Insurance
4. Ken Linder – IRI Insurance
5. Kerry Bell – UL Laboratories
6. Other Manufacturers – Viking, Grinnell, Globe or Reliable

- NFPA-25 – Inspection, Testing and Maintenance of Water based Fire Protection systems

Question – The NFPA-25 committee added the following paragraph to the new 1998 addition of this standard. (1-2 Purpose) – added following: ***"In those cases where it is determined that an existing situation can involve a distinct hazard to life or property, the authority having jurisdiction shall be permitted to require inspection, testing and maintenance methods in excess of those required by the standard."*** Did the committee make this addition to the code to allow AHJ's to require appropriate testing for Omega? Was this done at a special NFPA-25 meeting that addressed the members concern over Central Sprinkler inappropriate use of the 1-% sample size for testing? Did the committee feel there was a real concern with the statistical validity of a 1-% sample size for testing?

1. Ken Linder – IRI – new chairman of NFPA-25 and past recording secretary of committee during special meeting
2. Dave Hague – NFPA staff laison to committee

3. Joe Hankins – Factory Mutual – committee member
4. George Laverick – UL – committee member
5. Carl Maurice – Fairfax County – attended meeting

Section II –Central Sprinkler

- **Reporting of Omega Problems**

Question –Since Omega first installed others reported any problems with omega sprinklers failure to operate totally or partially? Ask following:

1. Buck Buccanan – As VP of sales we know that at least one report was made to him of omega's not going off.
2. Bill Pardue – handled all product claims during 1980's. Was out of favor for a long time but has made comeback. Appears to be close to O'Leary and Churchill. and seems to be on winning side. There is a real rift between George and his people and the O'Leary group.
3. Steve Meyer – just hoping to find something

- **Key Central Personnel**
  1. Bill Pardue – Executive Vice President – all operations reported to Bill including manufacturing and engineering.
  2. Ed McKelvey – VP of finance – was pushed aside when Bradford Group brought in Al Sable. Ed knows were all the bodies are buried.
  3. Jim McCann – Purchasing manager – purchased all parts of all products
  4. Jim McHugh – Worked in manufacturing under Al Schoenburger. he worked on some of original omega problems from production side. He set up X-ray machine for omega heads.

- **Key EX-Central Personnel**
  1. Tom Deegan – VP product development at Viking. Tom worked for Central during early days-manger of Chicago region.
  2. Bob Worthington – now president of Globe Sprinkler but was Bill Meyer's right hand man until he was pushed aside so George Meyer could become president. He knows a lot about how the family operates. He specifically was very involved with early Omega and knows about early problems.
  3. Kathy Slack – handled all early marketing of Omega to government, Hilton, Marriott etc. She worked directly with Bill Meyer.
  4. Bryan Hoening – Now VP of Engineering at Globe. He was very involved in early omega.

5. Anderson – VP of engineering retired. Relative of Meyer family. He ran engineering when omega introduced.
6. Al Shoenburger – VP Manufacturing – ran all production until retired.

- **UL Additional Questions**
  1. Was Omega de-listed or its operation questioned by UL in mid 80's?
  2. Do they concur with Central Sprinkler testing approach?
  3. Do they believe "site specific" discussion and if yes, can it be predetermined based on a site profile?
  4. In the late 80's UL caught Central red handed. Central was caught making a change on a letter from UL regarding an Omega listing. Tom Deegan has this story.

- **Jurisdiction Issue:**
  1. CPSC is the Authority Having Jurisdiction by NFPA definition any entity which has an interest can be AHJ
  2. Agreed that states adopt codes. The Omega operation issue is not a code issue but a product safety issue. You are not trying to change the code but making sure the product will meet the intent of the code and provide the performance implied by the code.
  3. JCAHO - HFA (Federal) (Replaces hand-written notation)
- **Questions for Factory Mutual**
  1. Over the past 50 years have they had any heads of any make not operate because of waterglass, excess hydrocarbons or stop leak products? Please comment on this question.
  2. Have there been any problems with other sprinkler heads similar in magnitude to the problems we are having with Omega?
  3. Do you consider properties with Omega sprinklers as non-sprinklered from an insurance standpoint?
  4. Has FM done any statistical revue of appropriate testing requirements for properties with Omega's? What do they feel is appropriate if any?

* HFA - Hospital Finance Administration
  Federal - Requires Compliance with NFPA - 101
  (Replaces hand-written notation)

* JCAHO - Same
  Joint Campaign for Accrediation of Hospital Organizations
  (Replaces hand-written notation)

EXHIBIT 7

CONFIDENTIAL

Please
withdraw this
MSJ/Dkt/82

[redacted]

from - worldlynx.net

Subject: Omega information

>" We are now experiencing another rather alarming situation in the use of our

[redacted]

>Omega's with CPVC, and that the build-up of primer, solvent cement, and pipe

>dope inside the sprinkler heads. Preliminary indications are that this

>excessive run-off may very well have a deleterious effect on the o-ring within

>our sprinkler, and possibly cause a leak. Of greater concern, would be those

>that do not leak, but in fact are nothing more than a pipe plug after these

>excessive applications harden. One would think that common sence by the

>fitters would prevent such occurance - training and certification is a must!"

[redacted]

* 0012909 deleted as it is a duplicate of 0012907

[redacted]

* 0012910 deleted as it is a duplicate of 0012908

EXHIBIT 4

CONFIDENTIAL

Re Exposed
with redactions
MS/bl/cg

COPY

U.S. CONSUMER PRODUCT SAFETY COMMISSION
WASHINGTON, D.C. 20207

OFFICE OF COMPLIANCE
Legal Division

Eric H. Singer
Trial Attorney
Tel: 301-504-0626 ext. 1376
Fax: 301-504-0359

Via Facsimile:
and by regular U.S. mail

February 10, 1998

Thanks for your time and effort in speaking with me and members of the CPSC engineering staff last Tuesday in regard to the Omega fire sprinkler. As I mentioned previously and again in that conversation, we would certainly like to have a follow-up phone conference to discuss more specific items on the Omega. We would be interested in speaking to you again some time between Wednesday, February 18 and Tuesday, February 23, 1998, if possible.

If you happen to be in the Washington, D.C. area in the next month and would prefer to meet with us in person for a follow-up discussion in lieu of a phone conference, that would be fine as well.

I will call shortly to follow up. Please call me with any questions in the meantime.

Sincerely,

Eric H. Singer

0012911

CONFIDENTIAL

Re: [illegible]
with medothine
MTC/[illegible]/88

ELT/6/16/98

~~FOR OFFICIAL USE ONLY~~

U.S. CONSUMER PRODUCT SAFETY COMMISSION
WASHINGTON, D.C. 20207

OFFICE OF COMPLIANCE
Legal Division

Eric H. Singer
Trial Attorney
Tel: 301-504-0626 ext. 1376
Fax: 301-504-0359

February 20, 1998

Re: Central Sprinkler Corp; Omega Series Fire Sprinklers

This will serve to confirm that I am, as I indentified myself over the phone with you yesterday, Eric Singer, an attorney with U.S. Consumer Product Safety Commission.

As you may know, the CPSC is the federal agency responsible for the enforcement of the Consumer Product Safety Act (CPSA), 15 U.S.C. § 2051, et. seq. The agency has jurisdiction over consumer products, and automatic fire sprinklers are consumer products because they are used and enjoyed by consumers in homes, apartments, nursing homes, hospitals, health clubs, hotels, motels, and office buildings. The agency is authorized to conduct studies, testing, and investigations of consumer products that raise safety issues, 15 U.S.C. § 2054(b)(1); to compel, if necessary, reports, answers to questions, and production of physical and documentary evidence pursuant to those investigations, 15 U.S.C. §§ 2076(b)(1)&(4); and to order the recall and/or stop-sale of a product shown to have a defect creating a substantial product hazard, 15 U.S.C. §§ 2064(c) & (d), 2061.

As you may also know, the agency staff has been investigating why "Omega" series fire sprinklers, produced by Central Sprinkler Corporation ("Central") of Lansdale, Pennsylvania, may fail to activate properly. Some 8-10 million Omega sprinklers utilizing an o-ring made of EPDM are in service; there are no estimates for the number of Omegas in service that contain the newer silicon o-ring. To date, six fires have been reported in which an Omega

sprinkler or sprinklers containing EPDM o-rings failed to activate.

Assuming I can speak with you at a time when I am not interrupting your dinner, I would like to encourage you to continue the conversation we began the other day. You yourself certainly are not a target of the staff's investigation. However, the staff has reason to believe that you possess information which could help the staff determine whether the Omega contains, or contained, a defect that creates a substantial product hazard to the public.

Please call or write me indicating whether you wish to continue our discussion voluntarily.

Sincerely,

Eric H. Singer

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with redactions
MTA/dlc/08

COPY

U.S. CONSUMER PRODUCT SAFETY COMMISSION
WASHINGTON, D.C. 20207

OFFICE OF COMPLIANCE
Legal Division

Eric H. Singer
Trial Attorney
Tel: 301-504-0626 ext. 1376
Fax: 301-504-0359

Via Facsimile:
and by regular U.S. mail

April 16, 1998

Dear

We look forward to meeting and talking with you on May 29.

I recommend using the following shuttle service both from Dulles Airport and to BWI:

Royal Airport Shuttle
1-800-653-0888
301-657-0888

They require reservations with one day advance notice. The rate from Dulles to our office should be $17. The rate from our office to BWI should be $27. For the return flight, they will probably insist on picking you up two hours before your departure time.

0012914

The Commission headquarters office address, where we will be meeting, is:

U.S. Consumer Product Safety Commission
4330 East West Highway, Rm. 610
Bethesda, MD 20814

The office is in downtown Bethesda in the East West Towers complex -- three long blocks east of the Bethesda metro stop and the Hyatt Hotel, which is at the intersection of East West Highway and Wisconsin Avenue. When you arrive, please go the 4th floor CPSC public information room and dial my extension and I will come downstairs to meet you.

I do not believe any of our staff will be able to receive you at Dulles. I will find out whether one of my colleagues is able to give you a ride to BWI for your return, but will not know for another week. In the meantime, please call the shuttle service above to make arrangements.

Thanks, and please call me with any questions in the meantime.

Sincerely,

Eric H. Singer

U.S. CONSUMER PRODUCT SAFETY COMMISSION
WASHINGTON, D.C. 20207-0001

OFFICE OF COMPLIANCE
LEGAL DIVISION

Facsimile: (301) 504-0359
Office: (301) 504-0626

DATE: 4/16/98 PAGES TRANSMITTED 3 + COVER

TO: _____

_____

OFFICE: _____

FAX: _____

FROM: Eric Singer, Esq.

TELEPHONE: (301) 504-0626 Ext. 1376

REMARKS: _____

_____

_____

[x] Confirmation copy to follow by U.S. Mail

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Note: If all pages are not received, or if you have any problems with this transmittal, please contact the person listed above.

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MAY 16 2018

Date: 2/23/98

To: US Consumer Products Safety Commission
Eric Singer
Phone: 301-504-0626
Fax: 301-504-0359

From:

Pages: 14

Subject: NFPA-101 Life Safety Code

Following are some excerpts from this code. You will see that the quick response and residential type heads have been part of a major change in building codes. There are many trade offs that would not been allowed before these heads were developed.

Sprinklers are now a part of the whole building system and if they do not work properly results in a situation that is less safe than older non sprinklered buildings that had not allowed current trade offs.

12-3.5 Extinguishment Requirements.

12-3.5.1* Buildings containing health care facilities shall be protected throughout by an approved, supervised automatic sprinkler system installed in accordance with Section 7-7.

Exception: In Type I and Type II construction, where approved by the authority having jurisdiction, alternative protection measures shall be permitted to be substituted for sprinkler protection in specified areas where the authority having jurisdiction has prohibited sprinklers, without causing a building to be classified as nonsprinklered.

12-3.5.2* Listed quick response or listed residential sprinklers shall be used throughout smoke compartments containing patient sleeping rooms.

12-3.5.3* Sprinklers in areas where cubicle curtains are installed shall be installed in accordance with NFPA 13, *Standard for the Installation of Sprinkler Systems.*

12-3.5.4 Portable fire extinguishers shall be provided in all health care occupancies in accordance with 7-7.4.1.

12-3.6 Corridors.

12-3.6.1 Corridors shall be separated from all other areas by partitions complying with 12-3.6.2 through 12-3.6.5. (*See also 12-2.5.8.*)

Exception No. 1: Spaces shall be permitted to be unlimited in area and open to the corridor, provided that

(a) The spaces are not used for patient sleeping rooms, treatment rooms, or hazardous areas; and

(b) The corridors onto which the spaces open in the same smoke compartment are protected by an electrically supervised, automatic smoke detection system installed in accordance with 12-3.4, or the smoke compartment in which the space is located is protected throughout by quick response sprinklers; and

(c) The open space is protected by an electrically supervised, automatic smoke detection system installed in accordance with 12-3.4, or the entire space is arranged and located to permit direct supervision by the facility staff from a nursing station or similar space; and

(d) The space does not obstruct access to required exits.

Exception No. 2: Waiting areas shall be permitted to be open to the corridor, provided that

(a) The aggregate waiting area in each smoke compartment does not exceed 600 sq ft (55.7 sq m); and

(b) Each area is protected by an electrically supervised, automatic smoke detection system installed in accordance with 12-3.4, or each area is arranged and located to permit direct supervision by the facility staff from a nursing station or similar space; and

(c) The area does not obstruct access to required exits.

Exception No. 3: Space for nurses' stations.*

Exception No. 4: Gift shops open to the corridor where protected in accordance with 12-3.2.5.

Exception No. 5: In a limited care facility, group meeting or multipurpose therapeutic spaces shall be permitted to open to the corridor, provided that

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coverage, the system shall be installed in accordance with Section 7-7. In buildings up to and including four stories in height, systems installed in accordance with NFPA 13R, *Standard for the Installation of Sprinkler Systems in Residential Occupancies Up to and Including Four Stories in Height*, shall be permitted.

Exception: The draft stop and closely spaced sprinkler requirements of NFPA 13, Standard for the Installation of Sprinkler Systems, shall not be required for convenience openings complying with 6-2.4.8 where the convenience opening is within the guest room or guest suite.

16-3.5.2 All buildings shall be protected throughout by an approved, supervised automatic sprinkler system installed in accordance with 16-3.5.1.

Exception: Buildings other than high rise, where all guest sleeping rooms have a door that opens directly to the outside at street or ground level or to exterior exit access arranged in accordance with 5-5.3.

16-3.5.3 Listed quick response or listed residential sprinklers shall be used throughout guest rooms and guest room suites.

16-3.5.4 Open air parking structures complying with NFPA 88A, *Standard for Parking Structures*, shall not be required to be sprinklered under this *Code*.

16-3.5.5 Portable fire extinguishers shall be provided in hazardous areas. Where provided, portable fire extinguishers shall be installed and maintained in accordance with 7-7.4.1.

18-3.5 Extinguishment Requirements.

18-3.5.1 Where an automatic sprinkler system is installed, either for total or partial building coverage, the system shall be installed in accordance with Section 7-7. In buildings up to and including four stories in height, systems installed in accordance with NFPA 13R, *Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height*, shall be permitted.

Exception No. 1: In individual dwelling units, sprinkler installation shall not be required in closets not over 12 sq ft (1.1 sq m). Closets that contain equipment such as washers, dryers, furnaces, or water heaters shall be sprinklered regardless of size.

Exception No. 2: The draft stop and closely spaced sprinkler requirements of NFPA 13, Standard for the Installation of Sprinkler Systems, shall not be required for convenience openings complying with 6-2.4.8 where the convenience opening is within the dwelling unit.

18-3.5.2 All buildings shall be protected throughout by an approved, supervised automatic sprinkler system installed in accordance with 18-3.5.1.

Exception: Buildings where every dwelling unit has either:

(a) An exit door opening directly to the street or yard at ground level, or

(b) Direct access to an outside stair complying with 5-2.2 that serves a maximum of two units both of which are located on the same floor, or

(c) Direct access to an interior stair serving only that unit and separated from all other portions of the building by fire barriers having a 1-hr fire resistance rating with no openings therein.

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approved, supervised automatic sprinkler system installed in accordance with Section 7-7.

Exception: In Type I and Type II construction, where approved by the authority having jurisdiction, alternative protection measures shall be permitted to be substituted for sprinkler protection in specified areas where the authority having jurisdiction has prohibited sprinklers, without causing a building to be classified as nonsprinklered.

13-3.5.2* Where this *Code* permits exceptions for fully sprinklered buildings or smoke compartments, the sprinkler system shall be

(a) In complete accordance with Section 7-7,

(b) Electrically connected to the fire alarm system, and

(c) Fully supervised.

Exception: In Type I and Type II construction, where approved by the authority having jurisdiction, alternative protection measures shall be permitted to be substituted for sprinkler protection in specified areas where the authority having jurisdiction has prohibited sprinklers, without causing a building to be classified as nonsprinklered.

13-3.5.3* Where this *Code* permits exceptions for fully sprinklered buildings or smoke compartments and specifically references this paragraph, the sprinkler system shall be

(a) Installed throughout the building in accordance with Section 7-7, and

(b) Electrically connected to the fire alarm system, and

(c) Fully supervised, and

(d) Equipped with listed quick response or listed residential sprinklers throughout all smoke compartments containing patient sleeping rooms.

Exception No. 1 to (d): Standard response sprinklers shall be permitted to be continued to be used in existing approved sprinkler systems where quick response and residential sprinklers were not listed for use in that location at the time of installation.

Exception No. 2 to (d): Standard response sprinklers shall be permitted for use in hazardous areas protected in accordance with Section 13-3.2.1.

13-3.5.4 Isolated hazardous areas shall be permitted to be protected in accordance with 7-7.1.2. For new installations in existing buildings, where more than two sprinklers are installed in a single area, water flow detection shall be provided to sound the building fire alarm or notify by a signal any constantly attended location, such as PBX, security, or emergency room, whereby necessary corrective action shall be directed.

13-3.5.5* Newly introduced cubicle curtains in sprinklered areas shall be installed in accordance with NFPA 13, *Standard for the Installation of Sprinkler Systems.*

13-3.5.6 Portable fire extinguishers shall be provided in all health care occupancies in accordance with 7-7.4.1.

13-3.6 Corridors.

13-3.6.1 Corridors shall be separated from all other areas by partitions complying with 13-3.6.2 through 13-3.6.5. (*See also 13-2.5.8.*)

Exception No. 1: Smoke compartments protected throughout by an approved, supervised

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18-3.5.3 Listed quick response or listed residential sprinklers shall be used throughout all dwelling units.

18-3.5.4 Portable fire extinguishers shall be provided in hazardous areas. Where provided, portable fire extinguishers shall be installed and maintained as specified in 7-7.4.1.

18-3.5.5 Open air parking structures complying with NFPA 88A, *Standard for Parking Structures*, shall not be required to be sprinklered under this *Code*.

22-2.2 Means of Escape.

22-2.2.1 Number of Means of Escape. Each normally occupied story of the facility shall have at least two remotely located means of escape that do not involve using windows. At least one of these means of escape shall comply with 22-2.2.2. The provisions of Chapter 5 shall not apply to means of escape unless specifically referenced in this chapter.

Exception No. 1: In prompt evacuation capability facilities, one means of escape shall be permitted to involve windows complying with 22-2.2.3(c).

Exception No. 2: A second means of escape from each story shall not be required where the entire building is protected throughout by an approved, automatic sprinkler system complying with 22-2.3.5 and the facility has two means of escape.

22-2.2.2 Primary Means of Escape. Every sleeping room and living area shall have access to a primary means of escape located to provide a safe path of travel to the outside. Where sleeping rooms or living areas are above or below the level of exit discharge, the primary means of escape shall be an interior stair in accordance with 22-2.2.4, an exterior stair, a horizontal exit, or an existing fire escape stair.

22-2.2.3 Secondary Means of Escape. In addition to the primary route, each sleeping room in facilities that utilize Exception No. 1 to 22-2.3.5.1 shall have a second means of escape that consists of one of the following:

(a) A door, stairway, passage, or hall providing a way of unobstructed travel to the outside of the dwelling at street or ground level that is independent of and remotely located from the primary means of escape;

(b) A passage through an adjacent nonlockable space, independent of and remotely located from the primary means of escape, to any approved means of escape;

(c)* An outside window or door operable from the inside without the use of tools, keys, or special effort, and providing a clear opening of not less than 5.7 sq ft (0.53 sq m) with the width not less than 20 in. (51 cm) and the height not less than 24 in. (61 cm). The bottom of the opening shall be not more than 44 in. (112 cm) above the floor. Such means of escape shall be acceptable if

1. The window is within 20 ft (6.1 m) of grade, or

2. The window is directly accessible to fire department rescue apparatus as approved by the authority having jurisdiction, or

3. The window or door opens onto an exterior balcony.

Exception: If the sleeping room has a door leading directly to the outside of the building with

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access to grade or to a stairway that meets the requirements of exterior stairs in 22-2.3.1.2, that means of escape shall be considered as meeting all the escape requirements for the sleeping room.

22-2.2.4 Interior Stairs Used for Primary Means of Escape. Interior stairs shall be enclosed with $^1/_2$-hr fire barriers with all openings equipped with smoke-actuated automatic-closing or self-closing doors having a fire protection rating comparable to that required for the enclosure. Stairs shall comply with 5-2.2.5.3. The entire primary means of escape shall be arranged so that occupants are not required to pass through a portion of a lower story unless that route is separated from all spaces on that story by construction having a minimum $^1/_2$-hr fire resistance rating.

The supporting construction shall be protected to afford the required fire resistance rating of the wall supported in buildings of other than construction Type II(000), Type III(200), or Type V(000).

Exception No. 1: Stairs that connect a story at street level to only one other story shall be permitted to be open to the story that is not the street level.

Exception No. 2: For prompt and slow evacuation capability facilities in buildings three or fewer stories in height, having an approved, automatic sprinkler system using quick response or residential sprinklers, stair enclosures shall not be required provided there still remains a primary means of escape from each sleeping area that does not require occupants to pass through a portion of a lower floor, unless that route is separated from all spaces on that floor by construction having a $^1/_2$-hr fire resistance rating.

Exception No. 3: In buildings two or fewer stories in height that house prompt evacuation capability facilities with not more than eight residents, stair enclosures shall not be required. Exceptions to 22-2.3.4.3.1 and 22-2.3.4.3.2 shall not be used in conjunction with this exception. Exception No. 1 to 22-2.3.5.1 shall not be used in conjunction with this exception.

22-2.2.5 Doors.

22-2.2.5.1 No door or path of travel to a means of escape shall be less than 32 in. (81 cm) wide.

Exception No. 1: In conversions (see definition in 22-1.3), 28-in. (71-cm) doors shall be permitted to continue to be used.

Exception No. 2: Bathroom doors shall be a minimum of 24 in. (61 cm) wide.

22-2.2.5.2 Doors shall be swinging or sliding.

22-2.2.5.3 Every closet door latch shall be readily opened from the inside in case of an emergency.

22-2.2.5.4 Every bathroom door shall be designed to allow opening from the outside during an emergency when locked.

22-2.2.5.5 No door in any means of escape shall be locked against egress when the building is occupied.

Exception: Delayed egress locks complying with 5-2.1.6.1 shall be permitted on exterior doors.

22-2.2.5.6 Doors shall comply with 5-2.1.4.5.

22-2.2.5.7 Doors shall comply with 5-2.1.5.3.

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22-2.2.6 Stairs.

22-2-2.6.1 Stairs shall comply with 5-2.2.

22-2.2.6.2 Winders complying with 5-2.2.2.5 shall be permitted.

22-2.3 Protection.

22-2.3.1 Protection of Vertical Openings.

22-2.3.1.1 Vertical openings shall be protected so as not to expose a primary means of escape. Vertical openings shall be considered protected if the opening is cut off such that barriers prevent the passage of smoke from one story to any primary means of escape on another story. Barriers shall resist the passage of smoke and shall have a fire resistance rating of not less than $^1/_2$ hr. Any doors or openings to the vertical opening shall be capable of resisting fire for not less than 20 min, shall resist the passage of smoke, and shall be self-closing or automatic-closing in accordance with 5-2.1.8.

Exception: Stairs shall be permitted to be open where complying with Exception No. 2 or No. 3 to 22-2.2.4.

22-2.3.1.2 Exterior stairs shall be reasonably protected against blockage caused by fire that would simultaneously expose both the interior and the exterior means of escape. This shall be accomplished through separation by physical distance, arrangement of the stairs, protection of the openings exposing the stairs, or other means acceptable to the authority having jurisdiction.

22-2.3.2 Hazardous Areas. Any hazardous area shall be protected in accordance with 22-2.3.2.1 and 22-2.3.2.2.

22-2.3.2.1 Any hazardous area that is on the same floor as, and is in or abuts, a primary means of escape or a sleeping room shall be protected by either

(a) An enclosure with a fire resistance rating of at least 1 hr with a self-closing or automatic-closing fire door in accordance with 5-2.1.8 having a fire protection rating of at least $^3/_4$ hr and protected by an automatic fire detection system connected to the fire alarm system provided in 22-2.3.4.1; or

(b) Automatic sprinkler protection, in accordance with 22-2.3.5, of the hazardous area and a separation that will resist the passage of smoke between the hazardous area and the sleeping area or primary escape route. Any doors in such separation shall be self-closing or automatic-closing in accordance with 5-2.1.8.

22-2.3.2.2 Other hazardous areas shall be protected by either

(a) An enclosure having a fire resistance rating of at least $^1/_2$ hr, with a self-closing or automatic-closing door in accordance with 5-2.1.8, equivalent to at least a $1^3/_4$-in. (4.4-cm) thick, solid bonded wood core construction and protected by an automatic fire detection system connected to the fire alarm system provided in 22-2.3.4.1, or

(b) Automatic sprinkler protection, in accordance with 22-2.3.5, of the hazardous area regardless of enclosure.

22-2.3.3 Interior Finish.

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22-2.3.3.1 Interior finish shall be in accordance with Section 6-5.

22-2.3.3.2 Interior Wall and Ceiling Finish. Interior wall and ceiling finish materials complying with 6-5.5 shall be Class or Class B.

Exception: Class C interior wall and ceiling finish shall be permitted in prompt evacuation capability facilities.

22-2.3.3.3 Interior Floor Finish. (No requirements.)

22-2.3.4 Detection, Alarm, and Communication Systems.

22-2.3.4.1 Fire Alarm Systems. A manual fire alarm system shall be provided in accordance with Section 7-6.

22-2.3.4.2 Occupant Notification. Occupant notification shall be provided automatically, without delay, in accordance with 7-6.3. Presignal systems shall be prohibited.

22-2.3.4.3 Smoke Detectors.

22-2.3.4.3.1 Approved smoke detectors shall be provided in accordance with 7-6.2.10. Detectors shall be installed on all levels, including basements, but excluding crawl spaces and unfinished attics. Additional detectors shall be installed for living areas as defined in Section 3-2.

Exception: Detectors shall not be required in buildings protected throughout by an approved, automatic sprinkler system installed in accordance with 22-2.3.5 using quick response or residential sprinklers.

22-2.3.4.3.2 Each sleeping room shall be provided with an approved, listed single-station smoke detector in accordance with 7-6.2.10.

Exception: Rooms protected by quick response or residential sprinklers in buildings protected throughout by an approved, supervised automatic sprinkler system installed in accordance with 22-2.3.5. The Exception to 22-2.3.4.3.1 shall not be used in conjunction with this exception.

22-2.3.5 Automatic Extinguishing Systems.

22-2.3.5.1 All facilities shall be protected throughout by an approved, automatic sprinkler system installed in accordance with 22-2.3.5.2. Quick response or residential sprinklers shall be provided.

Exception No. 1: Sprinklers shall not be required in small board and care homes serving eight or fewer residents with a rating of prompt evacuation capability.

Exception No. 2: Standard response sprinklers shall be permitted for use in hazardous areas in accordance with 22-2.3.2.

22-2.3.5.2* Where an automatic sprinkler system is installed, for either total or partial building coverage, the system shall be in accordance with Section 7-7 and shall initiate the fire alarm system in accordance with 22-2.3.4.1. The adequacy of the water supply shall be documented to the authority having jurisdiction.

Exception No. 1: * *In prompt and slow evacuation capability facilities, a sprinkler system complying with NFPA 13D, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes, shall be permitted. Facilities with more than eight residents shall be treated as two-family dwellings with regard to water supply. Additionally, entrance foyers shall be sprinklered.*

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Exception No. 2: In impractical evacuation capability facilities, a sprinkler system complying with NFPA 13D, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes, with a 30-min water supply shall be permitted. All habitable areas and closets shall be sprinklered. Facilities with more than eight residents shall be treated as two-family dwellings with regard to water supply.

Exception No. 3: In prompt and slow evacuation capability facilities, where an automatic sprinkler system is installed in accordance with NFPA 13, Standard for the Installation of Sprinkler Systems, automatic sprinklers shall not be required in closets not exceeding 24 sq ft (2.7 sq m) and bathrooms not exceeding 55 sq ft (5.1 sq m), provided such spaces are finished with lath and plaster or material providing a 15-min thermal barrier.

Exception No. 4: In prompt and slow evacuation capability facilities up to and including four stories in height, systems installed in accordance with NFPA 13R, Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height, shall be permitted.

Exception No. 5: In impractical evacuation capability facilities up to and including four stories in height, systems installed in accordance with NFPA 13R, Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height, shall be permitted. All habitable areas and closets shall be sprinklered.

22-2.3.5.3 Automatic sprinkler systems installed in impractical evacuation capability facilities shall be supervised in accordance with Section 7-7.

22-2.3.5.4 Sprinkler piping serving not more than six sprinklers for any isolated hazardous area shall be permitted to be installed in accordance with 7-7.1.2. In new installations, where more than two sprinklers are installed in a single area, water flow detection shall be provided to initiate the fire alarm system required by 22-2.3.4.1. Duration of water supplies shall be as required by 22-2.3.5.2.

22-2.3.6 Construction of Corridor Walls.

22-2.3.6.1 The separation walls of sleeping rooms shall be capable of resisting fire for at least $^1/_2$ hr, which is considered to be achieved if the partitioning is finished on both sides with lath and plaster or material providing a 15-min thermal barrier. Sleeping room doors shall be substantial doors, such as those of $1^3/_4$-in. (4.4-cm) thick, solid bonded wood core construction or of other construction of equal or greater stability and fire integrity. Any vision panels shall be fixed fire window assemblies in accordance with 6-2.3.2.2 or shall be wired glass not exceeding 1296 sq in. (0.84 sq m) each in area and installed in approved frames.

Exception No. 1: In prompt evacuation capability facilities, all sleeping rooms shall be separated from the escape route by walls and doors that are at least smoke resistant.

Exception No. 2: Corridor walls and doors that are capable of resisting the passage of smoke and that are protected by automatic sprinklers in accordance with 22-2.3.5 on both sides of the wall and door. In such instances, there shall be no limitation on the type or size of glass panels.

Exception No. 3: Sleeping arrangements that are not located in sleeping rooms shall be permitted for nonresident staff members, provided the audibility of the alarm in the sleeping area is sufficient to awaken staff who might be sleeping.

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22-3.3.4.1 General. A fire alarm system in accordance with Section 7-6 shall be provided.

22-3.3.4.2 Initiation. The required fire alarm system shall be initiated by

(a) Manual means in accordance with 7-6.2, and

(b) A manual fire alarm station located at a convenient central control point under continuous supervision of responsible employees, and

(c) The automatic sprinkler system, and

(d) Any required detection system.

22-3.3.4.3 Annunciator Panel. An annunciator panel connected with the fire alarm system shall be provided. The location of the annunciator shall be approved by the authority having jurisdiction.

Exception: Buildings not more than two stories in height and with not more than 50 sleeping rooms.

22-3.3.4.4 Occupant Notification. Occupant notification shall be provided automatically, without delay, in accordance with 7-6.3. Presignal systems shall be prohibited.

22-3.3.4.5 High-rise buildings shall be provided with an approved means of voice communication in accordance with 7-6.3.

Exception: Buildings equipped with a public address system.

22-3.3.4.6* Fire Department Notification. In case of a fire, provisions shall be made for the immediate notification of the public fire department by either telephone or other means. Where there is no public fire department, this notification shall be made to the private fire brigade.

22-3.3.4.7 Smoke Detectors. Each sleeping room shall be provided with an approved, single-station smoke detector in accordance with 7-6.2.10, powered from the building electrical system.

22-3.3.4.8 Smoke Detection Systems. All living areas as defined in Section 3-2 and corridors shall be provided with smoke detectors in accordance with NFPA 72, *National Fire Alarm Code*, arranged to initiate an alarm that is audible in all sleeping areas.

Exception No. 1: Detectors shall not be required in living areas in facilities protected throughout by an approved, automatic sprinkler system installed in accordance with 22-3.3.5.

Exception No. 2: Unenclosed corridors, passageways, balconies, colonnades, or other arrangements with one or more sides along the long dimension fully or extensively open to the exterior at all times.

22-3.3.5 Extinguishment Requirements.

22-3.3.5.1* All buildings shall be protected throughout by an approved, automatic sprinkler system installed in accordance with Section 7-7. Quick response or residential sprinklers shall be provided throughout. Such systems shall initiate the fire alarm system in accordance with Section 7-6.

Exception No. 1: In buildings not more than four stories in height, a sprinkler system complying with NFPA 13R, Standard for the Installation of Sprinkler Systems in Residential Occupancies

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23-2.2 Means of Escape.

23-2.2.1 Number of Means of Escape. Each normally occupied story of the facility shall have at least two remotely located means of escape that do not involve windows. At least one of these means of escape shall comply with 23-2.2.2. The provisions of Chapter 5 shall not apply to means of escape unless specifically referenced in this chapter.

Exception No. 1: In prompt evacuation capability facilities, one means of escape shall be permitted to involve windows complying with 23-2.2.3(c).

Exception No. 2: A second means of escape from each story shall not be required where the entire building is protected throughout by an approved, automatic sprinkler system complying with 23-2.3.5 and the facility has two means of escape. This exception shall not be permitted to be used in conjunction with Exception No. 2 to 23-2.2.3.

23-2.2.2 Primary Means of Escape.

23-2.2.2.1 Every sleeping room and living area shall have access to a primary means of escape located to provide a safe path of travel to the outside. Where sleeping rooms or living areas are above or below the level of exit discharge, the primary means of escape shall be an interior stair in accordance with 23-2.2.4, an exterior stair, a horizontal exit, or an existing fire escape stair.

23-2.2.2.2 In slow and impractical evacuation capability facilities, the primary means of escape for each sleeping room shall not be exposed to living areas and kitchens.

Exception: Buildings equipped with quick response or residential sprinklers throughout. Standard response sprinklers shall be permitted for use in hazardous areas in accordance with 23-2.3.2.

23-2.2.3 Secondary Means of Escape. In addition to the primary route, each sleeping room shall have a second means of escape that consists of one of the following:

(a) A door, stairway, passage, or hall providing a way of unobstructed travel to the outside of the dwelling at street or ground level that is independent of and remotely located from the primary means of escape;

(b) A passage through an adjacent nonlockable space, independent of and remotely located from the primary means of escape, to any approved means of escape;

(c)* An outside window or door operable from the inside without the use of tools, keys, or special effort, and providing a clear opening of not less than 5.7 sq ft (0.53 sq m) with the width not less than 20 in. (51 cm) and the height not less than 24 in. (61 cm). The bottom of the opening shall be not more than 44 in. (112 cm) above the floor. Such means of escape shall be acceptable if

1. The window is within 20 ft (6.1 m) of grade, or
2. The window is directly accessible to fire department rescue apparatus as approved by the authority having jurisdiction, or
3. The window or door opens onto an exterior balcony.

Exception No. 1: If the sleeping room has a door leading directly to the outside of the building with access to grade or to a stairway that meets the requirements of exterior stairs in 23-2.3.1.2, that means of escape shall be considered as meeting all the escape requirements for the sleeping

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room.

Exception No. 2: A second means of escape from each sleeping room shall not be required where the facility is protected throughout by an approved, automatic sprinkler system complying with 23-2.3.5.

Exception No. 3: Existing approved means of escape shall be permitted to continue to be used.

23-2.2.4 Interior Stairs Used for Primary Means of Escape. Interior stairs shall be enclosed with $^1/_2$-hr fire barriers with all openings equipped with smoke-actuated automatic-closing or self-closing doors having a fire protection rating comparable to that required for the enclosure. Stairs shall comply with 5-2.2.5.3. The entire primary means of escape shall be arranged so that occupants are not required to pass through a portion of a lower story unless that route is separated from all spaces on that story by construction having a minimum $^1/_2$-hr fire resistance rating. The supporting construction shall be protected to afford the required fire resistance rating of the wall supported in buildings of other than construction Type II(000), Type III(200), or Type V(000).

Exception No. 1: Stairs that connect a story at street level to only one other story shall be permitted to be open to the story that is not the street level.

Exception No. 2: In buildings three or fewer stories in height that house prompt or slow evacuation capability facilities protected throughout by an approved, automatic sprinkler system installed in accordance with 23-2.3.5 using quick response or residential sprinklers, stair enclosures shall not be required provided there remains a primary means of escape from each sleeping area that does not require occupants to pass through a portion of a lower floor, unless that route is separated from all spaces on that floor by construction having a $^1/_2$-hr fire resistance rating.

Exception No. 3: In buildings two or fewer stories in height that house prompt evacuation capability facilities with not more than eight residents and that are protected by an approved automatic sprinkler system installed in accordance with 23-2.3.5 using quick response or residential sprinklers, stair enclosures shall not be required. Exception No. 2 to 23-2.3.4.3 shall not be used in conjunction with this exception. Exceptions to 23-2.4.3 shall not be used in conjunction with this exception.

Exception No. 4: In buildings three or fewer stories in height that house prompt or slow evacuation capability facilities protected by an approved automatic sprinkler system in accordance with 23-2.3.5, stairs shall be permitted to be open at the topmost story only. The entire primary means of escape of which the stairs are a part shall be separated from all portions of lower stories.

23-2.2.5 Doors.

23-2.2.5.1 No door or path of travel to a means of escape shall be less than 28 in. (71 cm) wide.

Exception: Bathroom doors shall be a minimum of 24 in. (61 cm) wide.

23-2.2.5.2 Doors shall be swinging or sliding.

23-2.2.5.3 Every closet door latch shall be readily opened from the inside in case of an emergency.

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automatic-closing door in accordance with 5-2.1.8 equivalent to at least a $1^3/_4$-in. (4.4-cm) thick, solid bonded wood core construction, or

(b) Automatic sprinkler protection, in accordance with 23-2.3.5, of the hazardous area regardless of enclosure.

23-2.3.3 Interior Finish. Interior wall and ceiling finish shall be Class A or Class B in accordance with Section 6-5. There shall be no requirements for interior floor finish.

Exception: Class C interior wall and ceiling finish shall be permitted in prompt evacuation capability facilities.

23-2.3.4 Detection, Alarm, and Communication Systems.

23-2.3.4.1 Fire Alarm Systems. A manual fire alarm system shall be provided in accordance with Section 7-6.

Exception No. 1: If there are interconnected smoke detectors meeting the requirements of 23-2.3.4.3 and there is at least one manual fire alarm station per floor arranged to continuously sound the smoke detector alarms.

Exception No. 2: Other manually activated continuously sounding alarms acceptable to the authority having jurisdiction.

23-2.3.4.2 Occupant Notification. Occupant notification shall be in accordance with 7-6.3. Presignal systems shall be prohibited.

23-2.3.4.3* Smoke Detectors. Approved smoke detectors shall be provided in accordance with 7-6.2.10. These detectors shall be powered from the building electrical system and, when activated, shall initiate an alarm that is audible in all sleeping areas. Detectors shall be installed on all levels, including basements, but excluding crawlspaces and unfinished attics. Additional detectors shall be installed for living rooms, dens, day rooms, and similar spaces.

Exception No. 1: Buildings protected throughout by an approved, automatic sprinkler system installed in accordance with 23-2.3.5 using quick response or residential sprinklers with approved, single-station smoke detectors installed in each sleeping room in accordance with 7-6.2.10 and powered by the building electrical system.

Exception No. 2: Buildings protected throughout by an approved, automatic sprinkler system installed in accordance with 23-2.3.5 using quick response or residential sprinklers with existing battery-powered detectors in each sleeping room and where, in the opinion of the authority having jurisdiction, the facility has demonstrated testing, maintenance, and a battery replacement program that ensures the reliability of power to the detectors.

23-2.3.5 Automatic Extinguishing Systems.

23-2.3.5.1* Where an automatic sprinkler system is installed, for either total or partial building coverage, the system shall be in accordance with Section 7-7 and shall activate the fire alarm system in accordance with 23-2.3.4.1. The adequacy of the water supply shall be documented to the authority having jurisdiction.

Exception No. 1: In prompt and slow evacuation capability facilities, a sprinkler system complying with NFPA 13D, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes, shall be permitted. Automatic sprinklers shall

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not be required in closets not exceeding 24 sq ft (2.2 sq m) and bathrooms not exceeding 55 sq ft (5.1 sq m), provided such spaces are finished with lath and plaster or materials providing a 15-min thermal barrier.

Exception No. 2: In impractical evacuation capability facilities, a sprinkler system complying with NFPA 13D, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes, with a 30-min water supply shall be permitted. All habitable areas and closets shall be sprinklered. Automatic sprinklers shall not be required in bathrooms not exceeding 55 sq ft (5.1 sq m), provided such spaces are finished with lath and plaster or material providing a 15-min thermal barrier.

Exception No. 3: In prompt and slow evacuation facilities, where an automatic sprinkler system is installed in accordance with NFPA 13, Standard for the Installation of Sprinkler Systems, sprinklers shall not be required in closets not exceeding 24 sq ft (2.2 sq m) and bathrooms not exceeding 55 sq ft (5.1 sq m), provided such spaces are finished with lath and plaster or materials providing a 15-min thermal barrier.

Exception No. 4: In prompt and slow evacuation capability facilities up to and including four stories in height, systems installed in accordance with NFPA 13R, Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height, shall be permitted.

Exception No. 5: In impractical evacuation capability facilities up to and including four stories in height, systems installed in accordance with NFPA 13R, Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height, shall be permitted. All habitable areas and closets shall be sprinklered. Automatic sprinklers shall not be required in bathrooms not exceeding 55 sq ft (5.1 sq m), provided such spaces are finished with lath and plaster or material providing a 15-min thermal barrier.

23-2.3.5.2 Impractical Evacuation Capability. All impractical evacuation capability facilities shall be protected throughout by an approved, supervised automatic sprinkler system installed in accordance with 23-2.3.5.1.

23-2.3.5.3 Sprinkler piping serving not more than six sprinklers for any isolated hazardous area shall be permitted to be installed in accordance with 7-7.1.2. In new installations, where more than two sprinklers are installed in a single area, water flow detection shall be provided to initiate the fire alarm system required by 23-2.3.4.1. Duration of water supplies shall be as required by 23-2.3.5.1.

23-2.3.6 Construction of Corridor Walls.

23-2.3.6.1 The separation walls of sleeping rooms shall be capable of resisting fire for at least $^1/_2$ hr, which is considered to be achieved if the partitioning is finished on both sides with the lath and plaster or material providing a 15-min thermal barrier. Sleeping room doors shall be substantial doors, such as those of $1^3/_4$-in. (4.4-cm) thick, solid bonded wood core construction or of other construction of equal or greater stability and fire integrity. Any vision panels shall be fixed fire window assemblies in accordance with 6-2.3.2.2 or shall be wired glass not exceeding 1296 sq in. (0.84 sq m) each in area and installed in approved frames.

Exception No. 1: In prompt evacuation capability facilities, all sleeping rooms shall be separated from the escape route by walls and doors that are at least smoke resistant.

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EXHIBIT H

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Date: 2/23/98

To: US Consumer Products Safety Commission
Eric Singer
Phone: 301-504-0626
Fax: 301-504-0359

From:

Pages: 7

Subject: Residential & Quick Response

is putting some more info together for you but I believe the attached will get you a better idea of what is talking about – the degradation of sensitivity with delayed action.

1-4.5 Sprinkler Definitions.

1-4.5.1* The characteristics of a sprinkler that define its ability to control or extinguish a fire are:

(a) *Thermal Sensitivity.* A measure of the rapidity with which the thermal element operates as installed in a specific sprinkler or sprinkler assembly. One measure of thermal sensitivity is the Response Time Index (RTI) as measured under standardized test conditions.

1. Sprinklers defined as fast response have a thermal element with an RTI of 50 (meters-seconds)$^{1/2}$ or less, or

2. Sprinklers defined as standard response have a thermal element with an RTI of 80 (meters-seconds)$^{1/2}$ or more.

(b) *Temperature Rating.*

(c) *Orifice Size.* See Chapter 2.

(d) *Installation Orientation (see 1-4.5.3).*

(e) *Water Distribution Characteristics* (i.e., application rate, wall wetting).

(f) *Special Service Conditions (see 1-4.5.4).*

1-4.5.2 Sprinklers defined according to design and performance characteristics:

A-1-4.5.1 The Response Time Index is a measure of the sensitivity of the sprinkler's thermal element as installed in a specific sprinkler. It is usually determined by plunging a sprinkler into a heated laminar airflow within a test oven. The plunge test is not currently applicable to certain sprinklers. These sprinklers must have their thermal sensitivity determined by other standardized test methods.

The RTI is calculated using:

1. The operating time of the sprinkler,
2. The operating temperature of the sprinkler's heat-responsive element (as determined in a bath test),
3. The air temperature of the test oven,
4. The air velocity of the test oven, and
5. The sprinkler's conductivity (c) factor, which is the measure of conductance between the sprinkler's heat-responsive element and the sprinkler oven mount.

Other factors affecting response include temperature rating, sprinkler position, fire exposure, and radiation.

ISO standard 6182-1 currently recognizes the RTI range of greater than 50 (meters - seconds)$^{1/2}$ and less than 80 (meters - seconds)$^{1/2}$ as special response. Such sprinklers can be recognized as special sprinklers under 4-4.9.1.

A-1-4.5.2 ESFR Sprinkler. It is important to realize that the effectiveness of these highly tested and engineered sprinklers depends on the combination of fast response and the quality and uniformity of the sprinkler discharge. It should also be realized that ESFR sprinklers cannot be relied upon to provide fire control, let alone suppression, if they are used outside the guidelines specified in 5-3.5.

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Old-Style/Conventional Sprinkler. Sprinklers that direct from 40 to 60 percent of the total water initially in a downward direction and that are designed to be installed with the deflector either upright or pendent.

Open Sprinklers. Sprinkler that do not have actuators or heat-responsive elements.

Quick-Response (QR) Sprinkler. A type of spray sprinkler that meets the criteria of 1-4.5.1(a)1 and is listed as a quick-response sprinkler for its intended use.

Quick-Response Early Suppression (QRES) Sprinkler.* A type of quick-response sprinkler that meets the criteria of 1-4.5.1(a)1 and is listed for its capability to provide fire suppression of specific fire hazards.

Quick-Response Extended Coverage Sprinkler. A type of quick-response sprinkler that meets the criteria of 1-4.5.1(a)1 and complies with the extended protection areas defined in Chapter 4.

Residential Sprinkler. A type of fast-response sprinkler that meets the criteria of 1-4.5.1(a)1 that has been specifically investigated for its ability to enhance survivability in the room of fire origin and is listed for use in the protection of dwelling units.

Special Sprinkler. Sprinklers that have been tested and listed as prescribed in 4-4.9.

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NFPA 13D

1996 Edition

Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes

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1996 Edition

This edition of NFPA 13D, *Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes*, was prepared by the Technical Committee on Automatic Sprinklers and acted on by the National Fire Protection Association, Inc., at its Annual Meeting held May 20-23, 1996, in Boston, MA. It was issued by the Standards Council on July 18, 1996, with an effective date of August 9, 1996, and supersedes all previous editions.

Changes other than editorial are indicated by a vertical rule in the margin of the pages on which they appear. These lines are included as an aid to the user in identifying changes from the previous edition.

This edition of NFPA 13D was approved as an American National Standard on July 26, 1996.

Origin and Development of NFPA 13D

Recognizing the need to reduce the annual life loss from fire in residential occupancies (about 50 percent of total loss of life by fire), the Committee on Automatic Sprinklers appointed a subcommittee in May 1973 to prepare a *Standard on the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Mobile Homes*. The subcommittee was composed of members of the Committee on Automatic Sprinklers and other technically competent experts. The standard was submitted and adopted at the NFPA Annual Meeting in Chicago, Illinois, on May 12-16, 1975.

The 1980 edition was a complete rewrite of the 1975 edition, including SI units where appropriate. The 1980 edition incorporated the results of the residential sprinkler test program administered by the National Fire Protection Association and funded by a research grant from the United States Fire Administration. Factory Mutual Research Corporation and the Los Angeles City Fire Department conducted the dwelling tests. Factory Mutual Research Corporation, McNeary Insurance Consulting Services, and the Charlotte, North Carolina, Fire Department conducted the mobile home tests.

After gaining practical experience using the 1980 edition, modifications to the standard,

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1-5 Devices, Materials, Design, and Installation.

1-5.1*

Only new residential sprinklers shall be employed in the installation of sprinkler systems.

1-5.2

Only listed and approved devices and approved materials shall be used in sprinkler systems.

Exception: Listing shall be permitted to be waived for tanks, pumps, hangers, waterflow detection devices, and waterflow valves.

3-5 Sprinklers.

3-5.1

Listed residential sprinklers shall be used. Listing shall be based on tests to establish the ability of the sprinklers to control residential fires under standardized fire test conditions. The standardized room fires shall be based on a residential array of furnishings and finishes.

Exception No. 1: Residential sprinklers shall not be used in dry systems unless specifically listed for that purpose.

3-6* Alarms.

Local waterflow alarms with facilities for flow testing, such as alarm devices, shall be provided on all sprinkler systems.

Exception: Dwellings or manufactured homes having smoke detectors in accordance with NFPA 72, National Fire Alarm Code, shall not be required to be provided with a waterflow alarm.

Chapter 4 System Design

4-1 Design Criteria.

4-1.1 Design Discharge.

The system shall provide a discharge of not less than 18 gpm (68 L/min) to any single operating sprinkler and not less than 13 gpm (49 L/min) per sprinkler to the number of design sprinklers, but the discharge shall not be less than the listing of the sprinkler. The minimum operating pressure of any residential sprinkler shall be 7 psi (0.5 bar).

Design to this #
(Replaces hand-written notation)

4-1.2* Number of Design Sprinklers.

The number of design sprinklers shall include all sprinklers within a compartment, up to a maximum of two sprinklers, under a flat, smooth, horizontal ceiling. For compartments containing two or more sprinklers, calculations shall be provided to verify the single operating sprinkler criteria and the multiple (two) operating sprinkler criteria.

4-1.2.1 The definition of "compartment" as used in 4-1.2 for determining the number of design sprinklers is a space that is completely enclosed by walls and a ceiling. The compartment enclosure shall be permitted to have openings to an adjoining space, provided the openings have a minimum lintel depth of 8 in. (203 mm) from the ceiling.

5-3 Components.

5-3.1* Sprinklers.

Sprinklers for use in this type of system shall be specifically listed for use in the conditions described in Section 5-1. All sprinklers installed in a compartment shall have the same thermal response characteristics.

A-5-1 The concept of this sprinkler system is the result of testing conducted by the United States Fire Administration. One of the goals of these tests was to determine if a smaller quantity of water could be used to protect smaller dwellings. The purpose of the system is to enhance life safety and make installation economically feasible for smaller dwellings.

Design items in this chapter assume that egress times from smaller dwellings are minimal, since the units are single-story at grade level and occupants would be made aware of a fire in the unit almost immediately. This approach is considered in permitting the reduction of the water supply, in some instances, to 7 minutes.

A-5-3.1 The criteria used to list a sprinkler for this use should include, but should not be limited to:

(a) Temperature rating: 155°F to 165°F (68°C to 74°C)

(b) RTI: nominal 60 $(ft\text{-}s)^{1/2}$

(c) Droplet size

(d) Distribution patterns

(e) Areas of coverage

(f) Flow rates

(g) Operating pressures

(h) K Factor = nominal 2.0

(i) Ceiling slope.

All sprinklers within a compartment, as defined in 5-4.5, should be within 10°F (5.5°C) of one another in temperature rating.

A-5-3.2 These alarms should be located within the dwelling and should be of sufficient intensity to be clearly audible in all bedrooms over background noise levels with all intervening doors closed.

A-5-4.3 Sample areas of coverage for a sprinkler where listed for this design approach are provided in Table A-5-4.3.

Table A-5-4.3 Sample Areas of Coverage

Compartment Size		Number of Sprinklers
ft	(m)	
10 × 10	3 × 3	1
10 × 12	3 × 3.6	2
12 × 12	3.6 × 3.6	4
16 × 16	4.8 × 4.8	4
16 × 20	4.8 × 6	6

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Residential Occupancies. Occupancies, as specified in the scope of this standard, that include the following, as defined in NFPA *101®*, *Life Safety Code®*:

(a) Apartment buildings;

(b) Lodging and rooming houses;

(c) Board and care facilities (slow evacuation type with 16 or fewer occupants and prompt evacuation type);

(d) Hotels, motels, and dormitories.

Residential Sprinkler. A type of sprinkler that meets the definition of fast-response as defined by NFPA 13, *Standard for the Installation of Sprinkler Systems*, and that has been specifically investigated for its ability to enhance survivability in the room of fire origin and that is listed for use in the protection of dwelling units.

Shall. Indicates a mandatory requirement.

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EXHIBIT 1

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WASHINGTON, D.C. 20207

0012938

Automatic Sprinkler Systems Handbook

Seventh Edition

WITH THE COMPLETE TEXT OF

NFPA 13, *Standard for the Installation of Sprinkler Systems,* 1996 Edition

NFPA 13D, *Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes,* 1996 Edition

NFPA 13R, *Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height,* 1996 Edition

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2

Fast-Response Sprinklers: A Technical Analysis

Russell P. Fleming, P.E.

Introduction

In 1984, the National Fire Protection Research Foundation undertook the Quick-Response Sprinkler (QRS) Research Project, intended to develop usable data to provide for a timely yet orderly introduction of quick-response sprinkler technology into standards and codes. It is believed that this will ultimately result in improved life and property safety.

The project was divided into two parts. Group 1 tests addressing high challenge fires were conducted by the Factory Mutual Research Corporation in conjunction with the ESFR (early suppression fast-response) sprinkler test program. The Group 2 program was to address the broad range of occupancies between residential and industrial.

At the start of the program, the National Fire Protection Research Foundation and its Technical Advisory Committee recognized a need for a literature survey and analysis of fast response sprinkler technology to assist in planning the Group 2 test program. This report represents the result of that effort. Originally published in April of 1985 as "Quick-Response Sprinklers: A Technical Analysis," it was updated for republication with the 1991 edition of the NFPA *Automatic Sprinkler Systems Handbook*.

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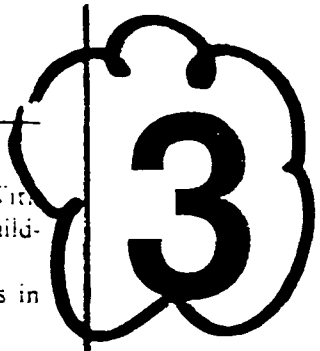

How Quick-Response Sprinklers Perform and What It Means for Their Application

Edward K. Budnick, P.E. and Russell P. Fleming, P.E.

The evolution of quick-response sprinkler (QRS) technology is recognized as the most significant development in automatic sprinkler systems since the introduction of the spray sprinkler in the 1950s. In fact, many believe it is the most important advance in front-line fire protection in some time, providing potentially significant improvements in life safety and fire safety and reducing the cost of fixed fire protection.

Along with such attractive advantages comes the responsibility of ensuring that QRS technology performs up to expectations. This means that we must understand how this technology performs well enough to identify performance limits and failure modes, provide critical design and installation guidance, and develop appropriate approval texts and standards. If we address it carefully and competently, the resulting applications of QRS technology should provide improved, highly effective, and reliable fire suppression.

For the past several years, the National Fire Protection Research Foundation has conducted the research necessary to address these issues. The principal focus of its Quick-Response Sprinkler Research Project has been to develop the technical basis necessary to establish installation and approval standards for broad application of quick-response sprinkler technology. Support for the project has come from a diverse group of private sector organizations.

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4

Developing an Early Suppression Design Procedure for Quick-Response Sprinklers

Edward K. Budnick, P.E. and Russell P. Fleming, P.E.

The investigation of the free-burn heat-release rates of typical fuel packages found in occupancies governed by NFPA 13, *Standard for the Installation of Automatic Sprinklers,* was funded by the National Fire Protection Research Foundation as part of its Group 2 quick-response sprinkler (QRS) effort. The Research Foundation also funded the subsequent required delivered density (RDD) testing of some of these fuel packages and the actual delivered density (ADD) testing of sprinklers that are representative of those currently listed. The goal of this research program is to develop a design method that will incorporate the use of quick-response sprinkler technology into NFPA 13.

For purposes of this article, the term *design approach* refers to the conceptual manner in which sprinklers are used in an engineering solution to the fire problem. Use of spray sprinklers in the fire control mode, for example, is a design approach. The term *design method* is used to describe a particular manner of codifying a design approach. The area/density method and the room design method are both currently recognized in NFPA 13 for use with spray sprinklers. Finally, the term *design procedure* refers to the specific steps to be taken when carrying out a design method.

Early in the Group 2 effort, it was decided that quick-response sprinklers could be used to their best advantage through the development of a design method based on the early suppression concept. This concept, originated by Factory Mutual Research Corporation, had previously served as the basis for

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Fire Protection Handbook™

Seventeenth Edition

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FAST RESPONSE SPRINKLER TECHNOLOGY

Arthur E. Cote and Russell P. Fleming

The ability to evaluate and control sprinkler sensitivity was the single most significant development in sprinkler technology in the 1980s. This ability has led to the development of new fast response sprinkler technology that holds the promise of improved fire protection for both life and property.

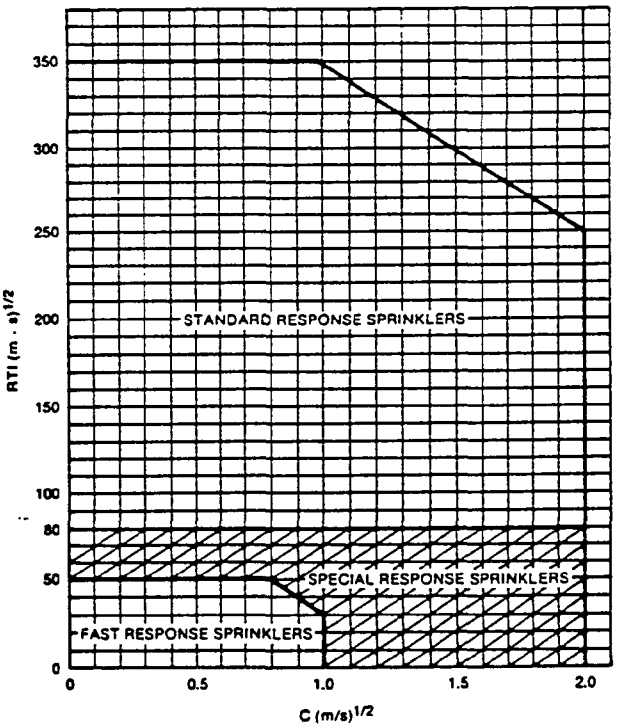
This chapter covers the development of residential and other fast response sprinklers, first for the residential environment and later for other applications. It also discusses the specific types of fast response sprinklers currently available and some of the incentives that have been considered to encourage the widespread use of residential sprinklers.

General information on fire sprinklers can be found in Section 5, Chapter 9, "Automatic Sprinkler Systems," and Section 5, Chapter 12, "Automatic Sprinklers." A discussion of the theory of fire sprinkler performance is in Section 5, Chapter 10, "Theory of Automatic Sprinkler Performance."

MEASURING SPRINKLER SENSITIVITY

Much of the original work in the area of measuring sprinkler sensitivity was done at Factory Mutual Research Corporation (FMRC) under the sponsorship of the United States Fire Administration (USFA) during the development of the residential sprinkler. Important contributing research was also performed at the British Fire Research Station and the National Institute of Standards and Technology (NIST).

The decade of progress in this area climaxed late in 1990, when tentative agreement was reached within the working group on sprinkler and water spray equipment of the International Standards Organization (ISO) for a standardized approach to sprinkler sensitivity requirements and testing. The agreement, which is expected to be processed as an amendment to Draft International Standard 6182/1, "Requirements and Methods of Tests for Sprinklers," uses the information of sprinkler test procedures developed by laboratories in the United States and Europe and establishes the three ranges of sprinkler sensitivity characteristics shown in Figure 5-13A.



5-13A. Tentative international sprinkler sensitivity ranges, RTI vs conductivity.

These ranges of sensitivity are based both on the response time index (RTI) of the device and on its conductivity (C). RTI is a measure of pure thermal sensitivity, which indicates how fast the sprinkler can absorb heat from its surroundings sufficient to cause activation. The conductivity factor is important in measuring how much of the heat

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picked up from the surrounding air will be lost to the sprinkler fittings and waterway.

Figure 5-13A shows three broad ranges of sprinkler sensitivity: standard, special, and fast response. Traditional sprinkler hardware falls into the standard-response category. The fast response category is being used for new types of sprinklers for which fast response is considered important. The special-response category is being used in some countries for special types of sprinkler that may be installed in conformance with appropriate national installation standards. In the United States, this includes some of the extended coverage sprinklers that are listed as special sprinklers.

Sprinkler response time as a function of the temperature rating of the operating element is well understood, - that is, a 165°F (74°C) rated sprinkler would operate when its temperature reaches 165°F (74°C), plus or minus a few degrees. Because of the "thermal lag" of the link or bulb mass, however, the air temperature may be as high as 1000°F (538°C) before the element operates. The smaller mass of the operating element of a fast response sprinkler permits it to follow a temperature rise in the surrounding air more rapidly, resulting in faster operation.The actual sensitivity requirements of the first fast-response sprinklers, intended as residential sprinklers, were arrived at somewhat by trial and error during developmental test work. To measure sensitivity, FMRC researchers first applied the concept of the "tau" factor and later developed the RTI.

Both the tau factor and RTI refer to the performance of a sprinkler or link in a standardized air oven tunnel test. The test is known as a "plunge" test because a sprinkler at room temperature is plunged into a heated air stream of known constant temperature and velocity.[3,4] In the plunge test, the tau factor is the time the excess temperature of the sensing element of the sprinkler is approximately 63 percent of the excess gas temperature. In other words, the tau factor is the time the temperature of the sprinkler link has risen 63 percent of the way to the higher temperature of the heated air. The smaller the tau factor, the faster the sprinkler sensing element heats up and operates.

The tau factor is independent of the air temperature used in the plunge test, but is inversely proportional to the square root of the air velocity. During the early development of the residential sprinkler, a tau factor of 21 sec was considered to indicate the needed level of sensitivity, but this was associated with a specific velocity - 5 ft/sec (1.52 m/sec) used in the FMRC plunge test. Since the tau factor changes with the velocity of heated air past the sprinkler, it is a fairly inconvenient measure of sprinkler sensitivity.

The RTI has replaced the tau factor as the measure of sensitivity and is determined simply by multiplying the tau factor by the square root of the air velocity at which it is found. The RTI is therefore practically independent of both air temperature and air velocity. Comparisons of RTI give a good indication of relative sprinkler sensitivity.

The smaller the RTI, the faster the sprinkler operation. Standard response sprinklers have RTIs in the range of 225 to 700 $sec^{1/2}ft^{1/2}$ (100 to 400 $sec^{1/2}m^{1/2}$), while the RTI range for residential sprinklers is about 50 to 90 $sec^{1/2}ft^{1/2}$ (28 to 50 $sec^{1/2}m^{1/2}$).

The need to add a conductivity term to the model of sprinkler response was recognized in 1986.[5,6] This term accounts for the loss of heat from the sprinkler operating element to the sprinkler frame, its mounting, and [illegible] water in the pipe. These losses can become sig[illegible] under low-velocity conditions, particularly for som[illegible] flush-type sprinkler designs with little insulation b[illegible] the operating element and the sprinkler body.[illegible]

HISTORICAL DEVELOPMENT

Sensitivity was recognized as a key attribute of aut[illegible] sprinklers almost from the start. An evaluation of [illegible] tiveness" was included among the first comprehens[illegible] ever performed by C.J.H. Woodbury of the Factory [illegible] Fire Insurance Companies in 1884. Many of the [illegible] ments to the automatic sprinkler during its first cen[illegible] use were made with thermal sensitivity in mind.

Yet the standard sprinkler of the 1970s was rea[illegible] tle changed from its ancestors. Except for the introd[illegible] of the spray sprinkler in the early 1950s to improv[illegible] sprinkler discharge pattern, sprinkler design, including sensitivity of release mechanisms, remained about the same. Sprinklers were essentially devices intended to protect property, although their effectiveness in providing safety from fires was outstanding.

Development of NFPA 13D

In 1973, in response to recommendations in the Presidential Commission report, "America Burning," the NFPA Committee on Automatic Sprinklers appointed a Subcommittee on Residential and Light-Hazard Occupancies to prepare a residential sprinkler standard. In 1975, the first edition of NFPA 13D, *Installation of Sprinkler Systems in One- and Two-Family Dwellings and Mobile Homes*, was published, based on expert judgment and the best information available at that time.

The purpose of the standard was "to provide a sprinkler system that will aid in the detection and control of dwelling fires and thus provide improved protection against injury, life loss, and property damage." The standard required the use of an NFPA 13, *Installation of Sprinkler Systems*, light-hazard water application density of 0.10 gpm/ft^2 [4 L/min)/m^2], but it permitted other concessions. The water supply could be based on the area of the largest room or 25 gpm (95 L/min), whichever was less; the total water supply required was to be only 250 gal (946 L); and sprinkler spacing of 256 sq ft (23.7 m^2) was permitted, although NFPA 13 allowed only 225 sq ft (20.9 m^2). Further, 13D, *Installation of Sprinkler Systems in One- and Two-Family Dwellings and Mobile Homes*, permitted sprinklers to be omitted from certain areas where the incidence of life loss from fires was shown statistically to be low. NFPA 13 had always required complete sprinkler protection in order to safeguard property properly. In departing from the ideal, the 1975 edition of NFPA 13D became the first attempt at a "life safety" sprinkler standard. In spite of these concessions, actual installations based on this standard were rare, primarily due to cost.

Residential Sprinkler Research

Beginning in 1976, the National Fire Prevention and Control Administration (NFPCA), which was later renamed the U.S. Fire Administration (USFA), acted on its mandate to reduce the nation's fire losses and funded research programs focusing on the residential fire problem in general and residential sprinkler protection in particular. The NFPCA/USFA programs included studies to assess the

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...pact sprinklers would have on reducing deaths and injuries in residential fires.[7] Other studies evaluated the design, installation, practical usage, and water acceptance factors that would have an impact on achieving reliable and acceptable systems[8]; the minimum water discharge rates and automatic sprinkler flow required, and response sensitivity and design criteria[9,10,11]; and full-scale tests of prototype residential sprinkler systems.[12,13,14,15,16]

The research showed that a more sensitive sprinkler was needed to respond faster to both smoldering and fast-developing residential fires for two reasons. First, fires had to be controlled quickly in order to prevent the development of lethal conditions in small residential compartments. In addition, fires had to be attacked while still small if they were to be controlled with the water supplies typically available in residences, - 20 to 30 gpm (76 to 114 L/min) - and if low costs were to be achieved.

Full-scale tests conducted by FMRC resulted in the development of a prototype fast response sprinkler that could control or suppress typical residential fires with the operation of not more than two sprinklers. It could also operate fast enough to maintain survivable conditions within the room of fire origin.[12] Survivable conditions were established as follows:

1. Maximum gas temperature at eye level of 200°F (93°C).
2. Maximum ceiling surface temperature of 500°F (260°C).
3. Maximum carbon monoxide concentration of 1,500 parts per million.

Thus, the sprinkler concept expanded from the traditional role of property protection to include life safety. Full-scale field tests were then conducted in Los Angeles to establish system design parameters using the new prototype fast response "residential sprinkler."[13,14,15,16]

The data from these tests were studied by the National Fire Protection Association Technical Committee on Automatic Sprinklers and used to establish the criteria for the 1980 edition of NFPA 13D, *Installation of Sprinkler Systems in One- and Two-Family Dwellings and Mobile Homes*.

Revised NFPA 13D Design Requirements

The design criteria in the 1980 edition of NFPA 13D, *Installation of Sprinkler Systems in One- and Two-Family Dwellings and Mobile Homes*, included for the first time the requirement that all sprinklers be "listed residential sprinklers." Figure 5-13B shows the first two listed residential sprinklers.

Other initial basic design requirements in the revamped NFPA 13D, *Installation of Sprinkler Systems in One- and Two-Family Dwellings and Mobile Homes*, were as follows:

Performance criteria: To prevent flashover in the room of fire origin, when sprinklered, and to improve the chance for occupants to escape or be evacuated.

Design criteria:

1. Only listed residential sprinklers to be used.
2. Minimum 18 gpm (68 L/min) to any single operating sprinkler and 13 gpm (49 L/min) to all operating sprinklers in the design area up to a maximum of two sprinklers.
3. Maximum area protected by a single sprinkler of 144 sq ft (13.4 m²).

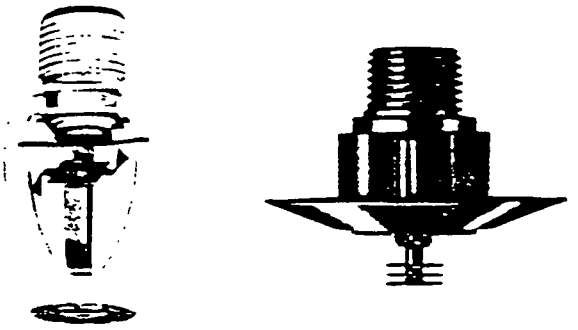

FIG. 5-13B. The first two listed residential "quick response" sprinklers. Shown are the Grinnell Model F954 (left) and Central "Omega" Model R-1 (right) pendent sprinklers.

4. Maximum distance between sprinklers of 12 ft (3.7 m).
5. Minimum distance between sprinklers of 8 ft (2.4 m).
6. Maximum distance from a sprinkler to a wall or partition of 6 ft (1.8 m).

Application rates, design areas, areas of coverage, and minimum design pressures other than those specified above were permitted to be used with special sprinklers listed for such special residential installation conditions.

Sprinkler coverage: Sprinklers to be installed in all areas with the following exceptions.

Exception No. 1: Sprinklers allowed to be omitted from bathrooms no larger than 55 sq ft (5.1 m²).

Exception No. 2: Sprinklers allowed to be omitted from closets where the least dimension does not exceed 3 ft (0.9 m), the area does not exceed 24 sq ft (2.2 m²), and the walls and ceiling are surfaced with noncombustible materials.

Exception No. 3: Sprinklers allowed to be omitted from open-attached porches, garages, carports, and similar structures.

Exception No. 4: Sprinklers allowed to be omitted from attics and crawl spaces that are not used or intended for living purposes or storage.

Exception No. 5: Sprinklers allowed to be omitted from entrance foyers that are not the only means of egress.

TYPES OF FAST RESPONSE SPRINKLERS

Today, fast response sprinkler technology has been incorporated into several different types of sprinklers, each with unique attributes and applications.

Residential Sprinklers

In the ten years following the development of the residential sprinkler, the special listings proliferated, to the point where the original sprinkler flow and spacing criteria have almost become obsolete. Residential sprinklers are now listed for coverage areas up to 400 sq ft (37.2 m²) per sprinkler. Table 5-13A contains a 1990 compilation of residential sprinklers listed by Underwriters Laboratories Inc. (UL), along with their pressure and flow requirements.

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TABLE 5-13A. *UL-Listed Residential Sprinklers (1990)*

Model	Style	K	Temperature	Maximum Spacing	1-spr Flow (gpm)	Pres (psi)	Multiple Sprinkler Flow	
Central Sprinkler Corporation, Lansdale, Pennsylvania:								
R-1 Omega	Flush pendent	3.9	145 & 160	14x14	18	(21.9)	13	
				16x16	24	(38.9)	17	
C-1 Omega	Flush pendent	5.3	145 & 160	12x12	25	(22.2)	18	
				14x14	30	(31.9)	21	
EC-20 Omega	Flush pendent	5.3	145 & 160	14x14	23	(18.8)	16	
				16x16	25	(22.2)	18	
				18x18	32	(36.3)	22.5	
EC-20A	Flush pendent or Recessed pendent	4.1	160	14x14	21	(26.2)	15	
EC-20A Omega	Flush pendent	5.6	160	14x14	25	(19.9)	18	
				16x16	30	(28.7)	21	
				18x18	32	(32.7)	29	
C1A	Flush pendent	5.6	160	12x12	25	(19.9)	20	
				14x14	30	(28.9)	26	
GB-R	Recessed pendent	4.3	155	14x14	17	(15.6)	13	
				16x16	18	(17.5)	13	
GB-R1	Pendent or Recessed pendent	5.3	155	14x14	24	(20.5)	17	
				16x16	30	(32.0)	21	
GB-R	Horizontal sidewall	5.3	155	14Wx16L	30	(32.0)	21	
	Recessed horizontal sidewall	5.3	155	14x14	27	(26.0)	19	
HEC-12	Flush horizontal sidewall	5.6	160	12x12	27	(23.6)	19	
			145 & 160	14x14	30	(29.1)	21	
Firematic, Shrewsbury, Massachusetts:								
A	Pendent or Recessed pendent	5.7	135 & 155	14x14	24	(17.7)	17	
A	Horizontal sidewall	5.7	155	14x14	25	(19.2)	20	
A	Recessed horizontal sidewall	5.7	155	14x14	26	(20.8)	20	
Grinnell Corporation, Exeter, New Hampshire:								
F954	Pendent	2.8	165	12x12	18	(41.3)	13	
F958	Horizontal sidewall	4.2	165	16Wx14L	24	(32.7)	17	
FR-1	Horizontal sidewall	5.6	140 & 165	16Wx20L	40	(51.0)	37	
		8.0	140 & 165	16Wx20L	50	(39.1)	45	
F991 Aquarius	Flush pendent	4.2	160	14x14	18	(18.4)	13	
				16x16	22	(27.4)	16	
F992 Aquarius	Flush pendent	5.6	160	14x14	20	(12.8)	17	
				16x16	22	(15.4)	19	
				18x18	31	(30.6)	24	
F993 Aquarius	Flush horizontal sidewall	5.55	160	14x14	30	(29.2)	21	
Reliable Automatic Sprinkler Co., Mt. Vernon, New York:								
A	Pendent	4.2	165	14x14	18	(18.8)	13	
				16x16	25	(36.3)	18	
		5.5	165	12x12	21	(14.6)	15	
				14x14	24	(19.0)	17	
A	Recessed pendent	4.2	165	14x14	19	(21.0)	13.5	
				16x16	25	(36.3)	18	
		5.5	165	12x12	21	(14.6)	15	
				14x14	24	(19.0)	17	
A	Horizontal sidewall or Recessed horizontal sidewall	4.1	165	12x12	21	(25.6)	15	
				14x14	25	(36.3)	18	
ZX	Flush pendent	4.1	165	14x14	18	(19.3)	13	
				16x16	24	(34.3)	17	
		5.4	165	14x14	26	(23.2)	18	
				16x16	30	(30.9)	21	
				18x18	32.5	(36.2)	23	
ZX	Horizontal sidewall	5.4	165	14x14	24	(19.0)	17	
F1/Res	Pendent	5.6	135 & 155	14x14	20	(12.8)	14	
				16x16	20	(12.8)	20	
				18x18	28	(25.0)	22	
F1/Res/F2	Recessed pendent	5.6	135 & 155	14x14	20	(12.8)	14	
				16x16	20	(12.8)	20	

TABLE 5-13A. *UL-Listed Residential Sprinklers (1990) (Continued)*

Model	Style	K	Temperature	Maximum Spacing	1-spr Flow (gpm)	Pres (psi)	Multiple Sprinkler Flow	Pres (psi)
Res	Horizontal sidewall	5.6	135	14x14	27	(23.3)	19	(11.5)
			135	14x14	25	(19.9)	18	(10.3)
			135 & 155	16x16	30	(28.7)	21	(14.1)
				16Wx18L	34	(36.9)	24	(18.4)
				16Wx20L	37	(43.7)	26	(21.6)
Res/F2	Recessed horizontal sidewall	5.6	135 & 155	14x14	28	(25.0)	20	(12.8)
Sprinkler Corporation, Milwaukee, Wisconsin								
	Pendent or Recessed pendent	4.5	165	14x14	18	(16.0)	13	(8.3)
				16x16	25	(30.9)	18	(16.0)
	Horizontal sidewall or Recessed horizontal sidewall	4.5	165	14x14	21	(21.8)	15	(11.2)
				16x16	25	(30.9)	18	(16.0)
		4.8	165	16Wx20L	38	(62.7)	27	(31.6)
g Corporation, Hastings, Michigan:								
	Pendent or Recessed pendent	4.2	155	14x14	18	(18.4)	13	(9.6)
				16x16	24	(32.7)	17	(16.4)
	Pendent or Recessed pendent	5.5	155	12x12	23	(17.5)	16	(8.5)
				14x14	24	(19.0)	17	(9.6)
	Horizontal sidewall	5.5	155	14x14	25	(21.0)	18	(10.7)
	Flush pendent	4.2	165	16x16	17	(16.4)	12	(8.2)
				18x18	20	(22.7)	14	(11.1)
				20x20	29	(47.7)	21	(25.0)
		5.5	165	12x12	18	(10.7)	13	(5.6)
				16x16	22	(16.0)	16	(8.5)
				18x18	22	(16.0)	18	(10.7)
				20x20	30	(29.8)	21	(14.6)
	Concealed pendent	4.2	155	14x14	18	(18.4)	13	(9.6)
		5.5	155	14x14	24	(19.0)	17	(9.6)

l is important to recognize that, in addition to their response characteristics, residential sprinklers have a al water distribution pattern.[12] Because the effective rol of residential fires often depends on a single sprin- the room of fire origin, the distribution of residen- sprinklers is required to be more uniform than that of spray sprinklers, which in large areas can rely e overlapping patterns of several sprinklers to make or voids. Additionally, residential sprinklers are ired to protect sofas, drapes, and similar furnishings e periphery of the room. In their discharge patterns, fore, the sprinklers must not only be capable of throw- ater to the walls of their assigned areas, but high gh up on the walls to prevent the fire from getting ve the sprinklers. The water delivered close to the ing not only protects the portion of the wall close to eiling, but also enhances the capacity of the spray to ases at the ceiling level, thus reducing the likelihood essive sprinkler openings.[12]

Because of their differences, residential sprinklers are sted by product evaluation organizations under the product standards as standard sprinklers. Underwrit- aboratories Inc., for example, has developed UL 1626 idential sprinklers, and FMRC has published its al Standard FM 2030 for residential sprinklers. Both standards include a plunge test with specific sen- requirements and a distribution test that checks the pattern in the vertical plane, as well as the horizon- ne. The product standards for standard spray sprin- ontain neither test.

oth UL 1626 and FM 2030 also include a fire test that nded to simulate a residential fire in the corner of containing combustible materials representative of a living room environment. The fire test arrangements for UL 1626 are shown in Figure 5-13C.

The UL 1626 test procedure contains a time-temperature curve that is reproducible in actual tests. The curve parallels the time-temperature relationship developed during the tests of the prototype residential sprinkler in Los Angeles that was part of the on-going residential sprinkler research effort.[13,15,16]

In summary, to meet the UL 1626 test criteria, residential sprinklers, installed in a fire test enclosure with an 8-ft (2.4 m) ceiling are required to control a fire for 10 min with the following limits:

1. The maximum gas or air temperature adjacent to the sprinkler—3 in. (76.2 mm) below the ceiling and 8 in. (203 mm) horizontally away from the sprinkler—must not exceed 600°F (316°C).
2. The maximum temperature—5 ft, 3 in. (1.6 m) above the floor and half the room length away from each wall— must be less than 200°F (93°C) during the entire test. This temperature must not exceed 130°F (54°C) for more than a 2-min period.
3. The maximum temperature ¼ in. (6.3 mm) behind the finished surface of the ceiling material directly above the test fire must not exceed 500°F (260°C).
4. No more than two residential sprinklers in a test area can operate.

The test enclosure is twice the size of the proposed maximum spacing of the residential sprinkler. In a typical test, the walls of one corner of the test enclosure are covered with combustible cellulosic acoustical panels ⅛ in. (3.2 mm) thick . Two combustible structures with urethane foam, representing stuffed furniture, are positioned

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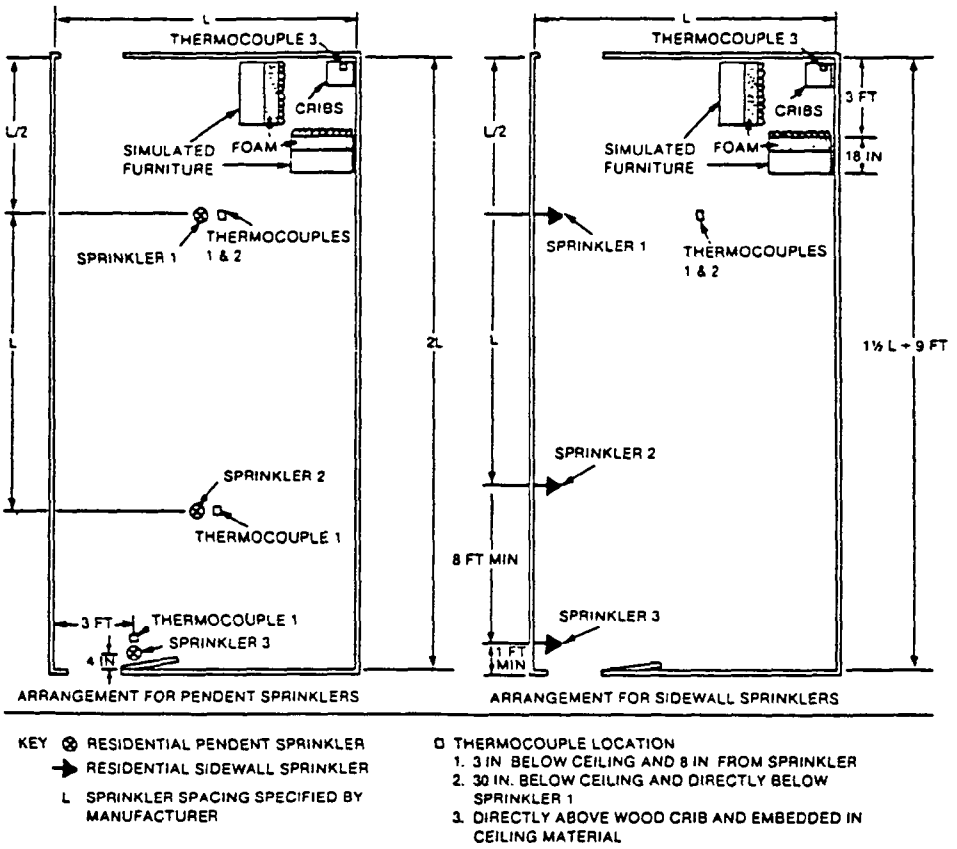

FIG. 5-13C. Fire test arrangements for UL 1626 for pendent sprinklers (left) and sidewall sprinklers (right). The simulated furniture consists of 3 in. (76 mm) thick uncovered urethane foam cushions 30 in. (762 mm) high by 30 in. (762 mm) wide. The foam has a density of 1.25 lbs/ft³ (6.1 kg/m³) and is attached to a wood frame. The walls of the test room are covered with 4 by 8 ft by ⅛ in. (1.2 × 2.4 m × 3.2 mm) decorative plywood paneling (flame spread rating 200) attached to wood furring strips. The fire source consists of 12 by 12 by 12 in. (0.3 × 0.3 × 0.3 m) wood cribs weighing 12 to 13 lbs (5.4 to 5.9 kg). The ceiling of the test room is 8 ft (2.4 m) high and covered with 2 × 4 ft × ½ in. (6.1 × 1.2 m × 12.7 mm) thick acousticalpanels attached to wood furring strips.

at the same corner. (See Figure 5-13C.) The enclosure is kept at an initial ambient temperature of 80°F (27°C) ± 5°F (3°C), and it is ventilated through two door openings on opposite walls. The fire source is a wood crib of 12 to 13 lb (5.4 to 5.9 kg) mass, measuring approximately 12 by 12 by 12 in. (0.3 by 0.3 by 0.3 m).

The wood crib is ignited by 8 oz. (24 mL) of N-heptane in a pan directly below the crib. Forty sec after ignition, the excelsior [¼ lb (0.11 kg)] on the floor next to the simulated furniture is ignited.

The fire test is conducted for 10 min after the ignition of the wood crib. The water flow to the first sprinkler that operates and the total water flow when the second sprinkler operates are specified as part of the listing limitations for the sprinklers in the test. The total water flow for two sprinklers must be a minimum of 1.2 times the minimum flow for a single sprinkler.

The water distribution test requirements are based on the distribution pattern of the prototype residential sprinkler used in the Los Angeles test fires.[16] The distribution requirements involve collections in both the horizontal and vertical planes.

All residential sprinklers in the test must discharge water at the flow rate specified by the manufacturer for a 10-min period simulating one sprinkler operating and two sprinklers operating. The quantity of water collected on both the horizontal and vertical surfaces is measured and recorded.

Sprinklers being tested are required to discharge a minimum of 0.02 gpm per sq ft [0.8(L/min)/m²] at both flow rates over the entire design area, plus an area 2 ft (0.61 m) beyond the listed coverage area in each direction (only three directions for horizontal sidewall-type sprinklers). They must also wet the walls of the test enclosure to a height not less than 28 in. (711 mm) below the ceiling with one sprinkler operating and not less than 36 in. (914 mm) with two sprinklers operating. Each wall surrounding the coverage area is required to be wetted with a minimum of 5 percent of the sprinkler application densities at both flow rates.

Since 1983, the use of residential sprinklers has also been permitted under some conditions in accordance with NFPA 13, *Installation of Sprinkler Systems*. Essentially, NFPA 13 allows residential sprinklers in dwelling units located in any occupancy provided they are installed in conformance with the requirements of their listing and the positioning requirements of NFPA 13D, *Installation of Sprinkler Systems in One- and Two-Family Dwellings and Mobile Homes*. A dwelling unit is defined as one or more rooms arranged for the use of one or more individuals living together, as in a single housekeeping unit normally having cooking, living, sanitary, and sleeping facilities. Dwelling units include hotel rooms, dormitory rooms,

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ping rooms in nursing homes, and similar living units. Occupancies encompassing dwelling units include apartment buildings, board and care facilities, dormitories, condominiums, lodging and rooming houses, and other multiple-family dwellings.

For NFPA 13, applications involving residential sprinklers in dwelling units, the design area is required to consist of the four most hydraulically demanding sprinklers. See Figure 5-13D).

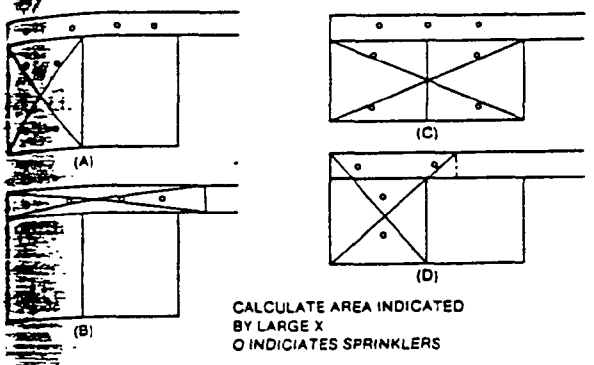

FIG. 5-13D. Examples of design areas for dwelling units within NFPA 13 occupancies.

Other areas, such as attics, basements, or other types of occupancies outside of dwelling units but within the same structure, are required to be protected in accordance with regular provisions of NFPA 13, *Installation of Sprinkler Systems*, including the appropriate water supply requirements. The decision as to which areas are to be protected with sprinklers is also regulated in accordance with the normal provisions of NFPA 13. This means, for example, that combustible concealed spaces generally require sprinklers, although the four-sprinkler design area is extended to such spaces above dwelling units when protected with residential sprinklers.

Residential sprinklers installed in systems designed to NFPA 13 requirements are spaced and positioned in accordance with their residential listings, not with the spacing requirements of NFPA 13. The water demands for the residential sprinklers are the same as in NFPA 13 applications, except that the multiple sprinkler flow requirement is extended to four sprinklers rather than the two stipulated for one- and two-family dwellings and mobile homes in NFPA 13D, *Installation of Sprinkler Systems in One- and Two-Family Dwellings and Mobile Homes*. The more liberal timing, component, hanger, and water supply duration allowances of NFPA 13D are not permitted in these systems.

In summary, NFPA 13, *Installation of Sprinkler Systems*, does not require residential sprinklers in residential occupancies, but it encourages their use through the four-sprinkler design area.

In 1989, a new standard was developed to bridge the gap between NFPA 13, *Installation of Sprinkler Systems*, and NFPA 13D, *Installation of Sprinkler Systems in One- and Two-Family Dwellings and Mobile Homes*. The new standard is NFPA 13R, *Installation of Sprinkler Systems in Residential Occupancies Up to Four Stories in Height*. Like NFPA 13D, NFPA 13R is oriented toward economical life safety protection. Sprinklers are omitted from building areas that have been found to have a low incidence of fatal fires, including combustible concealed spaces, small bathrooms and closets, and attached porches. As with NFPA 13D, residential sprinklers are required throughout dwelling units, with some minor exceptions. A four-sprinkler design area is required unless the largest compartment contains fewer sprinklers.

In recognition of the greater risk associated with multifamily occupancies, however, NFPA 13R, is more conservative than NFPA 13D, in some areas. Requirements for plans, hydraulic calculations, and system acceptance certificates parallel those of NFPA 13, *Installation of Sprinkler Systems*. Unlike NFPA 13D, NFPA 13R requires a consideration of the likelihood that simultaneous domestic flows might occur through combined service piping. In addition, pumps and other key equipment are required to be listed.

In NFPA 13R, *Installation of Sprinkler Systems in Residential Occupancies Up to Four Stories in Height* systems, areas outside dwelling units can be protected with standard spray sprinklers, using NFPA 13 design criteria.

Quick Response Sprinklers

Quick response sprinklers are designed to be used in hotels, motels, offices, and other buildings where faster sprinkler operation could enhance life safety. UL first listed these sprinklers as quick response sprinklers based on performance comparable to a standard response sprinkler equipped with a quick response electronic squib actuator, a device marketed by one sprinkler manufacturer in the 1970s.

Quick response sprinklers, which are essentially standard spray sprinklers equipped with fast response operating mechanisms, were first introduced in 1983. They were developed by manufacturers in two different ways. One was to replace the actuating mechanism of standard spray sprinklers with the more sensitive heat responsive element used in residential sprinklers. This sprinkler was then resubmitted to a testing laboratory for testing and listing under the product standard for standard spray sprinklers. The other way was to simply submit a residential sprinkler to a testing laboratory for testing and listing under the provisions of a product standard for standard spray sprinklers.

It was not until 1988 that full-scale testing showed that quick response sprinklers could be used effectively with the traditional area/density design approaches found in sprinkler installation standards.[17,18] In "control-mode" testing of a 6 ft, 8-in. (2.0 m) arrangement of a standard plastic commodity under a 20-ft (6.1 m) ceiling, multiple tests involving sprinklers identical in all respects except sensitivity indicated that fewer average quick response sprinklers activated to control the fire than standard response sprinklers.

Current NFPA standards permit the use of quick-response sprinklers throughout buildings of light- and ordinary-hazard occupancy, but they have not yet recognized their use in extra-hazard occupancies or occupancies involving high-piled storage. Research is currently underway to determine if quick response sprinklers can be used successfully in dry systems as well as wet systems.

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Early Suppression Fast Response Sprinklers

The early suppression fast response (ESFR) sprinklers were first envisioned by the Factory Mutual Research Corporation.[19,20] Working with FMRC, the National Fire Protection Research Foundation funded full-scale testing to prove that fast response sprinklers made suppression of a high-challenge fire feasible.[21]

Like its predecessor, the large drop sprinkler, the ESFR sprinkler is intended to prevail against the strong fire plumes associated with fires in industrial and warehouse occupancies. However, its delivery of water to the burning fuel surfaces is accomplished by means of spray momentum rather than the gravitational effects of large droplets.

Operating at a minimum pressure of 50 psi (7.25 kPa) so as to produce a minimum flow per sprinkler of 100 gpm (380 L/min), the ESFR sprinkler can protect challenges up to and including 25 ft (7.6 m) of plastics storage under a 30-ft (9.1 m) ceiling, without the use of in-rack sprinklers. The sprinkler has also been tested successfully for use in protecting aerosols and other special hazards, and it is currently being evaluated for use with storage more than 30 ft (9.1 m) high.

"Quick Response, High-Challenge" Large-Drop Sprinklers

The "quick response, high-challenge" sprinkler resulted from one manufacturer's insertion of a fast response link into an approved large-drop sprinkler. The large-drop sprinkler concept, pioneered during the 1970s by FMRC, was based on the theory that larger spray droplets would be more capable of achieving gravitational penetration of a strong upward fire plume.

Product approval and installation standards were developed, and specialized system design criteria found its way into NFPA standards beginning with the 1985 edition of NFPA 13, *Installation of Sprinkler Systems*. The large-drop sprinkler has a characteristic large deflector and is an upright sprinkler with a 0.64-in. (1.6 cm) diameter orifice.

The concept of combining the penetration capabilities of the large-drop sprinkler with fast response was basic to the development of the ESFR sprinkler program. In tests of the large-drop sprinklers with and without fast response links, the addition of fast response to the penetration abilities of the sprinkler provided superior protection against a high-challenge fire.

This particular sprinkler, however, later referred to as the "quick response, high-challenge" sprinkler, fell by the wayside during the screening for the ESFR prototype sprinkler due to its inability to provide sufficient water directly under the sprinkler. As an upright sprinkler, it could not handle the scenario in which a fire is started directly under a single sprinkler with 5 to 15 ft (1.5 to 4.6 m) of clearance below a 30-ft (9.1 m) ceiling. The sprinkler's water penetration capability was considered insufficient, due to an opening of the spray umbrella. The ESFR prototype eventually selected was a pendent with a larger orifice.

Nevertheless, this sprinkler had already established its worth in the eyes of many. A variation of that sprinkler is now listed by UL as a "specific application" sprinkler, intended for use within the constraints of demonstrated performance in full-scale fire tests.[22]

Quick Response, Early Suppression Sprin

Quick response, early suppression (QRES) sprinkl currently being developed in the United States.[18] W QRES sprinkler, the same principles used in the d ment of the ESFR sprinkler are being applied to a s orifice sprinkler, which could be used in a wide of business, mercantile, public assembly, educationa other applications. The proposed NFPA definition of sprinklers is "fast response sprinklers that are listed f ability to provide fire suppression of specific haza is expected that the final development of such spri is still several years away.

INCENTIVES TO MORE WIDESPREAD OF RESIDENTIAL SPRINKLERS

There are certain incentives that can stimulate int residential sprinklers. These incentives are discuss the following paragraphs.

Reduction in Government Spending

Reduction in all forms of government spending, res from public pressure to reduce property taxes, is a factor in the future growth of the residential sprinkle cept. Many fire departments are forced to protect areas and more subdivisions with the same numbe even fewer people since financial restrictions hamper department's ability to grow with the community result, alternates to traditional fire fighting techniques be found. One of them is the use of residential sprink

San Clemente, CA, was the first community in United States to pass a residential sprinkler ordinance 1980 as part of the fire department's master plan. This nance requires automatic sprinkler systems to be insta in all new residential construction. The prime moti for the passage of this ordinance was San Clemente's backs in government spending brought about by Propo tion 13, the state's tax-capping measure. Many commun across the country face similar situations. Automatic spr klers in residences may be the answer to fewer fire fig ers and longer response times from the fire departm

Insurance Savings

Although the greatest benefit from widespread instal of residential sprinklers will be the lives saved and ries prevented, lower property losses will be a seco and substantial benefit. An ad-hoc committee from insurance industry sponsored a number of the test fi Los Angeles and concluded that residential sprinkler the potential for reducing homeowners' claim pay expenses.[23] As a result, the Insurance Services Office Personal Lines Committee recommended that a 15-per reduction in the homeowner's policy premium be g for installation of an NFPA 13D, *Installation of Spri Systems in One- and Two-Family Dwelling and Mob Homes*, residential sprinkler system. While this would pay for the system over a short period of time, as is the in many commercial installations, the continuing incre in the cost of insuring a single-family home make this a nificant incentive nonetheless.

Real Estate Tax Reductions

In 1981, the State of Alaska enacted into law a signifi piece of legislation that has a dramatic impact on the in lation of sprinkler systems throughout that state. The

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provides that 2 percent of the assessed value of any structure is exempt from taxation if the structure is protected with a fire protection system. The word "structure" is significant in the law, since it also applies to homes. In effect, if a home were assessed at $100,000 for purposes of taxation, the assessed value would be computed at $98,000, provided that it contained a fire protection system.

Buyers' Attitude

While one study indicated that 30 percent of the people interviewed perceived no need for a residential sprinkler system," a survey published by the National Association of Home Builders on luxury features that buyers want in a new home showed that 14.3 percent indicated "fire suppression systems" as a choice. For potential buyers with incomes over $50,000, the percentage rose to over 20 percent.

Zoning

Greater land use may be possible with zoning changes that would permit fully sprinklered residences to be built on smaller parcels of land. The assumption is that the space between houses will not be as important from a fire protection standpoint if an entire street or neighborhood is fully sprinklered. One could argue, however, that if the sprinkler system fails, the resultant fire involving a number of residences could be much greater.

Sprinkler Legislation

In addition to the San Clemente, a number of other California communities have passed residential sprinkler legislation, including Orange County and Los Angeles County.

Since 1982, Greenburgh, NY, and several surrounding communities have enacted sprinkler ordinances that require the installation of automatic sprinklers in virtually all new construction, including all new multiple- and one- and two-family dwellings.

The State of Florida in 1983 passed a law requiring that all public lodging and time-share units three stories or more high in the state be sprinklered. It also required that all existing units be sprinklered by 1988.

In 1983, the City of Honolulu, HI, adopted legislation that required all new and existing high-rise hotels, which are those more than 75 ft (23 m) above grade, to be sprinklered.

In the late 1980s, additional jurisdictions, including Atlanta, GA, the State of Connecticut, and the Commonwealth of Massachusetts, acted to retroactively require the installation of sprinkler systems in high-rise residential buildings.

In 1990, the federal government enacted the Hotel and Motel Fire Safety Act, which contains strong incentives for complete sprinkler protection of hotels, since only hotels with satisfactory levels of fire protection will be eligible for federal employee travel.

Trade-Offs

Many "authorities having jurisdiction" have used building code trade-offs as an incentive to install sprinklers. Cobb County, GA, was one of the first communities to amend its Buildings and Construction Code to include trade-offs for multi-family structures equipped with residential sprinkler systems.

While these trade-offs can be a major incentive to install residential sprinklers, the disaster potential must always be considered if a fire, for whatever reason, should overpower the sprinkler system. This is especially true if the system is designed with the minimal water supplies required by NFPA 13D, *Installation of Sprinkler Systems in One- and Two-Family Dwellings and Mobile Homes*.

The City of Dallas, TX, adopted a building code that requires all new buildings or those undergoing major renovation, having an area greater than 7500 sq ft (697 m^2), to have automatic sprinklers. At the same time, this building code encourages trade-offs by allowing design options that trade "passive" fire protection features for "active" automatic sprinkler alternatives.

Mobile Homes

At least one major mobile home manufacturer is installing residential sprinkler systems in all of its mobile homes at the factory.

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THE COMMERCIAL OMEGA™ SPRINKLER COLLECTION

Dramatically Beautiful—Elegantly Subtle

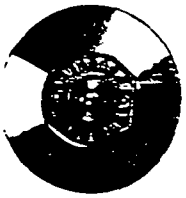
Central's Commercial Omega Sprinklers are a unique blend of futuristic aesthetics and impressive performance characteristics.

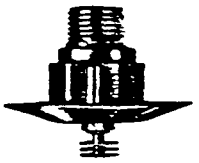
The Commercial Omega Sprinkler, available in pendent and horizontal sidewall design, is at least five times faster in operation than standard commercial sprinklers. Its genesis is rooted in the new standards of sensitivity necessary for life-safety. It is listed by the Underwriters Laboratories for light and ordinary hazard in accordance with N.F.P.A. 13, "Installation of Sprinkler Systems." This sprinkler is also listed by Underwriters Laboratories in accordance with N.F.P.A. 13-D "Sprinkler Systems—One and Two Family Dwellings." The Omega sprinkler is the first to satisfy and combine both Underwriters Laboratories listing requirements.

The Omega sprinkler will react to a fire before it has a chance to spread, effectively minimizing preburn and avoiding flashover, thereby limiting the involved area.

The smallest semi-concealed sprinkler made today, the Omega projects only 5/8" from any finished surface. Standard finishes available are polished chrome, polished brass, and natural brass. In addition, the escutcheon plates can be plated or painted to your specifications.

The Extended Coverage Omega Sidewall and the Extended Coverage Omega Pendent Sprinklers add a new dimension to the Omega Sprinkler Collection. These extended coverage sprinklers are listed by Underwriters Laboratories for light hazard occupancies and add to the overall economics and aesthetics of the sprinkler installation.





COMMERCIAL PENDENT—MODEL C-1

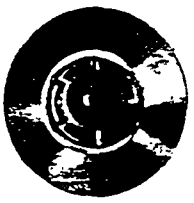
"K" FACTOR: 5.32 • **NOMINAL ORIFICE SIZE:** 1/2" • **THREAD SIZE:** 1/2" N.P.T. • **TEMPERATURE RATINGS:** 145°, 160°, 200°F (63°, 71°, 93°C) • **APPROVALS:** U.L. listed for light and ordinary hazard per N.F.P.A. 13 • **SPACING AND FLOW REQUIREMENTS:** See N.F.P.A. 13 • **SERVICE RATING:** 175 p.s.i.

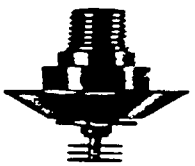
SPECIAL LISTINGS FOR EXTENDED COVERAGE

Authorities have made provisions in standards for sprinklers which satisfy basic design requirements but are listed by a recognized testing laboratory for specific conditions which may exceed or differ from the basic design with respect to flow rates, design areas, areas of coverage and minimum design pressures. The Omega Pendent with EC-20 deflector and the Omega Horizontal Sidewall with HEC-12 deflector have satisfied the requirements to allow for extended areas of coverage under the following conditions:

COMMERCIAL EXTENDED COVERAGE PENDENT—MODEL EC-20

"K" FACTOR: 5.32 • **NOMINAL ORIFICE SIZE:** 1/2" • **THREAD SIZE:** 1/2" N.P.T. • **TEMPERATURE RATINGS:** 145°, 160°F (63°, 71°C) • **APPROVALS:** U.L. listed for light hazard applications per N.F.P.A. 13 • **SERVICE RATING:** 175 p.s.i.





MODEL EC-20 PENDENT

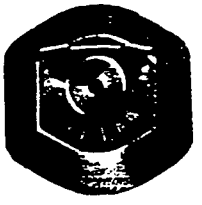
MAXIMUM WIDTH (FT)	MAXIMUM LENGTH (FT)	MINIMUM FLOW (GPM)	MINIMUM PRESSURE AT SPRINKLER (PSI)
20	20	40.0	56.5
18	18	32.5	37.3
16	22	35.5	44.5
*16	20	32.0	36.2
16	18	29.0	29.7
16	16	26.0	23.9

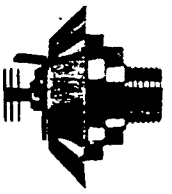
*Exception: 16x20 ft. spacing also qualifies for a 16 ft. ceiling height allowance when more than one sprinkler is installed in one room.

SPECIAL NOTE: 9' ceiling height restriction when more than one sprinkler is installed in one room

COMMERCIAL EXTENDED COVERAGE HORIZONTAL SIDEWALL—MODEL HEC-12

"K" FACTOR: 5.56 • **NOMINAL ORIFICE SIZE:** 1/2" • **THREAD SIZE:** 1/2" N.P.T. • **TEMPERATURE RATINGS:** 145°, 160°F (63°, 71°C) • **APPROVALS:** U.L. listed for light hazard applications per N.F.P.A. 13 • **SERVICE RATING:** 175 p.s.i.





MODEL HEC-12 HORIZONTAL SIDEWALL

MAXIMUM DEFLECTOR DISTANCE FROM CEILING	MAXIMUM WIDTH (FT)	MAXIMUM LENGTH (FT)	MINIMUM FLOW (GPM)	MINIMUM PRESSURE AT SPRINKLER (PSI)
4" - 12"	16	20	32.0	33.1
	16	18	29.0	27.2
	16	16	26.0	21.9
	14	14	20.0	12.9

SPECIAL NOTE: This sprinkler is listed for installation up to 20" maximum deflector distance from ceiling in 145° temperature rating with special HEC-20 deflector.

THE RESIDENTIAL OMEGA™ SPRINKLER COLLECTION

Dramatically Beautiful—Elegantly Subtle

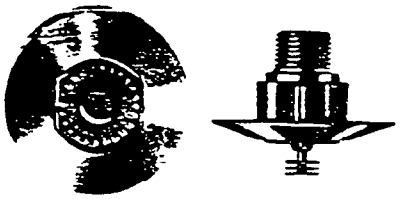
Central's Residential Omega Sprinkler is the successful culmination of years of careful thought, engineering research and development, and extensive testing. It is the most dramatic sprinkler advance in over half a century and is the forerunner of the entire Omega Sprinkler Collection.

The Residential Omega sprinkler, available in both pendent and horizontal sidewall design is at least five times faster in operation than standard commercial sprinklers. The Residential Omega sprinkler is U.L. listed in accordance with N.F.P.A. 13-D, "Sprinkler Systems—One and Two Family Dwellings, 1980."

These sprinklers have been designed to accommodate the water pressures normally found in residential areas. The semi-recessed design of the Residential Omega blends beautifully into the most discriminating homeowner's decor, with minimal potential for physical damage.

Standard finishes available are polished chrome, polished brass, and natural brass. In addition, the escutcheon plates can be plated or painted to your specifications.

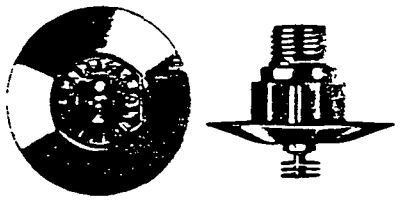
RESIDENTIAL PENDENT—MODEL R-1



"K" FACTOR: 3.85 • **NOMINAL ORIFICE SIZE:** 3/8" • **THREAD SIZE:** 1/2" N.P.T. • **TEMPERATURE RATINGS:** 145°, 160°F (63°, 71°C) • **APPROVALS:** U.L. listed per N.F.P.A. 13-D, "Sprinkler Systems—One and Two Family Dwellings" (1980). See Chapter 4, "System Design" special sprinkler listing reference in Paragraph 4-1.6. • **SERVICE RATING:** 175 p.s.i.

MAXIMUM LOCATION FROM ANY WALL (FT)	MAXIMUM SPACING BETWEEN SPRINKLERS (FT)	REQUIRED SPRINKLER DESIGN AREA AND DISCHARGE—PRESSURE REQUIREMENTS ONE SPRINKLER	TWO OR MORE SPRINKLERS
6	12	18 GPM-21.9 PSI	13 GPM Each-11.4 PSI Each
7	14	18 GPM-21.9 PSI	13 GPM Each-11.4 PSI Each
8	16	24 GPM-38.9 PSI	17 GPM Each-19.5 PSI Each

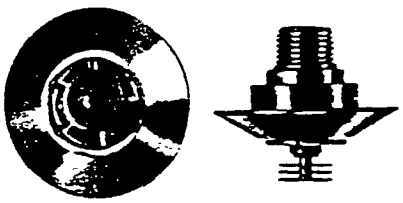
RESIDENTIAL PENDENT—MODEL C-1



"K" FACTOR: 5.32 • **NOMINAL ORIFICE SIZE:** 1/2" • **THREAD SIZE:** 1/2" N.P.T. • **TEMPERATURE RATINGS:** 145°, 160°F (63°, 71°C) • **APPROVALS:** U.L. listed per N.F.P.A. 13-D • **SERVICE RATING:** 175 p.s.i.

MAXIMUM LOCATION FROM ANY WALL (FT)	MAXIMUM SPACING BETWEEN SPRINKLERS (FT)	REQUIRED SPRINKLER DESIGN AREA AND DISCHARGE—PRESSURE REQUIREMENTS ONE SPRINKLER	TWO OR MORE SPRINKLERS
6	12	25 GPM-22.1 PSI	18 GPM Each-11.4 PSI Each
7	14	30 GPM-31.8 PSI	21 GPM Each-15.6 PSI Each

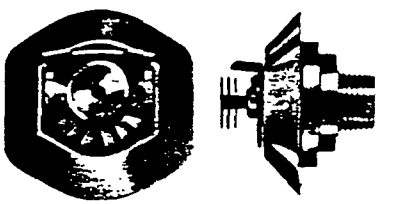
RESIDENTIAL EXTENDED COVERAGE PENDENT—MODEL EC-20



"K" FACTOR: 5.32 • **NOMINAL ORIFICE SIZE:** 1/2" • **THREAD SIZE:** 1/2" N.P.T. • **TEMPERATURE RATINGS:** 145°, 160°F (63°, 71°C) • **APPROVALS:** U.L. listed per N.F.P.A. 13—D • **SERVICE RATING:** 175 p.s.i.

MAXIMUM LOCATION FROM ANY WALL (FT)	MAXIMUM SPACING BETWEEN SPRINKLERS (FT)	REQUIRED SPRINKLER DESIGN AREA AND DISCHARGE—PRESSURE REQUIREMENTS ONE SPRINKLER	TWO OR MORE SPRINKLERS
7	14	23 GPM-18.7 PSI	16.0 GPM Each-9.1 PSI Each
8	16	26.0 GPM-23.9 PSI	18.0 GPM Each-11.5 PSI Each
9	18	32.5 GPM-37.3 PSI	22.5 GPM Each-17.9 PSI Each

RESIDENTIAL HORIZONTAL SIDEWALL—MODEL HEC-12



"K" FACTOR: 5.56 • **NOMINAL ORIFICE SIZE:** 1/2" • **THREAD SIZE:** 1/2" N.P.T. • **TEMPERATURE RATINGS:** 145°, 160°F (63°, 71°C) • **APPROVALS:** U.L. listed per N.F.P.A. 13—D • **SERVICE RATING:** 175 p.s.i.

MAXIMUM DEFLECTOR DISTANCE FROM CEILING	MAXIMUM WIDTH (FT)	MAXIMUM LENGTH (FT)	MAXIMUM DISTANCE FROM ADJACENT WALL (FT)	REQUIRED SPRINKLER DESIGN AREA AND DISCHARGE PRESSURE REQUIREMENTS ONE SPRINKLER	TWO OR MORE SPRINKLERS
4"-6"	12	12	6	27 GPM-23.6 PSI	19 GPM-11.7 PSI
	14	14	7	30 GPM-29.1 PSI	21 GPM-14.3 PSI

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FLOW AND PRESSURE REQUIREMENTS

As indicated in NFPA 13-D, water application rates and areas of coverage other than those specified in NFPA 13-D may be used with special sprinklers which have been listed for such specific conditions. Omega residential sprinklers have been so listed. Each requires a specific minimum available water flow rate and pressure in order to adequately protect a specified area of coverage, as follows:

ADDENDUM A

Model	Max. Distance From Any Wall	Maximum Spacing Between Sprinklers	Maximum Area of Coverage	Min. Flow Requirement Per Sprinkler		Min. Pressure Requirement At Sprinkler	
				One Spkr.	Two Spkrs.	One Spkr.	Two Spkrs.
R-1	6 ft.	12 ft.	144 sq. ft.	18 gpm	13 gpm	21.9 psi	11.4 psi
	7 ft.	14 ft.	196 sq. ft.	18 gpm	13 gpm	21.9 psi	11.4 psi
	8 ft.	16 ft.	256 sq. ft.	24 gpm	17 gpm	38.9 psi	19.5 psi
C-1	6 ft.	12 ft.	144 sq. ft.	25 gpm	18 gpm	22.1 psi	11.4 psi
	7 ft.	14 ft.	196 sq. ft.	30 gpm	21 gpm	31.8 psi	15.6 psi
EC-20	7 ft.	14 ft.	196 sq. ft.	23 gpm	16 gpm	18.7 psi	9.1 psi
	8 ft.	16 ft.	256 sq. ft.	26 gpm	18 gpm	23.9 psi	11.5 psi
	9 ft.	18 ft.	324 sq. ft.	32.5 gpm	22.5 gpm	37.3 psi	17.9 psi

Model	Max. Width of Coverage	Max. Length of Coverage	Maximum Distance from Adjacent Wall	Min. Flow Requirement Per Sprinkler		Min. Pressure Requirement At Sprinkler	
				One Spkr.	Two Spkrs.	One Spkr.	Two Spkrs.
HEC-12	12 ft.	12 ft.	6 ft.	27 gpm	19 gpm	23.6 psi	11.7 psi
	14 ft.	14 ft.	7 ft.	30 gpm	21 gpm	29.1 psi	14.3 psi

Thus, the spacing of these sprinklers is determined by characteristics of the water supply available to the sprinklers, and the number of design sprinklers. (See Chap. 4 in NFPA 13-D for a discussion of the number of design sprinklers.)

APPLICABILITY OF CSC RESIDENTIAL SPRINKLERS

Omega residential sprinklers are applicable only to:

- wet pipe sprinkler systems (see Chap. 5 in NFPA 13)
- occupancies where residential sprinklers are required or permitted by NFPA 13-D or NFPA 13
- at maximum service pressures of 175 psi.
- at maximum ambient temperatures of 110°F (for sprinklers rated at 145°F) and 125°F (for sprinklers rated at 160°F)
- where neither system piping nor the sprinklers will be exposed to freezing temperatures.

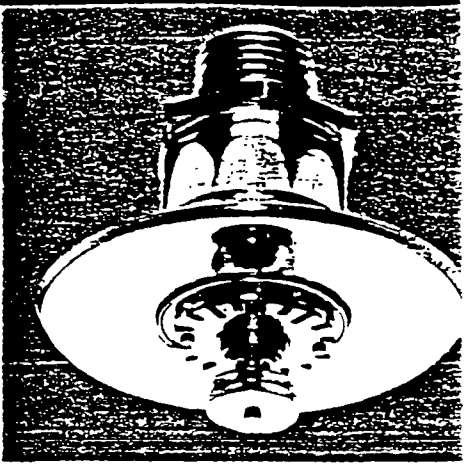
HYDRAULIC DESIGN

Omega residential sprinklers must be installed in a hydraulically designed piping system: a pipe schedule system is not applicable. This is because proper functioning of the sprinklers requires their being provided with at least the minimum flows and pressures specified above in "FLOW AND PRESSURE REQUIREMENTS".

Omega C-1A

Residential
Quick Response Commercial
Standard Commercial
Automatic Sprinkler

Manufactured by: Central Sprinkler Corporation
451 North Cannon Avenue, Lansdale, Pennsylvania 19446



1/2" Orifice Adjustable Pendent Automatic Sprinkler

Product Description

The Omega model C-1A Quick Response Commercial/Residential Pendent Automatic Sprinkler is a low profile, aesthetically pleasing, ceiling mounted sprinkler that offers a high degree of protection for human life. It operates five to six times faster than a standard sprinkler and features a spray pattern that has been shown to be effective in the control or extinguishment of commercial and residential fires.

The model C-1A incorporates a significant cost saving feature: a special escutcheon assembly that provides for 7/8" of field adjustment resulting in an easily accomplished, tight fit against the ceiling.

The Model C-1A carries a triple Listing* by Underwriters Laboratories for use as:

1. A Residential Sprinkler that qualifies for installation in residential occupancies in accordance with current NFPA 13D or NFPA 13 (160°F temperature rating only).
2. A Quick Response Commercial Sprinkler that qualifies for installation in accordance with current NFPA 13 (160 °F temperature rating only).
3. A Standard Commercial Sprinkler that qualifies for installation in accordance with current NFPA 13.

The model C-1A has a K factor of 5.56, a temperature rating of 160°F 71°C or 200°F/93°C and a maximum working pressure of 175 psi.

The model C-1A is available in two standard finishes. Its mating escutcheon plate is available in three standard finishes with additional special finishes available.

Operation: A fusible alloy pellet is compressed with a bearing disc into a copper housing by a ball plunger. Heat is absorbed by the heat collecting fins and conducted to the alloy pellet. At the rated temperature the alloy melts, causing the ball plunger to drop, freeing balls from the retaining groove. This movement allows system water pressure to force the orifice sealing mechanism and deflector assembly open. Water is then discharged in a designed flow pattern.

Technical Data

Model number: C-1A
Style: Pendent (adjustable)
Orifice size: 1/2"
K factor: 5.56
Thread size: 1/2" N.P.T.
Temperature rating:
  160°F/71°C
  200°F/93°C (not Listed for Residential or Quick Response)
Approvals: U.L., B.S. & A.
  (Cal. No. 375-75-SA)
Maximum working pressure: 175 psi
Factory hydro test: 500 psi
Standard finishes:
  Sprinkler: chrome, factory brass
  Escutcheon plate: chrome plated, brass plated, white
Length: 2 7/16"
Width: 1 1/4"
Adjustable range below ceiling:
  3/8" to 1 1/4"
Highest allowable ambient temperature:
  100°F/38°C for 160°F rating
  150°F 66°C for 200° F rating
Weight: 4.7 oz.

*For specific listing requirements see the appropriate information contained in this brochure.

0012957

AN OLD IDEA WITH A NEW TECHNOLOGY

by

JOHN A. VINIELLO
Manager, Residential Fire Protection

GRINNELL FIRE PROTECTION SYSTEMS COMPANY, INC.

0012958

AN OLD IDEA WITH A NEW TECHNOLOGY

I Historical Background

Automatic sprinkler systems have enjoyed an enviable record of protecting life and property for over one hundred years. Statistics demonstrate there has never been any multiple death fire in a completely sprinklered building where the system was properly operating.

According to National Fire Protection Association (NFPA) statistics, the only fatalities in fully sprinklered and properly supervised properties have been the result of explosions or flash fires. Self immolation by a person who was too young, too old, too intoxicated or too handicapped in some other way to protect himself properly, has been the cause of death. Unfortunately, the inadvertent closure of a valve controlling the water supply to the the sprinkler system has also rendered the system ineffective in some fire conditions.

During the mid 1970s, the National Commission on Fire Prevention and Control conducted exhaustive research in examining the fire problems in the United States. They published "America Burning" which concluded that this nation, a world leader in technological advancement, suffered from one of the highest death rates and injuries due to fire. As a result of the Commission's work, legislation was enacted in the Congress of the United States which created the U.S. Fire Administration. This Administration's objective was to reduce deaths from fire by 50% before the decade of the 1990s. Although large life loss fires, such as those occurring in hotels and motels, become national media events, statistics clearly show that the residential fire has been, and presently is, what we have characterized as the fire protection community's public enemy No. 1. From 1977 to 1981 the National Fire Protection Association (NFPA) reported that there was an average of 7,700 civilian fatalities annually attributed to fire. This would be comparable to having two 747's crash in midair each month. As one fire protection expert commented: "In the course of a normal lifetime, almost a 1/2 million people will die in the United States from fire."

II A New Technology

In cooperation with the U.S. Fire Administration, Factory Mutual Research Corporation conducted a series of fire tests during 1978 in an effort to study current sprinkler technology and its application to residential type fires. Factory Mutual concluded as a result of this research that the then available commercial/industrial type sprinkler devices were simply not adequate to protect against the type of fire loadings expected in residences. The commercial/industrial sprinklers were too slow in their operation and did not provide the high enough wall wetting pattern which was needed to cut off the perimeter fire which could be commonly expected in homes. Additional test

II A New Technology - Continued

programs, funded by the U.S. Fire Administration, in cooperation with the National Fire Protection Association and Factory Mutual, were conducted. These tests substantiated the initial research conducted at Factory Mutual and demonstrated, without question, the need for a sprinkler device with a faster response time and the capability of delivering water which provides wetting higher on the walls to help counter the perimeter fire which is common in residential fire scenarios. Grinnell Fire Protection Systems Company, Inc., in cooperating with these agencies, developed prototype sprinkler heads for these test programs.

The National Fire Protection Association established a subcommittee of N.F.P.A. 13, which developed a new residential standard for one- and two-family dwellings and mobile homes. In November of 1980, at the N.F.P.A. meeting in San Diego, N.F.P.A. 13D, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Mobile Homes, was adopted. This new standard, which was based on the results of the fire test program, called for only listed new residential sprinklers for installation in accordance with the criteria established by the N.F.P.A. 13D Committee. Underwriters Laboratories (U.L.) established a new manufacturing standard, U.L. 1626, which set very stringent sensitivity, water distribution, and fire test requirements for manufacturers seeking a listing for newly designed residential hardware. In May of 1981, Grinnell Fire Protection Systems Company, Inc. became the world's first sprinkler manufacturer to successfully pass all of the U.L. tests and obtain a listing for the world's first residential fire sprinkler.

An old idea, utilizing a new technology whose time had come, was now a reality.

III Rationale

N.F.P.A. #13D Sprinkler Systems, One- and Two-Family Dwellings and Mobile Homes (1980) is "intended to provide a method for those individuals wishing to install a sprinkler system for additional life safety and property protection. It is not the purpose of this standard to require the installation of an automatic sprinkler system."

Simply stated, "where" fire protection systems are required is generally covered in building and fire codes, or local ordinances. N.F.P.A. standards, on the other hand, outline the design criteria for "how" the system should be installed in order to protect against particular potential hazard. A subtle, but important difference. Since the present scope of application of N.F.P.A. #13D (1980) deals with the design installation of automatic sprinkler systems for one and two-family dwellings and mobile homes, any system design for occupancies

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III Rationale - Continued

which fall outside the scope of this standard should only be permitted with written authorization from the "authority having jurisdiction." Based on the research conducted in developing this new residential sprinkler technology, as well as fire tests and demonstrations coordinated by the U.S. Fire Administration and Factory Mutual Research Corporation, a number of "authorities having jurisdiction" are in the process of considering residential fire sprinkler ordinances. The concept of "access trade-offs", as well as "construction trade-offs" is gaining in popularity. As an example, such ordinances may include, but not be limited to, requiring the installation of residential fire protection systems in accordance with N.F.P.A. #13D (1980) in low rise, high density tyoe construction as a means of mitigating one or more of the following fire protection specifications.

Access Trade-offs

Without Residential Fire Protection	With Residential Fire Protection
Units must be within 5 minute response of nearest fire station	Waived
Units must not be located more than 150 feet from closest vehicular access way.	Waived
Standard street widths required	Reductions permitted
Street grade of 15% or greater not permitted	Waived
Must adhere to hydrant spacing requirements	Greater hydrant spacing permitted
Fire flow requirements must be met	50% reduction in required fire flow
Hazardous areas - 75 units for single means of ingress or egress	Number may increase
Nonhazardous areas - 150 units for single means of ingress or egress	Number may increase
Access for ladder trucks - 50' from rear of parking stalls to face of unit	Extended to 75' or 100'

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Access Trade Offs - Continued

When any portion of a building is in excess of 150' from a water supply, it may be required that on-site fire hydrants and mains capable of supplying the required fire flow be installed.	Waived

CONSTRUCTION TRADE-OFFS

Without Residential Fire Protection	With Residential Fire Protection	Savings/ Advantage*
Tenant separation walls must be made of 5/8" Type X Fire Rated Gypsum Wallboard.	Half-inch standard Gypsum Wallboard may be substituted.	$23.00 per 1,000 sq. ft.
5/8" Type X Rated Gypsum Wallboard and 3/4" plywood must be used in one-hour floor/ceiling assemblies.	Half-inch standard Gypsum Wallboard and 5/8" plywood may be substituted in floor/ceiling assemblies.	$55.00 per 1,000 sq. ft.
Fire stops are required in the attic at every unit.	Fire stops in attic required every 3,000 square feet.	$123.00 each fire stop.
Maximum tenant travel to a fire exit must not exceed 20 feet.	Exits may exceed the maximum required travel from a tenant with one exit may be exceeded by 15 feet for a maximum travel of 35 feet.	Design Freedom
Tenants may not travel by other tenants' doors unless those doors are 3/4-hour fire rated doors in 20 minute frames with 3 UL listed spring hinge closers.	Standard doors and frames with no closers may be used.	$111.70 each door.
Interior finish must be Class "A".	Interior finish may be Class "C" or better.	Design Freedom
One-hour rating on walls and doors of hazardous areas.	No one-hour rating of doors or walls of hazardous areas.	$23.00 per 1,000 sq. ft. (walls). $111.70 each door.

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Hazardous area must be one-hour rated walls with 3/4-hour rated doors with 3 UL spring hinge closers. (Hazardous areas are: common storage, common mech. rooms, etc.)	Standard 1/2 inch sheetrock and standard doors with no closers may be used.	$23.00 per 1,000 sq. ft. on walls. $55.00 per 1,000 sq. ft. on ceilings. $111.70 each door.
Every 6,000 square feet a four-hour masonry fire separation is required.	The fire rated separation would not be required until 10,000 square feet and after 8,000 square feet a two-hour separation would be permitted.	$8,345 each 4-hour wall. Note: Cost of 2-hour sheetrock wall-$750.
Buildings must be placed on property to not exceed 50' from paved parking area for aerial rescue operations.	Buildings allowed up to 125' from street or parking area.	Allows maximum use of site and landscaping.
There can be no windows within 15 feet of other tenants travel.	Windows may be placed anywhere desired.	Design Freedom

*Builder/Developer, Cobb County, Georgia. (1982 Dollars)

IV Housing Trends

America is facing a severe housing crisis. If the demographic demands of the fertile 50s are not met, this country will face, during the decade of the 80s, a housing shortage unparalleled in the annals of the residential construction industry. Because of rising construction costs, coupled with high interest rates, affordable housing is beyond the economic reach of the majority of our population. Many builders believe that the days of the "sprawling single family dwelling" are coming to an end. In an effort to make greater utilization of skyrocketing land costs, many builders/developers are turning to "high density" construction in the form of low-rise condominiums, townhouses, triplexes, four-plexes, and garden apartments. It is hoped that this type of residential construction will make housing more affordable and provide a salvation for a severely depressed housing industry. Unfortunately, the extra burdens that this type of construction is placing on local fire departments is becoming very real indeed.

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IV Housing Trends - Continued

It is well known that the tax reform legislation presently sweeping the country has caused substantive cutbacks in many municipal budgets. These fiscal constraints are dramatically affecting fire department funding in many cities and towns. Manpower reductions and the lack of ample funding for additional fire stations, new equipment and training programs has the potential of seriously hampering the fire fighting effectiveness in many municipalities; and high density type construction will not help the situation. Financially beleaguered fire departments simply do not have the necessary resources needed to fully protect these properties. As a result, many municipalities are turning to private fire protection in the form of residential fire sprinklers to supplement already strained public protection.

V Financial Motivations for Residential Fire Sprinkler Systems

In addition to access and construction trade-offs which are gaining popularity among the fire services, a number of financial inducements are being enacted which will provide financial motivation for individuals to install residential fire sprinkler systems.

Insurance Savings

Following the 1979 test program in Los Angeles, an Ad-hoc Committee composed of the insurance industry conducted a series of fire tests to consider the impact of residential sprinklers on fire losses in dwelling properties. Although it was acknowleged that the greatest benefit of residential fire sprinklers will be in the saving of lives and preventing injuries from fire, the major focus of this test program was on the single factor of determining the impact on property loss reduction.

Based on the results of this test program, it was the observation of the Ad-hoc Committee that residential fire sprinkler systems definitely had the ability to reduce claim payment expenses. The committee further recognized that an earlier (1977) I.S.O. discount was less than what seemed to be appropriate as a result of those tests.

Since 1977, the Insurance Services Office has had filings in many states providing a 5% discount on a total homeowner policy premium covering a dwelling with an approved and properly maintained sprinkler system that covers all areas of the insured structure. Their filings also allowed a 2% discount for a similar system that omits specified areas such as closets, attics and bathrooms.

After considering the report from the Ad-hoc Insurance Committee, and the U.S. Fire Administration's sprinkler comparison test program, the Homeowner's Committee of I.S.O. made a recommendation that could result in a tripling of the

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Insurance Savings - Continued

discount for residential sprinkler systems installed in accordance with N.F.P.A. 13D (1980). Discounts of up to 15% would be applied to the entire homeowner policy premium for single family residences protected in accordance with N.F.P.A. 13D (1980). Since a homeowner premium is multi-peril in nature, it is estimated that the fire protection portion of the premium usually accounts for 40% of the entire policy. A 15% discount applied to the total homeowner premium translates into a fire insurance discount of almost 37%.

Water Damage

It has been suggested that the installation of a residential fire sprinkler system in a home would cause an insurance company to penalize a homeowner because of the threat of water damage due to inadvertent sprinkler leakage. Insurance statistics from commercial underwriting departments of several large insurance companies demonstrate that sprinkler leakage is one of the most profitable lines of coverage that insurance carriers underwrite. The payment of claims for the inadvertent discharge of sprinklers is minimal considering the number of exposure units (large numbers of sprinkler installations in commercial/industrial properties) carriers underwrite. As a result of this excellent experience, the ISO recommendation of a 15% reduction on a total homeowner premium when a residence is protected with a system installed in accordance with N.F.P.A. 13D (1980), does not include a penalty for sprinkler leakage.

Since I.S.O. provides rate making advice for its subscribing membership, the implementation of these recommendations will depend on individual carriers. I.S.O. has proceeded with state filings with a number of Superintendents of Insurance and several adoptions of this credit have already taken place. (See Table I enclosed)

Real Estate Tax Reductions

On January 1, 1981, the State of Alaska enacted into law a significant piece of legislation which will impact dramatically the installation of sprinkler systems throughout the state.

The law provides that 2% of the assessed value of any structure would be exempt from taxation if the structure is protected with a fire protection system. The word "structure" is significant in the law since it also applies to homes.

In effect, if a home was assessed for $100,000, for purposes of taxation, the assessed value would be computed at $98,000, provided it had a fire protection system.

This law has received widespread attention, particularly among the fire services and a number of jurisdictions are studying its implications for potential adoption in other states. (Copy of law is included)

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TABLE I

ISO RECOMMENDED PREMIUM CREDITS
STATE ADOPTIONS*

Homeowners Insurance

Alabama
Alaska
Arizona
Arkansas
California
Colorado
Connecticut
Delaware
Georgia
Hawaii
Idaho
Illinois
Iowa
Kentucky
Maryland
Massachusetts
Michigan
Minnesota
Missouri
Montana
Nebraska
Nevada
New Mexico
New York
North Dakota
Ohio
Oklahoma
Oregon
Pennsylvania
South Carolina
South Dakota
Tennessee
Utah
Virginia
Washington
West Virginia
Wisconsin
Wyoming

Fire Dwelling Insurance

Arizona
Arkansas
California
Colorado
Connecticut
Georgia
Illinois
Kentucky
Maine
Maryland
Michigan
Missouri
Montana
New Hampshire
New Mexico
Ohio
Pennsylvania
Rhode Island
Tennessee
Virginia
Utah
West Virginia
Wisconsin
Wyoming

*As of January 1, 1983

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Homeowner Insurance

Insurance paid by an individual who owns and occupies a dwelling. The ISO recommendation would allow a total premium credit of up to 15% if the dwelling has complete sprinkler protection and smoke detectors are installed.

Fire Dwelling Insurance

A fire dwelling policy is normally issued to an individual who owns but does not occupy a dwelling. The ISO recommendation would allow a premium credit of up to 20% if the unit is completely sprinklered and smoke detectors are installed.

Mobile Home Supplement

Sometime in 1983 ISO will be recommending to its member companies additional credits for owners of mobile homes.

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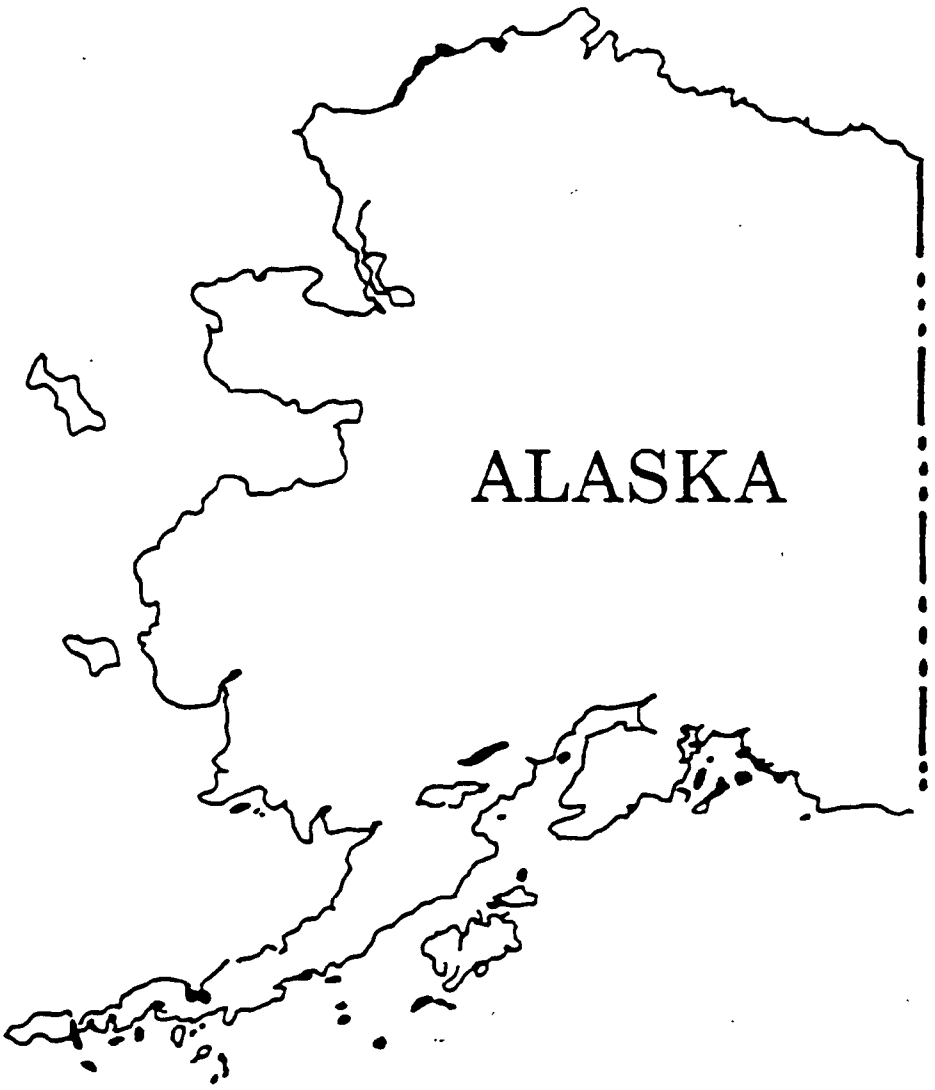


LEGISLATION AND MODEL RESOLUTION

0012968

Original Sponsors: Malone and Duncan Offered: 5/9/80

IN THE HOUSE BY THE RULES COMMITTEE

SENATE CS FOR CS FOR HOUSE BILL NO. 648
IN THE LEGISLATURE OF THE STATE OF ALASKA
ELEVENTH LEGISLATURE - SECOND SESSION
A BILL

For an Act entitled: "An Act relating to fire prevention."

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

*SECTION 1. AS 18.70 is amended by adding a new section to read:

Sec. 18.70.081. APPROVAL OF FIRE PROTECTION SYSTEMS. Before October 30 of each year the Department of Public Safety shall prepare and make available a list of approved fire protection systems to the Department of Community and Regional Affairs, the Department of Commerce and Economic Development, and the public.

*SECTION 2. AS 29.53.020(a) is amended by adding a new paragraph to read:

(7) real property to the extent and subject to the conditions provided in (j) of this section.

*SECTION 3. AS 29.53.020 is amended by adding a new subsection to read:

(j) Two percent of the assessed value of a structure is exempt from taxation if the structure contains a fire protection system approved under AS 18.70.081, in operating condition, and incorporated as a fixture or part of the structure. The exemption granted by this subsection is limited to

(1) an amount equal to two percent of the value of the structure based on the assessment for 1981, if the fire protection system is a fixture of the structure on January 1, 1981; or

(2) an amount equal to two percent of the value of the structure based on the assessment as of January 1 of the year immediately following the installation of the fire protection system if the fire protection system becomes a fixture of the structure after January 1, 1981.

***SECTION 4. AS 42.05.381 is amended by adding a new subsection to read:**

(d) A utility shall provide for a reduced fee or surcharge for standby water for fire protection systems approved under AS 18.70.081 which use hydraulic sprinklers.

***SECTION 5. AS 44.33.170 is amended by adding a new subsection to read:**

(b) Tourist attraction development matching money may also be obtained for the purpose of purchasing and installing a fire protection system approved under AS 18.70.081 for a building used or to be used for the purposes described in (a) of this section.

***SECTION 6. AS 45.95.020(a) is amended to read:**

(a) The commissioner shall, under regulations and policies adopted by him, make small business loans to acquire, finance or refinance or equip businesses, including farming equipment, fire protection systems approved under AS 18.70.081, mining and fishing, not exceeding $500,000. The loans shall be secured by acceptable collateral and may not exceed 75 percent of the appraised value of the collateral offered as security. The rate of interest may not exceed nine and one-half percent a year on the unpaid balance.

***SECTION 7. AS 45.95.020 is amended by adding a new subsection to read:**

(a) The commissioner may not disqualify an applicant for, or prejudice an applicant's priviledge to receive, a loan to purchase and install a fire protection system solely because of a loan already made to the applicant under this chapter.

New sprinkler system sparks interest in small-home fire protection

Next month, Grinnell Fire Protection Systems Company, Inc. will introduce the nation's first U.L. listed residential sprinkler. The product, according to a Grinnell spokesman, is the "first of a new generation of sprinklers".

It was designed to meet National Fire Protection Association (NFPA) standard 13D, which prescribes the installation and maintenance procedures for such systems in one- and two-family dwellings and mobile homes — and was developed over years of research sponsored by the Federal government.

Grim statistics clearly indicate a need for improved residential fire protection. In 1980, 5,446 civilians died as a result of residential fires; fires in one- and two-family homes accounted for 4,175 of those deaths. Although fatalities were down from 1979, according to Marion Cole at NFPA, the number of residential fires rose 5% over 1979. And property loss, estimated at over $3 billion last year, showed a 20% increase over the previous year.

A major drawback to getting popular acceptance for residential sprinklers: sprinkler head appearance. According to a study prepared by several organizations, home-owners seem to care more about esthetics than safety. And while Grinnell hasn't completely been able to overcome that snag, the new product has, according to Fire Marshall Gary Carmichael of San Clemente, California*, "taken all the benefits of a commercial system and fit them into residential needs."

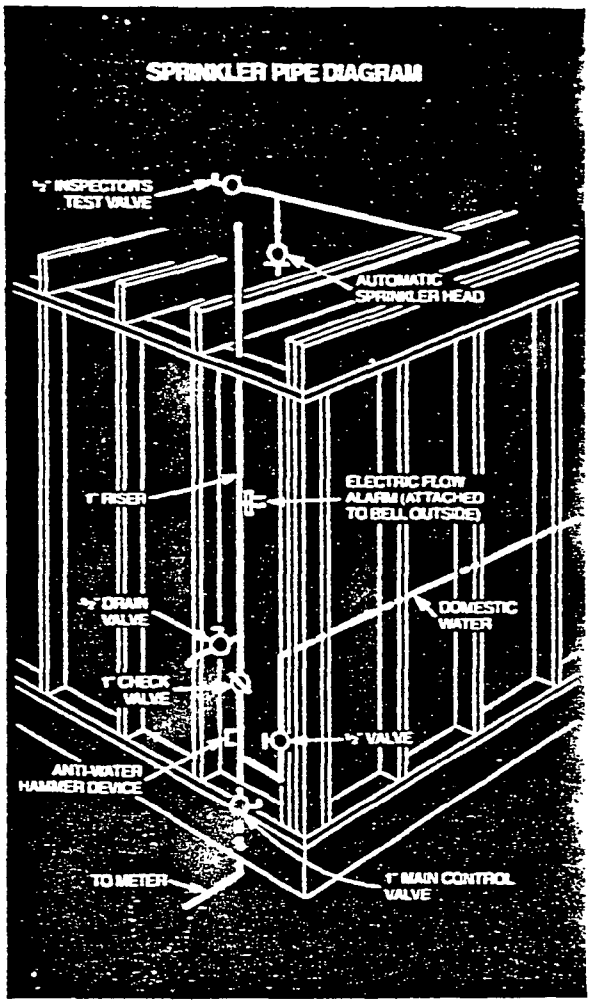
Sensitivity. A major obstacle, says Carmichael, was finding a head sensitive enough to extinguish flames before lethal toxic fumes build up, yet not so sensitive as to be affected by heat or smoke from stoves or cigarettes.

Recent technological developments now permit the new head to achieve the crucial balance between under- and over-sensitivity so that it reacts up to five times faster, than a commercial head, the manufacturer says.

Low Cost. A 2,000 square foot home, says the manufacturer, should be adequately served by a $1,700 to $2,000 system. Ideally, the system will be connected directly to domestic water supplies *(see diagram above right)*. Where that supply is insufficient, storage tanks can be installed in basements or elsewhere.

Esthetics. The head is small, and although it must be exposed to be effective, the manufacturer has developed as inconspicuous a unit as possible. Grinnell is working on other devices to improve the appearance.

Coverage. Each head covers a 144 square foot area. A 12'x12' room requires one head in the center of the ceiling; a 12'x24' space takes two heads set at specified distance from each other



Low Water Requirements. The system requires 18 gal./min. for one head, 26 gal./min. for two. The head distributes a fine spray in a pattern designed to extinguish "perimeter fires" — fires that occur on the walls. This type of fire is common in residential spaces.

Incentives for the Homebuilder. Fire Marshall Carmichael as well as others concerned with fire safety expect an increasing number of communities to require residential sprinklers in accordance with the recently revised standard from NFPA. Some communities are already making it advantageous by offering builders "access to trade-offs" — that is, allowing builders to increase density, to narrow streets, to build beyond the range of a fire station — if they install a residential sprinkler system

According to U S. Fire Administration's Harry Shaw, "as far as the solution to the residential fire problem is concerned, the residential sprinkler system, working off the domestic water supply, is probably the ultimate answer to residential fire protection."

For more information on the Grinnell fire sprinkler system, *circle* 200 *on the reader service card*. Also see the Literature section on Page 95 for agencies to contact for details and statistics

— JENNIFER A. WAGNER

*San Clemente, California is the first community in the U S to mandate residential sprinklers

Reprinted with permission of *Housing Magazine*
November 1981 issue

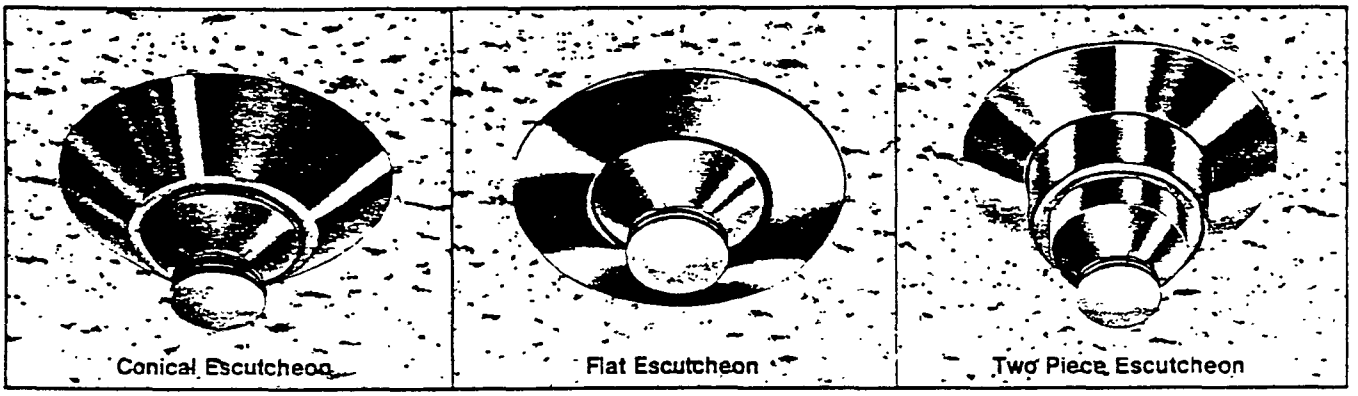
0012971

Reliable®

Model ZX-1 Mach 1 Quick Response Flush Pendent Horizontal Sidewall Automatic Sprinkler

Bulletin 134A

RTI 55.8 / 30.8 (FM)



Product Description

The Model ZX-1 Mach 1 Quick Response Sprinkler is a fusible solder pellet type automatic sprinkler.

This sprinkler has demonstrated a response time in laboratory tests which is five to ten times faster than standard response sprinklers.

This quick response enables Model ZX-1 Mach 1 Sprinklers to apply water to a fire much faster than standard response sprinklers of the same temperature rating.

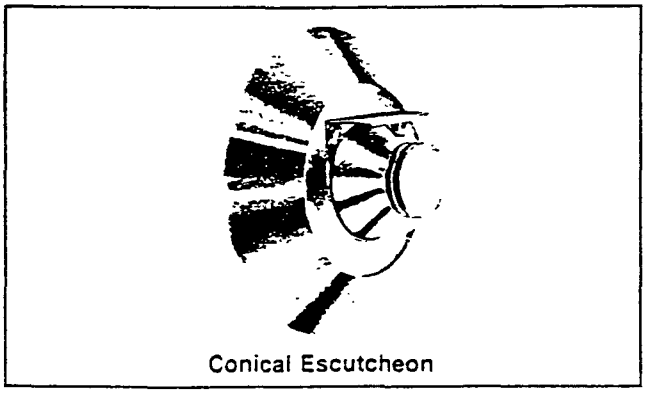
Modern architectural designs require sprinklers that provide not only the best fire protection but also an attractive appearance. The Model ZX-1 Mach 1 meets both criteria. The flush style of this sprinkler provides for an aesthetically pleasing installation by concealing all of the sprinkler operating parts with the exception of the finned sensor. Only when the solder pellet melts does the operating mechanism release from the sprinkler allowing the deflector to be extended for distributing the discharging water.

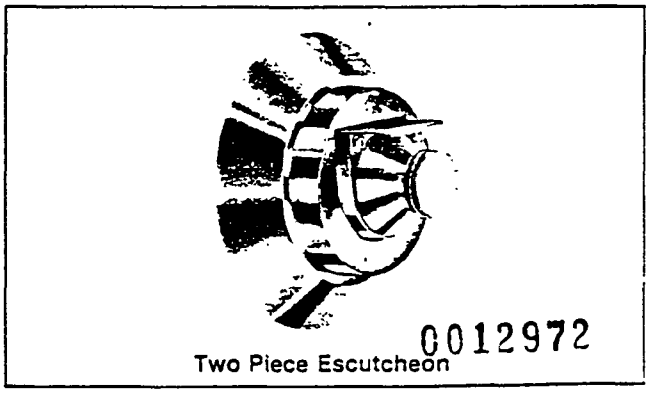
The Model ZX-1 Mach 1 Flush Pendent Sprinkler is to be ordered with one of three escutcheons—a conical, a flat or a two piece conical that is highly adjustable—all of which appeal to aesthetic concerns while resolving difficult ceiling installations.

The Model ZX-1 Mach 1 Horizontal Sidewall Sprinkler is to be ordered with either of two escutcheons—a conical or a two piece that is highly adjustable—both of which resolve aesthetic concerns.

Application and Installation

The Model ZX-1 Mach 1 is a UL Listed Quick Response Sprinkler for use with fixed fire protection systems: Wet, Dry, Deluge or Preaction. Care must be exercised that the orifice sizes, temperature ratings, and sprinkler spacings are in accordance with this bulletin and the latest published standards of the National Fire Protection Association or the approving authority having jurisdiction. Quick response sprinklers are intended for standard area coverage and standard water densities as specified in NFPA 13. Quick response sprinklers and standard response sprinklers should not be intermixed.


Conical Escutcheon


Two Piece Escutcheon

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These sprinklers must be installed with a Reliable Model ZX Sprinkler Wrench. Any other type of wrench may damage the sprinkler which is designed to allow wrenching with the shipping cap installed, thereby providing further sprinkler protection. Shipping caps should be removed only after ceilings and walls are finished and when escutcheons are being installed. When Model ZX-1 Mach 1 sprinklers are ordered, sprinklers and escutcheons are packaged separately. Model ZX escutcheons are the only escutcheons that can be used with these sprinklers. The use of any other escutcheon will void all approvals and negate all warranties. Also, each installed sprinkler must include one of the escutcheons.

Use care to avoid damaging the sprinklers before, during and after installation. Inspect all installed sprinklers to insure the sensor fins and the horizontal sidewall deflector shelf have not been damaged. Refer to Figs. 4 and 5 for the correct horizontal sidewall deflector shelf angles. Replace all sprinklers which have any sign of damage.

Maintenance

Model ZX-1 Mach 1 Quick Response Sprinklers should be inspected quarterly, and the sprinkler system maintained in accordance with NFPA-13A. Do not clean the sprinklers with soap and water, ammonia or other cleaning fluids. Remove any sprinkler which has been painted (other than factory applied) or damaged in any way. A stock of spare sprinklers should be maintained to allow quick replacement of damaged or operated sprinklers.

Model ZX-1 Mach 1 Quick Response Flush Pendent Automatic Sprinkler

U.S. Patent No. 4,766,961

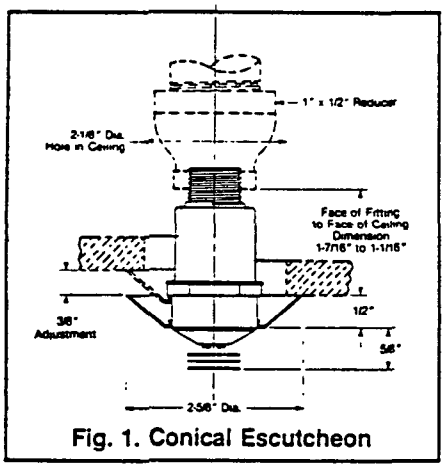


Fig. 1. Conical Escutcheon

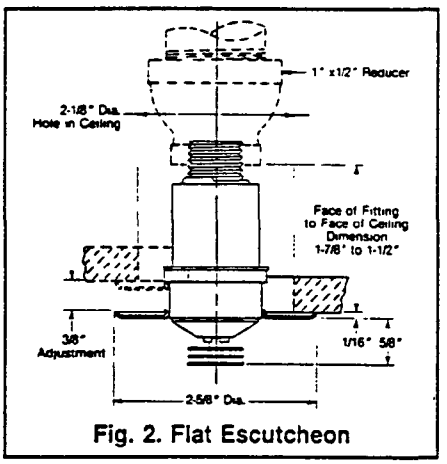


Fig. 2. Flat Escutcheon

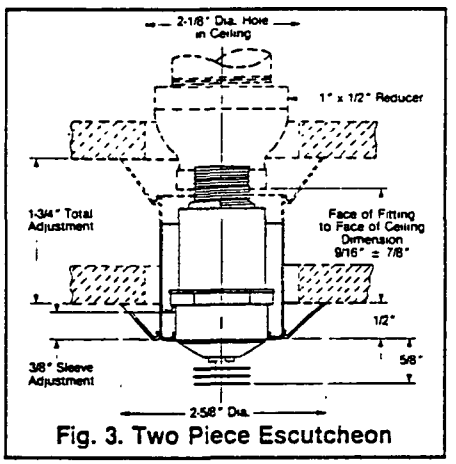


Fig. 3. Two Piece Escutcheon

Standard Finishes	
Sprinkler	**Escutcheon**
Bright Chrome Plated Bright Chrome/Enamel Painted (1) Bright Brass Plated Black Plated	Bright Chrome Plated Satin Chrome Plated Enamel Painted (1) Bright Brass Plated Black Plated

Approval Organizations

1. Underwriters Laboratories, Inc.
2. Underwriters' Laboratories of Canada
3. N.Y.C. B.S.&A. No. 587-75-SA

ULI Listing Category

Sprinklers Automatic & Open
Quick Response Sprinklers

ULI Guide Number

NIV

Technical Data

Classification	Sprinkler Rating		Maximum Ceiling Temperature	
	°F	°C	°F	°C
Ordinary	165	74	100	38

Installation Wrench

Model ZX Pendent Sprinkler Wrench

Sprinkler Markings

RASCO PEND ZX-1 QR
RASCO PEND ZX-1 QR 7/16

0012973

(1) White, Off White and Black are standard colors.

Note: Approvals are for ordinary hazard, except small orifice sprinklers which are limited to light hazard occupancies.

Installation Data

Sprinkler Type	"K" Factor		Sprinkler Height	Approval Organizations
	US	Metric		
Standard—Pendent				
1/2" Standard Orifice with 1/2" NPT Thread	5.4	77.8	2 29/32"	1,2,3
7/16" Small Orifice with 1/2" NPT Thread	4.1	59.0	2 29/32"	1,2,3

Reliable...For Complete Protection

Reliable offers a wide selection of sprinkler components. Following are some of the many precision-made Reliable products that guard life and property from fire around the clock.

- Automatic sprinklers
- Flush automatic sprinklers
- Recessed automatic sprinklers
- Concealed automatic sprinklers
- Adjustable automatic sprinklers
- Dry automatic sprinklers
- Intermediate level sprinklers
- Open sprinklers
- Spray nozzles
- Alarm valves
- Retarding chambers
- Dry pipe valves
- Accelerators for dry pipe valves
- Mechanical sprinkler alarms
- Electrical sprinkler alarm switches
- Water flow detectors
- Deluge valves
- Detector check valves
- Check valves
- Supertrol electrical system
- Sprinkler emergency cabinets
- Sprinkler wrenches
- Sprinkler escutcheons and guards
- Inspectors test connections
- Sight drains
- Ball drips and drum drips
- Control valve seals
- Air maintenance devices
- Air compressors
- Pressure gauges
- Identification signs
- Fire department connection

The equipment presented in this bulletin is to be installed in accordance with the latest published Standards of the National Fire Protection Association, Factory Mutual Research Corporation, or other similar organizations and also with the provisions of governmental codes or ordinances whenever applicable.

Reliable Sprinkler Devices, protecting life and property for over 70 years, are approved by all fire insurance and government agencies, and are installed and serviced by Reliable's chain of representatives.
Reliable representatives, located throughout the United States, Canada and foreign countries, have a life-time of experience and are as near as your telephone

Manufactured by

Reliable

The Reliable
Automatic Sprinkler
Co., Inc.
525 North MacQuesten Parkway
Mount Vernon, New York 10552
(914) 668-3470 Corporate Offices
(914) 592-1414 Sales Offices

(S) PRINTED IN U.S.A. 5/90

0012974

Reliable®

Model ZX-1 Quick Response Institutional Automatic Sprinkler

Product Description

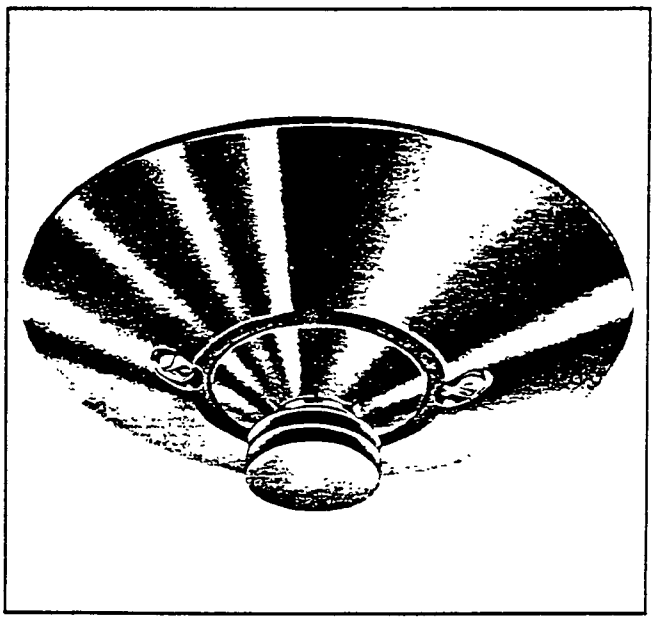
The Model ZX-1 Quick Response Institutional Sprinkler is a fusible solder pellet type of automatic sprinkler.

This sprinkler has demonstrated a response time in laboratory tests which is five to ten times faster than standard response sprinklers.

This quick response enables Model ZX-1 Mach 1 Institutional Sprinklers to apply water to a fire much sooner than standard response sprinklers of the same temperature rating. Only when the solder pellet melts does the operating mechanism release from the sprinkler allowing the deflector to be extended for distributing the discharging water.

Modern architectural designs require sprinklers that provide not only the best fire protection but also an attractive appearance. The Model ZX-1 meets both criteria. The flush style of this sprinkler provides for an aesthetically pleasing installation by concealing all of the sprinkler's operating parts with the exception of the finned sensor.

The Model ZX-1 Quick Response Institutional Sprinkler has been designed for use in correctional and mental facilities, and in any other type of institution where attempts by an occupant at self injury might involve the use of a fire sprinkler. The heat sensor is designed to release any type of suspended load that exceeds 80 lbs. The conical escutcheon assembly is firmly attached to the sprinkler body with tamper resistant fasteners.



Application and Installation

The Model ZX-1 is a UL Listed Quick Response Sprinkler for use with fixed fire protection systems: Wet, Dry, Deluge or Preaction. Care must be exercised that the orifice sizes, temperature ratings, and sprinkler spacings are in accordance with this bulletin and the latest published standards of the National Fire Protection Association or the approving authority having jurisdiction. Quick response sprinklers are intended for standard area coverage and standard water densities as specified in NFPA 13. Quick response sprinklers and standard response sprinklers should not be intermixed.

These sprinklers must be installed with a Reliable Model ZX Sprinkler Wrench. Any other type of wrench may damage the sprinkler which is designed to allow wrenching with the shipping cap installed, thereby providing further sprinkler protection. Shipping caps should be removed only after ceilings and walls are finished and when escutcheons are being installed. When Model ZX-1 sprinklers are ordered, sprinklers and escutcheons are packaged separately. Model ZX Institutional Escutcheons are the only escutcheons that can be used with these sprinklers. The use of any other escutcheon will void all approvals and negate all warranties. Also, each installed sprinkler must include one of the escutcheons.

Use care to avoid damaging the sprinklers before, during and after installation. Install them according to Caution Sheets CA-24 and -30, and inspect all installed sprinklers to insure the sensor fins have not been damaged. Replace all sprinklers which have any sign of damage.

0012975

The Reliable Automatic Sprinkler Co., Inc., 525 North MacQuesten Parkway, Mount Vernon, New York 10552

August 1, 1987

TERMS AND CONDITIONS OF SALE

General

All sales by Central shall be subject to the terms and conditions stated herein. The placement of orders with Central shall constitute acceptance of these terms and conditions. If buyers' purchase orders or confirmations are at a variance with the terms and conditions herein, they shall not be binding upon Central and Central's terms and conditions shall take precedence.

Prices

All selling prices are F.O.B. point of shipment.

Price Changes

Prices are subject to change without prior notice.

Late Charges

Domestic, including Canada and Puerto Rico — A charge of 1½% per month will be added to all amounts owed Central beyond terms. This represents 18% interest on an annual basis.
Overseas — Irrevocable Letter of Credit.

Minimum Charge

$50.00 per order.

Export Packing

An extra charge will be made for special packaging in the amount of 1% of the cost of the goods being shipped for air and ocean shipments. If it is required that we fully crate a shipment at customer's request, the charge for this crating will be 3% of the cost of the goods being shipped.

Special Handling & Packaging

An extra charge may be made for special handling and packaging.

Special Terms

Special material orders and made-to-order products may not be cancelled unless agreed to by Central in writing, and upon agreement for compensation for work already performed.

Method of Shipment

Unless shipment method is designated by the Buyer, Central will make this selection at Buyer's risk.

Return Shipments

There shall be no credit given for material returned without written authorization. Requests for such returns shall include the date and invoice number of the original purchase. Returns will be credited for the amount of the purchase price less 20% for handling, inspection, and retesting provided the goods are in resaleable condition. Returns must be shipped freight prepaid. Omega's, dry pendents, and dry horizontal sidewall sprinklers are non-returnable. Materials purchased for you from other manufacturers are subject to their return policy terms.

Liability

Shipping or delivery dates are approximate only. Central assumes no penalty or liability for delays under any circumstances.

Warranty

Central manufactured products are warranted against defects in material and workmanship solely to original purchasers from Central. This warranty will continue for a period of one year from the shipping date. Materials found to be defective by Central shall be repaired or replaced at Central's option. *Central will not be responsible for labor charges or consequential expenses or damages incurred as a result of defective products.*

This warranty is expressly made in lieu of any and all other warranties, expressed or implied, including the warranties of merchantability and fitness.

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CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION
1998 MAY 20 P 4:52

U.S. CONSUMER PRODUCT SAFETY COMMISSION
WASHINGTON, D.C. 20207-0001

OFFICE OF COMPLIANCE
Legal Division

Deborah S. Orlove
Trial Attorney
Tel: 301-504-0626 ext. 1347
Fax: 301-504-0359

May 20, 1998

VIA TELECOPIER AND OVERNIGHT EXPRESS

J. Gordon Cooney, Jr., Esq.
Thomas P. Hogan, Jr., Esq.
Emily J. Lawrence, Esq.
MORGAN, LEWIS & BOCKIUS LLP
2000 One Logan Square
Philadelphia, PA 19103

Re: ***In the Matter of Central Sprinkler Corp. and Central Sprinkler Co.*, CPSC Docket No. 98-2**
Complaint Counsel's Responses to Respondents' Interrogatories; Complaint Counsel's Responses to Respondents' First Request for Production of Documents

Dear Counsel:

Pursuant to the parties' continuing duty to supplement discovery responses as mandated by 16 C.F.R. § 1025.31(f), enclosed please find a supplemental response to Respondents' Interrogatories, as well as a package of documents responsive to Respondents' First Request for Production of Documents.

With respect to the documents, Bates pages 11769 - 11919, and 12157 - 12170 are or may be responsive to Request Nos. 3, 4, 9, 12, 14, 38, 40, 44, 45 and 60, and may also be responsive to Respondents' Interrogatory No. 122. Bates pages 11920 - 12156, and 12363 are or may be responsive to Request Nos. 3, 4, 9, 12, 14, 38, 41, 44, 45 and 60, and may also be responsive to Respondents' Interrogatory No. 123. Bates pages 12171 - 12361 are or may be responsive to Request Nos. 3, 5, 7, 12, 14, 15, and may also contain information responsive to, among others, Request Nos. 9, 23, 24, 25 and 27, and may also be responsive to Respondents' Interrogatory No. 122. Bates page 12362 is or may be responsive to Request Nos. 3, 5, 7, 12 and 41, and Respondents' Interrogatory No. 123. Bates pages 12364 - 12430, and pages 12438 - 12450 are or may be responsive to Request Nos. 3, 4, 5, 7, 9, 14, 15, 23, 37, 38, 40, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 61 and 69, and may also be responsive to Respondents' Interrogatory No. 119. Please note that portions of the documents including consumer names, addresses, and telephone numbers have been redacted in accordance with 16 C.F.R. § 1015.17 and 15 U.S.C. § 2074(c). Bates pages 12431 - 12437, and 12451 - 12456

are or may be responsive to Request Nos. 3, 4, 5, 7, 9, 14, 21, 22, 25, 26, 27, 37, 39, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 57, 58, 68, 69 and 70, and may also be responsive to Respondents' Interrogatory No. 120. Bates pages 12457 - 12479 are or may be responsive to Request Nos. 3, 7, 14, 15, 38, 40, 46, 47, 48, 49, 50, 51, 52, 53, 61, 62 and 69, and may also be responsive to, among others, Respondents' Interrogatories 46, 51, 52, 53 - 73, 74, 76, 77, 88, 89 and 118. Please be advised that all documents are provided without waiving objections stated in Complaint Counsel's Responses to Respondents' First Set of Interrogatories and Complaint Counsel's Responses to Respondents' First Request for Production of Documents.

Sincerely,

Deborah S. Orlove

Deborah S. Orlove, Esq.
Complaint Counsel

cc: The Honorable William B. Moran
Sayde Dunn, Secretary, Consumer Product Safety Commission
Michael F. Healy, Esq.
John C. Fenningham, Esq.

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OFC OF THE SECRETARY
FREEDOM OF INFORMATION
1998 MAY 22 P 5:31

U.S. CONSUMER PRODUCT SAFETY COMMISSION
WASHINGTON, D.C. 20207-0001

OFFICE OF COMPLIANCE
Legal Division

Deborah S. Orlove
Trial Attorney
Tel: 301-504-0626 ext. 1347
Fax: 301-504-0359

May 22, 1998

VIA OVERNIGHT EXPRESS

J. Gordon Cooney, Jr., Esq.
Thomas P. Hogan, Jr., Esq.
Emily J. Lawrence, Esq.
MORGAN, LEWIS & BOCKIUS LLP
2000 One Logan Square
Philadelphia, PA 19103

Re: ***In the Matter of Central Sprinkler Corp. and Central Sprinkler Co.*, CPSC Docket No. 98-2**
Complaint Counsel's Responses to Respondents' Interrogatories; Complaint Counsel's Responses to Respondents' First Request for Production of Documents

Dear Counsel:

Pursuant to the parties' continuing duty to supplement discovery responses as mandated by 16 C.F.R. § 1025.31(f), enclosed please find a second supplemental response to Respondents' Interrogatories, as well as an additional package of documents responsive to Respondents' First Request for Production of Documents.

With respect to the documents, Bates pages 12480 - 12527, 12537 - 12540, 12555 - 12573, 12598 - 12666, 12667 - 12809, 12834 - 12849, and 12853 - 12859 are or may be responsive to Request Nos. 3, 4, 5, 7, 9, 14, 15, 23, 37, 38, 40, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 61 and 69. Bates pages 12529 - 12535, 12818 - 12833, and 12860 - 12861 are or may be responsive to Request Nos. 3, 4, 5, 7, 9, 14, 21, 22, 25, 26, 27, 37, 39, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 57, 58, 68, 69 and 70, and may also be responsive to Respondents' Interrogatory Nos. 114 and 120. Bates pages 12549 - 12554 are or may be responsive to Request Nos. 3, 4, 5, 7, 9, 14, 15, 19, 20, 31, 44, 46, 50, 51, and 57. Bates pages 12551 - 12552 may also be responsive to Request No. 58. Bates pages 12810 - 12817, and Bates page 12902 (which belongs between Bates pages 12814 and 12815, and has been so placed, as it was mistakenly not initially Bates-stamped), and Bates pages 12890 - 12900 are or may be responsive to Request Nos. 3, 4, 9, 12, 14, 38, 40, 44, 45 and 60, and may also be responsive to Respondents' Interrogatory Nos. 79 and 121. Bates pages 12574 - 12597 are or may be responsive to Request Nos. 3, 4, 9, 12, 14, 38, 40, 44, 45 and 60, and may also be

responsive to Respondents' Interrogatory No. 122. Bates pages 12536, 12541 - 12548, and 12850 - 12851 are or may be responsive to, among other Requests, Request Nos. 3, 4, 5, 6, 9, 12, 14, 15, 31, and 56. Bates page 12528 is or may be responsive to Request Nos. 3, 7, 14, 15, 38, 40, 46, 47, 48, 49, 50, 51, 52, 53, 61, 62 and 69, and may also be responsive to, among others, Respondents' Interrogatories 46, 51, 52, 53 - 73, 74, 76, 77, 88, 89 and 118. Bates pages 12852, 12862 - 12889, and 12901 are or may be responsive to Request Nos. 3, 4, 9, 12, 14, 38, 41, 44, 45 and 60, and may also be responsive to Respondents' Interrogatory No. 123. Bates page 12901 may also be responsive to Respondents' Request No. 16. Please be advised that all documents are provided without waiving objections stated in Complaint Counsel's Responses to Respondents' First Set of Interrogatories and Complaint Counsel's Responses to Respondents' First Request for Production of Documents.

Sincerely,

Deborah S. Orlove, Esq.
Complaint Counsel

cc: The Honorable William B. Moran
Sayde Dunn, Secretary, Consumer Product Safety Commission
Michael F. Healy, Esq.
John C. Fenningham, Esq.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

September 22, 1998

OFFICE OF
THE ADMINISTRATIVE
LAW JUDGES

BY REGULAR MAIL AND FACSIMILE
Sadye E. Dunn, Secretary
U.S. Consumer Product Safety Commission
Office of the Secretary
4330 East West Highway, Building 4340
Bethesda, Maryland 20814

Re: In the Matter of Central Sprinkler Corp., and Central Sprinkler Co.
Docket No. CPSC 98-2

Dear Ms. Dunn:

This is in response to your inquiry of September 21, 1998, regarding documents pertaining to Underwriters' Laboratories ("UL") and a request for information under the Freedom of Information Act, 5 U.S.C. § 552.

Release of the UL documents to the public record first requires the issuance of an Order. On August 5, 1998, I issued the first of five temporary stays of these proceedings. In my view, a stay of the proceedings affects all aspects of the case, including the issuance of an Order directing release of UL (and other) documents to the public record.

I am on record, with my most recent Order granting a stay to September 29, 1998, that further extensions will be disfavored. Please be assured that should settlement not be reached and proceedings resume, an Order pertaining to the UL (and other) documents will be issued expeditiously.

Sincerely,

William B. Moran

William B. Moran
United States Administrative Law Judge

WBM:ebm
cc: Counsel for Complaint (by regular mail)
Counsel for Respondent (by regular mail)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF
THE ADMINISTRATIVE
LAW JUDGES

October 5, 1998

BY REGULAR MAIL AND FACSIMILE
Sadye E. Dunn, Secretary
U.S. Consumer Product Safety Commission
Office of the Secretary
4330 East West Highway, Building 4340
Bethesda, Maryland 20814

Re: In the Matter of Central Sprinkler Corp., and Central Sprinkler Co.
Docket No. CPSC 98-2

Dear Ms. Dunn:

Enclosed is my Order, which was also sent via facsimile to you this date. Please serve this Order to all parties.

Sincerely,

William B. Moran

William B. Moran
United States Administrative Law Judge

WBM:ebm
Enclosure

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UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETAR
. FREEDOM OF INFORMATION

1998 JUN 23 P 4:41

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents.	)	

COMPLAINT COUNSEL'S NOTICE OF *IN CAMERA* SUBMISSION OF ADDITIONAL INFORMATION IN SUPPORT OF ITS SECOND MOTION FOR PROTECTIVE ORDER

Complaint Counsel hereby files notice of its submission of additional information in support of its Second Motion for Protective Order, pursuant to 16 C.F.R. § 1025.31, 16 C.F.R. § 1025.45, and the Presiding Officer's June 16, 1998 Order Regarding Complaint Counsel's Second Motion For Protective Order and *In Camera* Submission.

DATED: 6/23/98

Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.
Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, Maryland 20814
301-504-0626

dso/notserv.mot

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, **COMPLAINT COUNSEL'S NOTICE OF *IN CAMERA* SUBMISSION OF ADDITIONAL INFORMATION IN SUPPORT OF ITS SECOND MOTION FOR PROTECTIVE ORDER** was filed with the Secretary of the Commission, and deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

J. Gordon Cooney, Jr., Esq.
Thomas P. Hogan, Jr., Esq.
Emily J. Lawrence, Esq.
MORGAN, LEWIS & BOCKIUS LLP
2000 One Logan Square
Philadelphia, PA 19103
(215) 963-5000
fax (215) 963-5299

Michael F. Healy, Esq.
MORGAN, LEWIS & BOCKIUS LLP
1800 M Street, NW
Washington, DC 20036-5869
(202) 467-7000
fax (202) 467-7176

John C. Fenningham, Esq.
CORR, STEVENS & FENNINGHAM
Five Neshaminy Interplex, Suite 315
Trevose, PA 19053
(215) 639-4070
fax (215) 639-8995

Attorneys for Central Sprinkler Corporation and Central Sprinkler Company

The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
401 M St., S.W.
Mail Code 1900 L
Washington, DC 20460
fax (202) 565-0044

The *In Camera* submission was forwarded to the Presiding Officer only.

Signed: Dawn Bern

Dated: 6/23/98

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

OFFICE OF THE SECRETARY
FREEDOM OF INFORMATION

1998 JUL -7 P 4:05

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents.	)	

COMPLAINT COUNSEL'S NOTICE OF SERVICE OF SIXTH SET OF SUPPLEMENTAL DOCUMENTS IN RESPONSE TO RESPONDENTS' FIRST INTERROGATORIES AND FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS

Pursuant to its continuing duty to supplement discovery responses as mandated by 16 C.F.R. § 1025.31(f), Complaint Counsel hereby provides the following supplemental documents in response to Respondents' First Interrogatories and First Request for Production of Documents and Things. The Documents consist of five X Ray pictures (Bates pages 0013817 - 0013821) and one X Ray film (Bates page 0013822) that are or may be responsive to Respondents' Interrogatory Nos. 124, 126 and/or 127, as well as Respondents' Request for Production of Documents Nos. 8, 13, 14, 23, 24, 25, 27, 28, 36, 44, 46, 47, 48, 49, 50, 51, 52 and/or 57.

DATED: July 7, 1998

Deborah S. Orlove

Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.
Complaint Counsel
United States Consumer Product Safety Commission

Office of Compliance
4330 East West Highway
Bethesda, Maryland 20814
301-504-0626

supp6.doc

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, **COMPLAINT COUNSEL'S NOTICE OF SERVICE OF SIXTH SET OF SUPPLEMENTAL DOCUMENTS IN RESPONSE TO RESPONDENTS' FIRST INTERROGATORIES AND FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS** was filed with the Secretary of the Commission, and deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

J. Gordon Cooney, Jr., Esq.
Thomas P. Hogan, Jr., Esq.
Emily J. Lawrence, Esq.
MORGAN, LEWIS & BOCKIUS LLP
2000 One Logan Square
Philadelphia, PA 19103
(215) 963-5000
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Michael F. Healy, Esq.
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(202) 467-7000
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John C. Fenningham, Esq.
CORR, STEVENS & FENNINGHAM
Five Neshaminy Interplex, Suite 315
Trevose, PA 19053
(215) 639-4070
fax (215) 639-8995

Attorneys for Central Sprinkler Corporation and
Central Sprinkler Company

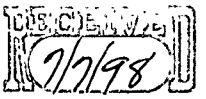
The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
401 M St., S.W.
Mail Code 1900 L
Washington, DC 20460
fax (202) 565-0044

The documents at issue were hand-delivered to the Secretary of the Commission on this day (with photocopy of X Ray Film, Bates page 0013822 only), and forwarded via certified mail to the Presiding Officer (with photocopy of X Ray Film, Bates page 0013822 only) and, pursuant to Respondents' instructions, to Respondents via courier to the attention of Kathleen Sanzo, Esq. at the office of Michael F. Healy, Esq., above.

Dated: July 7, 1998

Signed: Deborah S. Olwine

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION



In the Matter of	)	
	)	
CENTRAL SPRINKLER CORP.,	)	
	)	
and	)	**CPSC Docket No. 98-2**
	)	
CENTRAL SPRINKLER CO.,	)	
	)	
Respondents	)	

ORDER REGARDING FIRST PREHEARING CONFERENCE

The First Prehearing Conference ("First Conference") in this matter was held on June 16, 1998. This Order relates to issues raised during the First Conference.

1. **Other sprinkler systems and establishment of a Section 15 violation.**

Central Sprinkler Corp. and Central Sprinkler Co. ("Respondents" or "Central") asserted that in order to establish a Section 15 (15 U.S.C. § 2064) violation under the Consumer Product Safety Act ("CPSA"), Complaint Counsel must show not only that Omega Sprinklers ("Omega" or "Omegas") fail at a particular, but yet to be determined, rate but also that such rate is greater than the rate of comparable competitive sprinklers in the same kind of environment. Thus, Central asserts that the failure rate (in the field or under laboratory testing) of its sprinklers must be judged by "reference to what other sprinklers would do under . . . similar circumstances." Tr. 8.

It is the Court's view that such a standard would create several sub-trials and, attendant with such an approach, expand the number of parties from Central to the entire sprinkler industry. Not only would this be unwieldy, it also would be irrelevant to the issues here. Other

sprinkler systems may or may not present a substantial product hazard, but such determinations are appropriate only for another day in the wake of some other possible investigations, if they are ever warranted and after they occur.

In short, issues pertaining to other sprinkler systems are speculative and a distraction from the matter at hand. This case is very simply about Central's Omega sprinklers and only about them. For the same reasons, Central will not be permitted to introduce evidence in its defense that its sprinklers fail no more often than those of other manufacturers. Accordingly, the Court will not permit evidence pertaining to what other sprinkler systems may or may not do, their failure rates, etc.[1]

2. **Central's non-litigation related remediation efforts.**

At the First Conference, the Court alluded to Central's remedial and testing program, noting that such a program carries with it a possible implication that there is something wrong with Omegas. It was observed that companies do not undertake remediation programs when there is nothing wrong with their product.[2] While a manufacturer may undertake an "education program" to dispel concerns and misconceptions, a "remediation program" involves much more. Respondent suggests that it is being a responsible "proactive" manufacturer and no inference should be drawn from its actions.

The Court appreciates that *in the context of specific litigation*, efforts at remediation may

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[1] Should Central wish to argue these points further it may file a motion for reconsideration within thirty (30) days of this Order.

[2] The Court assumes that Complaint Counsel has inquired in detail through discovery about Central's remediation program.

not be considered in determining liability. However, a separate question is the extent to which it is appropriate and fair for the Court to consider Central's remediation program to establish a Section 15 violation if such remediation occurs when there is no litigation. The parties should specifically address the attendant public policy aspects of considering such non-litigation related remediation efforts and direct the Court to applicable precedent.

Simultaneous briefing on this issue shall be submitted by September 30, 1998.

3. **Respondent's Motion for Reconsideration of my May 15, 1998, Order regarding jurisdiction and certification for interlocutory review.**

During the May 29, 1998, conference call, I informed the parties that I had reconsidered my May 15th Order and reaffirmed that the Consumer Product Safety Act applies to the sprinklers in issue. At the First Conference, I denied certification for interlocutory review, finding that granting such review would not materially advance the ultimate termination of this litigation as the Consumer Product Safety Commission has already considered the issue of jurisdiction in voting to issue the Complaint. In addition, the General Counsel's office which advised the Commission on the issue of jurisdiction originally would again be advising it.[3] Finally, and independent of this basis, I noted that Complaint Counsel intends to provide evidence that Omegas are/have been installed in residences, including apartments. Thus, at a minimum,[4] it cannot be reasonably argued that the Consumer Product Safety Act does not apply

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[3] Complaint Counsel explained at the First Conference that the General Counsel is shielded from Complaint Counsel. Thus, Complaint Counsel would be filing a brief before the Commission and the General Counsel again would be advising the Commission.

[4] This observation should not be interpreted as a retrenchment, in any manner, from the scope of my original Order upholding jurisdiction.

to such sprinklers. Central, to some degree, appears to concede at least this much, as it presented in its brief an alternative limited jurisdiction argument confined to residences.

4. **Factory Mutual Research Corporation's ("FMRC") request to participate as a non-party.**

Neither Central nor Complaint Counsel object to FMRC's request to participate as a non-party. Accordingly, FMRC's request is GRANTED. However, FMRC is directed to disclose all communications, oral or written, that it has had in the past, currently or has in the future to the other party, relating to the matters in issue. Thus, within seven (7) days of this Order, any communications between FMRC and Central are to be disclosed to Complaint Counsel and any communications between FMRC and Complaint Counsel are to be disclosed to Central. As indicated, this is a continuing obligation for FMRC.

5. **Establishment of a *prima facie* case.**

As stated in the First Conference, Complaint Counsel is not obligated to establish the cause of the alleged defect(s) with the Omegas. Section 15 makes clear that what must be shown is the presence of "a product defect which (because of the pattern of defect, the number of defective products distributed in commerce, the severity of the risk or otherwise) creates a substantial risk of injury to the public." Complaint Counsel is obligated to show that the Omegas in issue have a substantial defect which occurs in a significant percentage of the sprinklers. Complaint Counsel is directed to brief the issue of the showing necessary to establish a *prima facie* case, including its opinion of the percentage of Omegas which must be shown to be defective. The brief shall be filed within thirty (30) days of this Order. Thereafter, Central shall file its reply. Should Complaint Counsel also intend to introduce evidence of the alleged *cause* of

the defect(s), Central is entitled to be so informed. Similarly, should Complaint Counsel intend to assert that any alleged instances of Omega's non-activation in fires is attributable to Omega defect(s), Respondent is entitled to know this.

On the other hand, the Court ruled and reaffirms here that the absence of personal injuries is not probative of whether Omegas have a substantial defect.

6. **The adequacy of Central's proposed remediation plan.**

At the First Conference, the Court rejected Central's suggested approach that the adequacy of its remediation plan be considered first. The Court affirms that the hearing will proceed first with evidence regarding whether or not the the Omegas present a substantial product hazard, with the second phase (assuming sufficient evidence is presented in the first phase) addressing the appropriate remedy.

While counsel for Central has asked that briefing be permitted by the Court to consider having the hearing begin by addressing the remediation issue first, this request is DENIED. The statute envisions determination of a defect first and remedy second. This makes sense, absent a complete stipulation by the parties, as the adequacy of the remedy may hinge upon the evidence presented and the magnitude of the problem, assuming one is shown. Thus, evaluation of whether a "full and complete remedy" has been provided may not be adequately assessed until after the evidence is produced.

Discovery Issues

At the time of the First Conference, Central had yet to deliver some 500,000 pages of documents (alternatively described as "some 400 boxes" of documents) to Complaint Counsel.

Central wanted Complaint Counsel to sign its confidentiality agreement, an agreement which would severely limit the public record, before providing the documents.

The Court ordered that all of the documents be delivered to Complaint Counsel by June 18, 1998, followed by a **"complete index similar to the index that Complaint Counsel has provided to Central"** . . . with the first 100 boxes due on June 26 and the remaining 300 boxes and indexes due by July 3, 1998. The terms of the confidentiality order set forth in my June 3, 1998, Order at pages 5 and 6 were made applicable to Complaint Counsel. Central shall be informed prior to the disclosure of these documents to consultants for Complaint Counsel and have an opportunity to object to disclosure to those documents on grounds such as whether they would reveal trade secrets to a competitor.

As to the public record itself, the Court agrees with the general principle that the public record should be as open as possible, save for legitimate claims of confidentiality. The Court directed that, prior to presenting any documents for resolution of disputes, the parties are to confer in order to determine which documents can, by agreement, be entered into the public record, leaving as a remainder only those documents over which there is a *legitimate* dispute for inclusion in the public record. As to those documents which may remain in dispute, Central is directed to provide very specific reasoning as to why they should be shielded from the public record, in the same manner as the June 3rd Order to Underwriters Laboratory and Factory Mutual Research Corporation. This means that each item attempted to be shielded, line by line, must be supported by substantial reasons, and as more particularly set forth in that June 3rd Order at pages 4 and 5.

Witnesses

While the parties' witness list is evolving, both sides were directed to identify to the other those fact witnesses presently known, other than those witnesses covered under some privilege, who do not need to be identified yet. Any witnesses that either side feels need not be disclosed to the other side should be identified to the Court by an *in camera* motion, which submission completely sets forth the grounds for withholding the witnesses' identification at this time.

Simultaneous Disclosures

The Court rejected Central's suggestion that there be a staggered disclosure of witnesses and documents and directed that these disclosures be simultaneous. The parties agreed to disclose fact witnesses, identifying anyone who is knowledgeable about the case.

Discovery Schedule

The Court, after considering the parties proposed discovery schedules, adopted that proposed by Complaint Counsel, as modified by the particular orders made during the First Conference.

Hearing Location and Witnesses

At the First Conference the Court raised the possibility of accommodating both parties with their respective preferred hearing location, with the first phase being conducted in Washington, D.C. and the second being conducted in Philadelphia, Pennsylvania. The parties are directed to provide the Court by November 6, 1998, their updated witness list, indicating where

the witnesses are located, and an estimation of the time needed for direct testimony in order that the Court may issue an Order directing the hearing dates and locations.

William B. Moran

William B. Moran
United States Administrative Law Judge

Dated: July 7, 1998
Washington, D.C.

In the Matter of Central Sprinkler Corp. and Central Sprinkler Co., Respondents - CPSC Docket No. 98-2

CERTIFICATE OF SERVICE

I hereby certify that the foregoing **Order Regarding First Prehearing Conference**, dated July 7, 1998, was sent in the manner indicated to the addressees listed below.

By telefacsimile and Regular Mail to:
Respondents

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Thomas P. Hogan, Esquire
Emily J. Lawrence, Esquire
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Michael F. Healy, Esquire
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John C. Fenningham, Esquire
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Factory Mutual Research Corporation

John N. Love, Esqsuire
Alan R. Miller
Rosemary Connolly
Factory Mutual Research Corporation
222 Berkeley Street, Suite 2200
Boston, MA 02116-3748

By hand delivery to:
Complaint Counsel

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In the Matter of Central Sprinkler Corp. and Central Sprinkler Co., Respondents - CPSC Docket No. 98-2

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Bethesda, Maryland 20814

Sadye E. Dunn, Secretary
Consumer Product Safety Commissiosn

Date: July 8, 1998

RECEIVED 7/8/98

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
	)	
CENTRAL SPRINKLER CORP.,	)	
	)	
and	)	**CPSC Docket No. 98-2**
	)	
CENTRAL SPRINKLER CO.,	)	
	)	
Respondents	)	

ORDER DIRECTING REPLIES

Pending before this Court are two matters. The first is Consumer Product Safety Commission's ("Complaint Counsel") Motion to Compel Answers to Interrogatories and Central Sprinkler Corp. and Central Sprinkler Co.'s ("Respondents") opposition thereto. The second matter is Respondents' Renewed Motion to Compel Full and Complete Responses to Interrogatories and Document Requests.

Upon consideration of the first matter, the Court desires the benefit of a reply to Respondents' opposition. Such reply shall not exceed fifteen (15) pages and shall be submitted to the Court by facsimile within five (5) days (Monday, July 13, 1998). No further responses shall be permitted.[1]

Similarly, in anticipation that Complaint Counsel will file an opposition to the second matter, Respondents are afforded the opportunity to file with the Court (by facsimile) a reply to such opposition within five (5) days of service. Such reply shall also be limited to fifteen (15)

---

[1] As to these matters, beyond filing by facsimile, the customary rules for service set forth at 16 C.F.R. § 1025.16 continue to apply.

pages and no further responses shall be permitted.

William B. Moran

William B. Moran
United States Administrative Law Judge

Dated: July 8, 1998
Washington, D.C.

In the Matter of Central Sprinkler Corp. And Central Sprinkler Co., Respondents
CPSC Docket No. 98-2

CERTIFICATE OF SERVICE

I hereby certify that the foregoing **Order Directing Replies**, dated July 8, 1998 was sent in the following manner to the addressees listed below.

By Regular Mail to:

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Sadye E. Dunn
Secretary, Consumer Product Safety Commission

Date: July ___, 1998

In the Matter of Central Sprinkler Corp. and Central Sprinkler Co., Respondents - CPSC Docket No. 98-2

CERTIFICATE OF SERVICE

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By telefacsimile and Regular Mail to: Respondents

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By hand delivery to: Complaint Counsel

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In the Matter of Central Sprinkler Corp. and Central Sprinkler Co., Respondents - CPSC Docket No. 98-2

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Sadye E. Dunn

Sadye E. Dunn, Secretary
Consumer Product Safety Commissiosn

Date: July 8, 1998

RECEIVED 7/8/98

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
	)	
CENTRAL SPRINKLER CORP.,	)	
	)	
and	)	**CPSC Docket No. 98-2**
	)	
CENTRAL SPRINKLER CO.,	)	
	)	
Respondents	)	

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Pending before this Court are two matters. The first is Consumer Product Safety Commission's ("Complaint Counsel") Motion to Compel Answers to Interrogatories and Central Sprinkler Corp. and Central Sprinkler Co.'s ("Respondents") opposition thereto. The second matter is Respondents' Renewed Motion to Compel Full and Complete Responses to Interrogatories and Document Requests.

Upon consideration of the first matter, the Court desires the benefit of a reply to Respondents' opposition. Such reply shall not exceed fifteen (15) pages and shall be submitted to the Court by facsimile within five (5) days (Monday, July 13, 1998). No further responses shall be permitted.[1]

Similarly, in anticipation that Complaint Counsel will file an opposition to the second matter, Respondents are afforded the opportunity to file with the Court (by facsimile) a reply to such opposition within five (5) days of service. Such reply shall also be limited to fifteen (15)

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[1] As to these matters, beyond filing by facsimile, the customary rules for service set forth at 16 C.F.R. § 1025.16 continue to apply.

pages and no further responses shall be permitted.

William B. Moran

William B. Moran
United States Administrative Law Judge

Dated: July 8, 1998
Washington, D.C.

In the Matter of Central Sprinkler Corp. And Central Sprinkler Co., Respondents
CPSC Docket No. 98-2

CERTIFICATE OF SERVICE

I hereby certify that the foregoing **Order Directing Replies**, dated July 8, 1998 was sent in the following manner to the addressees listed below.

By Regular Mail to:

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Sadye E. Dunn
Secretary, Consumer Product Safety Commission

Date: July ___, 1998

In the Matter of Central Sprinkler Corp. and Central Sprinkler Co., Respondents - CPSC Docket No. 98-2

CERTIFICATE OF SERVICE

I hereby certify that the foregoing **Order Directing Replies**, dated July 8, 1998, was sent in the manner indicated to the addressees listed below.

By telefacsimile and Regular Mail to: Respondents

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Thomas P. Hogan, Esquire
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In the Matter of Central Sprinkler Corp. and Central Sprinkler Co., Respondents - CPSC Docket No. 98-2

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Bethesda, Maryland 20814

Sadye E. Dunn

Sadye E. Dunn, Secretary
Consumer Product Safety Commissiosn

Date: July 8, 1998

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UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION

1998 JUL -9 P 2:44

In the Matter of	
CENTRAL SPRINKLER CORP.,	
and	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	
Respondents	

COMPLAINT COUNSEL'S MOTION FOR EXTENSION OF TIME TO FILE REPLY BRIEF TO UNRECEIVED OPPOSITION, AND OPPOSITION TO UNRECEIVED MOTION

COMES NOW Complaint Counsel, and respectfully requests a seven-day extension of time to file its reply to Respondents' Opposition to Complaint Counsel's Motion to Compel Discovery, and an extension of time to allow it 10 days from receipt of Respondents' Renewed Motion to Compel to file a response thereto.

Yesterday, July 8, 1998, Complaint Counsel was served by hand with the Judge's *Order Regarding First Prehearing Conference*, as well as the Judge's *Order Directing Replies* in the above-captioned litigation. In the *Order Directing Replies*, the Court directs Complaint Counsel to reply to Respondents' Opposition to Complaint Counsel's Motion to Compel Answers to Interrogatories by Monday, July 13, 1998. Complaint Counsel has never received service of any such Opposition. The Judge's Order is the first that Complaint Counsel has heard of such Opposition.

The *Order Directing Replies* also references a Renewed Motion to Compel Full and Complete Responses to Interrogatories and Document Requests, allegedly filed and served by

Respondents. As with the Opposition to Complaint Counsel's Motion to Compel, Complaint Counsel has never received any such document. Complaint Counsel's first notice of the filing was in receiving the Judge's *Order Directing Replies*.

Complaint Counsel immediately informed counsel for Respondents that Complaint Counsel has not received service of any such filings. Counsel for Respondents indicated that they had mailed the documents, but would now federal express them to Complaint Counsel.

At this time (12:30 p.m., Thursday, July 9, 1998), Complaint Counsel still has not received the filings. Complaint Counsel expects to receive a copy of the filings by this afternoon or tomorrow, July 10, at the latest. Under the Judge's current *Order Directing Replies*, Complaint Counsel's Reply would be required in one or, at the most, two business days after the Opposition is received. Complaint Counsel respectfully requests that it be given ten days from receipt of Respondents' Opposition to file its reply.

Furthermore, according to the applicable rules of practice, Complaint Counsel would only have until July 14 to file its Opposition to Respondents' Renewed Motion to Compel. At this time, Complaint Counsel has not received Respondents' Motion. Again, assuming delivery by July 10, this would allow Complaint Counsel approximately two business days after receipt of the Motion to draft and file an opposition. As such, Complaint Counsel respectfully requests that it be given ten days from the date of receipt of the pleading to file its Opposition.

Complaint Counsel does not wish to further delay these proceedings by requesting such extensions. However, in this instance, because it never received the documents to which it must respond, Complaint Counsel is left with no choice other than to request an extension.

Dated: July 9, 1998

Respectfully submitted,

Deborah S. Orlove

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Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.
Complaint Counsel
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Office of Compliance
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(301) 504-0626

Of Counsel
Eric L. Stone, Esq.
Director, Legal Division
Alan H. Schoem, Esq.
Assistant Executive Director
Office of Compliance

dso\central\exten.mot

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents	)	

ORDER GRANTING
COMPLAINT COUNSEL'S MOTION FOR
EXTENSION OF TIME TO FILE REPLY BRIEF
TO UNRECEIVED OPPOSITION, AND
OPPOSITION TO UNRECEIVED MOTION

Upon consideration of Complaint Counsel's Motion for Extension of Time to File Reply Brief to Unreceived Opposition, and Opposition to Unreceived Motion,

IT IS HEREBY ORDERED that Complaint Counsel's Motion is GRANTED, and Complaint Counsel be given ten days from the date of receipt of Respondents' Opposition to Complaint Counsel's Motion to Compel Answers to Interrogatories to file its reply, and ten days from receipt of Respondents' Renewed Motion to Compel Full and Complete Responses to Interrogatories and Document Requests to file its Opposition thereto.

Date:_____

_____
The Honorable William B. Moran, Judge

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, **COMPLAINT COUNSEL'S MOTION FOR EXTENSION OF TIME TO FILE REPLY BRIEF TO UNRECEIVED OPPOSITION, AND OPPOSITION TO UNRECEIVED MOTION** was filed with the Secretary of the Commission, telecopied, and deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

J. Gordon Cooney, Jr., Esq.
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Attorneys for Central Sprinkler Corporation and Central Sprinkler Company

The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
401 M St., S.W.
Mail Code 1900 L
Washington, DC 20460
fax (202) 565-0044

Signed: _____

Dated: 7/9/98

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
	)	
CENTRAL SPRINKLER CORP.,	)	
	)	
and	)	**CPSC Docket No. 98-2**
	)	
CENTRAL SPRINKLER CO.,	)	
	)	
Respondents	)	

ORDER GRANTING IN PART COMPLAINT COUNSEL'S MOTION FOR EXTENSION OF TIME TO FILE REPLY BRIEF TO UNRECEIVED OPPOSITION AND OPPOSITION TO UNRECEIVED MOTION

Upon consideration of Complaint Counsel's Motion for Extension of Time to File Reply Brief to Unreceived Opposition and Opposition to Unreceived Motion, it is hereby ordered that Complaint Counsel's Motion is GRANTED *IN PART.*

Complaint Counsel is given until July 16, 1998, to file its reply to Respondents' Opposition to Complaint Counsel's Motion to Compel Answers to Interrogatories and ten (10) days from receipt of Respondents' Renewed Motion to Compel Full and Complete Responses to Interrogatories and Document Requests to file its opposition thereto.

William B. Moran
William B. Moran
United States Administrative Law Judge

Dated: July 10, 1998
Washington, D.C.

In the Matter of Central Sprinkler Corp. And Central Sprinkler Co., Respondents
CPSC Docket No. 98-2

CERTIFICATE OF SERVICE

I hereby certify that the foregoing **Order Granting In Part Complaint Counsel's Motion For Extension Of Time To File Reply Brief To Unreceived Opposition And Opposition To Unreceived Motion**, dated July 10, 1998 was sent in the following manner to the addressees listed below.

By Regular Mail to:

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_____

Sadye E. Dunn
Secretary, Consumer Product Safety Commission

Date: July ___, 1998

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION
1998 JUL 16 P 5:04

In the Matter of	)	
CENTRAL SPRINKLER CORP.	)	
and	)	CPSC Docket No. 98-2
CENTRAL SPRINKLER CO.	)	
Respondents.	)	

COMPLAINT COUNSEL'S REPLY TO RESPONDENTS' OPPOSITION TO COMPLAINT COUNSEL'S MOTION TO COMPEL ANSWERS TO INTERROGATORIES

Pursuant to the Administrative Law Judge's Orders of July 8 and 10, 1998, Complaint Counsel submits this Reply to Respondents' Opposition to Complaint Counsel's Motion to Compel ("Respondents' Opposition").

Central contends in its Opposition that Complaint Counsel's interrogatories are "unduly burdensome" and "oppressive," and, therefore, the Judge should refuse to order Respondents to answer them on that basis altogether.[1] See Respondents' Opposition at 10-15. Yet, according to Central's Opposition, Respondents have spent an average of eight

[1]Respondents' contention is unfounded in light of their own interrogatories, which number 148, not including multiple subparts.

hours reviewing each box of materials it has served upon Complaint Counsel in response to interrogatories. Central has compiled and delivered to Complaint Counsel approximately 460 boxes of responsive documents. It has allegedly reviewed these documents for privileged and confidential material, created a privilege log, Bates-stamped the documents and, pursuant to the Judge's recent Order, created what it claims are highly detailed indexes to the documents. Central claims it has expended in excess of $200,000 and 3,700 man hours to gather information responsive to discovery.

In light of the efforts in which Central has already allegedly engaged, one must question whether some of Central's 127 employees, whom Respondents' counsel consulted in this process, or some of the twenty counsel and twenty administrative staff that Respondent's counsel has employed, could not have spent some of that time actually answering Complaint Counsel's interrogatories.

Central contends that it has adequately responded to Complaint Counsel's interrogatories by producing 600,000 pages of business records. Central claims that such action is permissible because the burdens on both parties in this matter are "substantially the same" in deriving the answer from the documents, and, further, that its references to categories of documents and its indexes are more than specific. Id. at 16, 19, 23.

Central's argument is unfounded. The burden placed on Complaint Counsel to find the responses in the documents far exceeds that on Respondents. Respondents have screened the documents and reviewed them for responsiveness, as well as privileged and confidential matters. Id. Respondents seek to 'equalize' the burden by arguing that their counsel is not familiar with the contents of the documents. Id. at 20 n.6.

According to Central's Opposition:

> Although such an index is not required by any rule, regulation, law, or even Complaint Counsel's discovery requests, Central has been creating and providing to Complaint a detailed description of all the documents produced. . . . [T]he creation of this index has been tremendously time-consuming and expensive. For each box produced, this index provides the Bates-number range of each discrete set of documents within each box, the employee who is the source of the documents, the department relevant to such documents. These descriptions not only correspond to the categories of documents described in Central's Interrogatory Responses, they provide even more detail regarding the enclosed documents. Thus, Central has provided Complaint Counsel with a veritable "road map" to describe the documents produced and the manner in which they are responsive to Complaint Counsel's Interrogatories.

Id. at 24 (citations to Opposition exhibits omitted). How Respondents and their counsel were able to establish privilege logs and "detailed" indexes without some knowledge of the documents is uncertain.

Moreover, Respondents' familiarity with the documents says nothing of the familiarity of Central's own supervisors, managers and executives. Those members of the "Omega team" and those engineers who have worked with and on the Omega over the years, in particular, should know their product, and be able to answer Complaint Counsel's interrogatories.

Furthermore, neither Central original responses to Complaint Counsel's interrogatories, which pointed to broad categories of supposedly responsive documents, or their most recent indexes, "equalize" the burden. The broad categories of business records in which "answers" supposedly can be found, which Respondents seek to represent as "specific" or "particular", are, indeed, overbroad. The indexes merely match up documents

to these ubiquitous categories. Id. at 8. In sum, Central remains far more able to derive answers from its own documents and employees than can Complaint Counsel.

Central simply attempts to avoid its primary responsibility: answering, in whole or in part, interrogatories in narrative form. Instead, it has given Complaint Counsel over 400 boxes of documents, under the guise of responding to Complaint Counsel's interrogatories. Central claims that "the only accurate and truthful manner to respond to Complaint Counsel's interrogatories is by reference to documents." Id. at 23. However, such a claim presumes -- erroneously -- that all answers to Complaint Counsel's specific questions are somehow memorialized in writing or can be divined from written material, and also that it would place an equal burden on Complaint Counsel to find the answer as it would on Respondents. Complaint Counsel suspects that Central's senior staff and engineers could easily answer the interrogatories without sifting through 460 boxes to find the answers.

Moreover, Respondents are actually or virtually silent regarding many contention and other fact interrogatories listed in Appendix A that often go the heart of defenses Central has raised publicly over the last three years. Respondents should be compelled to properly respond to Complaint Counsel's interrogatories.

For example, Central executives and engineers should be able to describe how each Omega model works (not just how "most" work) (Interrogatory No. 27). They should also be able to identify those who designed and developed each model Omega (Interrogatory No. 16(a)). They can undoubtedly explain the procedure for assembling and manufacturing the Omega (Interrogatory No.21); in fact, according to Respondents, Central's own work instructions ensure that employees know the process and procedure for assembly of Omegas.

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III. CONCLUSION

Complaint Counsel respectfully requests that its Motion to Compel be granted. Should the Presiding Officer not grant Complaint Counsel's motion to compel, Complaint Counsel respectfully requests in the alternative that Respondents be directed to provide full and complete narrative responses to at least the Interrogatories listed in Appendix A.[2]

[2]Central has represented to the Judge that it has made no other copy of the documents it has produced to Complaint Counsel. Therefore, if Central requires the return of certain boxes for reference to answer Complaint Counsel's interrogatories, Complaint Counsel will agree to return the boxes for a limited time, for that purpose.

Respectfully submitted,

Complaint Counsel
U.S. Consumer Product Safety Commission

Eric H. Singer
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DATE: July 16, 1998

APPENDIX A

Complaint Counsel Interrogatory Nos.:

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that **COMPLAINT COUNSEL'S REPLY TO RESPONDENTS'OPPOSITION TO COMPLAINT COUNSEL'S MOTION TO COMPEL ANSWERS TO INTERROGATORIES**, was filed with the Secretary of the Commission and sent to the Court and all parties of record in these proceedings by telefacsimile and by first-class U.S. mail, postage prepaid, on July 16, 1998.

The Honorable William B. Moran
United States E.P.A.
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Mail Code 1900L
Washington, DC 20460

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Dated: 7/16/98

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION
1998 JUL 16 P 5:04

In the Matter of	)	
CENTRAL SPRINKLER CORP.	)	
and	)	CPSC Docket No. 98-2
CENTRAL SPRINKLER CO.	)	
Respondents.	)	

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301-504-0626

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APPENDIX A

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The Honorable William B. Moran
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Signed: Kenn Bevis

Dated: 7/16/98

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

RECEIVED 7/17/98

In the Matter of	)	
	)	
CENTRAL SPRINKLER CORP.,	)	
	)	
and	)	**CPSC Docket No. 98-2**
	)	
CENTRAL SPRINKLER CO.,	)	
	)	
Respondents	)	

ORDER GRANTING COMPLAINT COUNSEL'S JUNE 18, 1998 MOTION REGARDING DISCOVERY

On June 18, 1998, the Consumer Product Safety Commission ("Complaint Counsel" or "CPSC") filed a Motion seeking an Order requiring that Central Sprinkler Corp. and Central Sprinkler Co. ("Central" or "Respondents") answer CPSC's First Set of Interrogatories ("First Set") and provide documents responsive to Complaint Counsel's First Request for Production of Documents ("First Request"). Respondents' Opposition to the motion was filed on July 1st. The Court then directed that Complaint Counsel file a Reply to Respondents' Opposition, which Reply was received on July 16, 1998. For the reasons set forth herein and to the extent set forth more particularly below, the Motion is GRANTED.

Complaint Counsel states that for 109 of its interrogatories, Respondent raised blanket objections and that, for 88 responses, the answers referenced broad categories of index-less business records wherein the answers sought could be found. On May 29, 1998, the response was supplemented by two indexes which listed the department from which the records emanated. On this basis, Complaint Counsel asserts that it has not received appropriate responses to its

interrogatories, nor documents associated with them, nor a meaningful index to the documents. Significantly, Complaint Counsel relates that all of the documents have Bates stamps and most have been reviewed. Motion at 4.

Discussion

I. Overview

It is expected that the parties will comply not only with the letter of discovery but also with its spirit. The Court notes that, while the representatives owe fidelity to their clients, all due fidelity is also owed to the Court. Cyphers v. Fuji Heavy Industries Co., Ltd., 1998 U.S. Dist. LEXIS 3526 *8 -*9. Answers to interrogatories should be responsive and where relevant questions are posed, the fact that answering them is burdensome is not a bar. Further, this Court subscribes to the view that a response directing that an answer *may* be found upon inspection of records "is little more than an offer to play the discredited game of blindman's bluff . . ." Clark v General Motors Corp., 1975 U.S. Dist. LEXIS 12095 *3 -*4.

Motions to compel discovery are addressed at 16 C.F.R. 1025.36. Responses that are inadequate, either by being incomplete or evasive, in whole or in part, are treated as failures to respond. While Section 1025.32(d) offers the option to produce business records, its availability is not unqualified. The burden of deriving the answer sought must be "substantially the same" for the party propounding the interrogatory as for the party served and, even if the burdens are roughly equivalent, the party served must "specify" the records which supply the answer.

II. Cases cited by Respondent in its opposition.

Respondent has referred to several cases in support of its position. In re U.S. Financial Securities Litigation, 74 F.R.D. 497 (S.D. Cal. 1975), was cited for the proposition that a party

need not answer unduly burdensome, unreasonable or oppressive interrogatories, but Respondent omits that the decision also held that, in general, the frequency and scope of interrogatories are not limited, and it recognized that "unfettered discovery of all materials relevant to the case should be permitted and that discovery need not be limited to the facts admissible at trial." Id. at 498. The court, in granting leave to serve interrogatories, noted that the test for discovery is that which is "reasonable and necessary to the litigation at hand" as opposed to "numerous and minor evidentiary details." Id. Breeland v. Yale and Towne Mfg., 26 F.R.D. 119 (E.D.N.Y. 1960), cited by Respondent for the same principle, miscasts the Court's holding, which determined that the plaintiff's use of *two* procedures (voluminous interrogatories of minute details *and* examination of the defendant before trial, *together* constituted abuse of the interrogatory procedure). Id. at 120.

In United States v. Proctor & Gamble Co., 25 F.R.D. 252, (D.N.J. 1960), cited by Central for the proposition that even in an antitrust matter, 2,500 interrogatories were unnecessary and unduly burdensome, the Court observed that, among the thousands of documents, the party served had "assigned such documents to the specific issues to which they . . . pertain." Id. at 253. Thus, plaintiff had keyed all its documents to the general topics discussed. Id. at 254. Further, the Court considered specifying which defendants were represented at a conference and participated to be more than a mere evidentiary detail and that it was reasonable to require plaintiff to specify "the general nature of the topics discussed on such occasions or events," while furnishing "in *specific* detail the *exact* nature and limits of the topics discussed on such occasions or events," was deemed unduly burdensome. Id. at 254 (italics added). Such evidentiary details, the Court concluded, were best left to the vehicles of deposition or personal inquiry. Id.

In Krantz v. United States, 56 F.R.D. 555, 558 (W.D. VA 1972), quoted by Central for the proposition that interrogatories should be "relatively few and limited to important facts rather than numerous and concerned with minor evidentiary details," the Court observed that "[g]enerally the fact that interrogatories are burdensome is alone not sufficient to excuse a party from answering them, nor will mere numbers excuse a party." Rather, the Court stated, the inquiry should be whether the interrogatories are "unreasonable under the facts and circumstances of the particular case." Id. at 556, 557. In that particular case, the Court, which ruled that the 1,500 questions were unreasonable, was influenced by the fact that the interrogating party already had the precise information it sought and even under those circumstances, the Court still allowed the government to submit a reasonable number of new interrogatories or to pick a reasonable number from its original list. Id. at 557, 558.

While the Court in Milsen Co. v. Southland Corp., 16 Fed. R. Serv. 2d, 116 (N.D., Ill. 1972), 1972 U.S. Dist. LEXIS 14071, found that forcing the defendant to further specify pages would create an undue burden, underlying this was its determination that the burden of ascertaining the information from the records was "substantially the same for either party" and the Court was influenced by the fact that the defendant "has offered to cooperate with the plaintiffs in their research." Id. at *3 -*4.

In Halder v. Int'l Telephone and Telegraph Co., 75 F.R.D. 657 (E.D.N.Y. 1977), the Court balanced the burden placed upon the defendant against the value of the answers to the plaintiff's case, and determined that the particular contested interrogatories involved information of limited probative value. Id. at 658. In this context, the Court held that the defendant should not be forced to engage in extensive research and compilation, when the purpose is to assist

plaintiff in the preparation of his case. Id.

Petroleum Insurance Agency, Inc. v. Hartford Accident and Indem. Co., 11 F.R.D. 318 (D. Mass 1983) ("Petroleum"), cited by Central for the proposition that the party seeking answers has the burden of showing that the answering party's burden is less, also makes clear that the party invoking the business records exception must *specify* the records from which the answer may be derived. The specification must "be in sufficient detail to permit the interrogating party to locate and to identify, *as readily as can be the party served*, the records from which the answer may be ascertained." Id. at 319. Particularly pertinent to the case at hand, the Court in Petroleum noted a "*respondent may not impose on an interrogating party a mass of records as to which research is feasible only for one familiar with the records*," and observed that such a tactic was specifically addressed by the Advisory Committee as "an abuse of the option." Id. at 319, 320 (italics added). Thus, the responding party must "specify, by category and location, the location of records from which answers to interrogatories may be derived." **In blunt terms, this means the responding party must "point to the place in the record where the answer is found" and if they cannot, then they must provide a written answer to the interrogatory**. Id. In fact, in the context of one particular disputed interrogatory, the court noted that the defendants already had done considerable work to gather the information requested and it followed that it would not be equally burdensome for the plaintiff to search the records as defendants had already done so. Id. at 321.

III. Conclusions and Specific Orders

With each page having a Bates stamp number, the Respondents' duty is to identify the specific page(s) that provide a complete response. If a corporate party could simply claim that the

burden of deriving "information from the records is substantially the same," discovery would be thwarted at every turn, and simply referring to a document in order to answer an interrogatory is not the kind of burden contemplated by the rule. Pascale v. G.D. Searle & Co., 90 F.R.D. 55,60 (D. RI 1981). Thus, it is totally inadequate to simply refer to a mass of documents and direct the interrogating party to find the information.

In evaluating the relative burdens of the parties, at the outset Central is presumed to have greater familiarity with its own documents. The fact that the interrogated party merely has to examine its own documents in order to divine the answers sought is not considered in measuring the burdens. In addition, each document has already received a degree of attention by Central as each page has been Bates-stamped. Other factors, each considered independent, are the presumption that the Respondent would, in its normal course of operations, maintain some sort of index to retrieve its own documents and the acknowledgment by Central that it has been/is involved in other law suits regarding its Omega sprinklers as well as the fact that Central has been aware of and engaged with the CPSC's investigation for the past two years. Of significance is the admission that it has already made a detailed review of the more than 600,000 pages of documents: ***"Central then reviewed these documents for privileged information and confidential documents."*** Respondents' Opposition to Complaint Counsel's Motion to Compel at 7 (emphasis added). The Court observes that, of necessity, such a review had to involve extremely close scrutiny of these documents.

Each of these considerations independently lead the Court to conclude that there is no *bona fide* claim of an equal burden between Complaint Counsel and Central in determining the answers to the questions by the CPSC. As 16 C.F.R. 1025.32(b) makes clear, each interrogatory

is to be answered. Answers in turn require a meaningful response and thus, evasive or incomplete responses are not answers. Respondents cannot discharge its duty to answer interrogatories by simply delivering a tidal wave of documents to Complaint Counsel, the effect of which makes the information exceedingly difficult to locate.

Accordingly, within 7 (seven) days of service, Respondents are ordered to answer[1] the following interrogatories, either by providing a complete written response to the questions or by identifying the *particular* Bates-stamped page(s) corresponding to each question and subpart thereof:

I-3 (Interrogatory No. 3)[2] Answer, covering the period 1978 to the present.[3]

I-5 Answer.

I-6 Answer.

I-7 No further answer required.

I-8 No further answer required.

I-9 Answer.

I-10 Answer to the extent Respondents' business records provide answers.

I-11 Answer to the extent Respondents' business records provide answers.

I-12 Answer to the extent Respondents' business records provide answers.

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[1]Unless directed otherwise, all questions are to be answered fully.

[2]For brevity, all subsequent references to particular interrogatories will be identified by an "I," followed by the applicable number. Thus interrogatory number 5 is identified as "I - 5."

[3]To the extent that Complaint Counsel disagrees with the limitations on discovery in this Order, it will have to file a supplemental motion, particularly identifying the need for the information still sought.

I-13 Answer to the extent Respondents' business records provide answers.

I-15 Answer, since 1978, items 1), 2), 3), 4), 5), 6), 7), 10) and 11). For those no longer employed, provide, if known, address and telephone number.

I -16 Answer.

I-17 Answer.

I-18 Answer.

I-19 Answer.

I-20 Answer.

I-21 Answer.

I-22 Answer.

I-23 Answer without implied limitation to "Stop-leak."

I-24 No further answer required.

I-25 Answer.

I-26 Answer.

I-27 Answer.

I-28 Answer more completely by identifying specific Bates-stamped pages in business records.

I-29 No further answer required.

I-30 Answer by identifying the specific Bates-stamped pages for each model and with a written answer to (g).

I-31 Answer generally, and for subparts (a) - (d), by identifying the specific Bates-stamped pages for each.

I-32 Answer.

I-33 Answer.

I-34[4] Answer by identifying the specific Bates-stamped pages.

I-35 Answer generally and by identifying the specific Bates-stamped pages for subparts (a) - (l).

I-36 Answer generally and by identifying the specific Bates-stamped pages for subparts (a) - (l).

I-37 Answer. Parts (b)- (h) may be answered by identifying the particular Bates-stamped pages.

I-38 Answer. Parts (b)-(h) may be answered by identifying the particular Bates-stamped pages.

I-39 Answer. Parts (b)-(h) may be answered by identifying the particular Bates-stamped pages.

I-40 Answer. Parts (b)-(i) may be answered by identifying the particular Bates-stamped pages.

I-41 Answer. Parts (b)-(i) may be answered by identifying the particular Bates-stamped pages.

I-42 Answer.

I-43 Answer. Parts (b)-(j) may be answered by identifying the particular Bates-stamped pages.

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[4] The answer requires a general written response and identification, by Bates-stamped pages, of the other instances alluded to, beyond the 17 instances specifically listed.

I-44 Answer (a) and (j). Parts (b)-(i) may be answered by identifying the particular Bates-stamped pages.

I-45 Answer (a). Parts (b)-(i) may be answered by identifying the particular Bates-stamped pages.

I-46 Answer (a). Parts (b)-(j) may be answered by identifying the particular Bates-stamped pages.

I-47 Answer. Parts (d)-(e) may be answered by identifying the particular Bates-stamped pages.

I-48 Answer.

I-49 Answer (a)-(f), (k), (g), (h) and (i); subparts (i)-(v) of (i) may be answered by identifying the particular Bates-stamped pages. The initial general question for (j) must be answered with subparts (i)-(iv) of (j) answered by referring to the particular Bates-stamped pages.

I-50 Answer (a), (b), (c), (d), (e), (f) and (j); however (g)-(i) may be answered by identifying the particular Bates-stamped pages.

I-51 Answer; however, after answering (e) and (f) generally, subparts (i)-(v) of (e) and (i)-(iv) of (f) may be answered by identifying the particular Bates-stamped pages.

I-52 Answer, but after answering (e) generally, subparts (i)-(v) may be answered by identifying the particular Bates-stamped pages.

I-53 Answer, but (e), (f), (h), (k) and, after answering (i) and (j) generally, subparts (i)-(v) of (i) and (i)-(iv) of (j) may be answered by identifying

the particular Bates-stamped pages.

I-54 Answer, but (g) and after answering (h) generally, subparts (i)-(v) and (i) may be answered by identifying the particular Bates-stamped pages.

I-55 Answer, but (e), after being answered generally, subparts (i)-(v) and (f) may be answered by identifying the particular Bates-stamped pages.

I-56 Answer.

I-57 Answer, but (d), (f) and (g) and after answering (h) generally, subparts (i)-(v) of (h) and (i) may be answered by identifying the particular Bates-stamped pages.

I-58 After answering the initial question, and subparts (a), (b), (c) and (j), subparts (d)-(i) may be answered by identifying the specific Bates-stamped pages.

I-59 After answering the initial question and subparts (a)-(d), (f), (g) and the initial question for (i), (e) and (h), subparts (i)-(v) of (i) and (j) may be answered by identifying the specific Bates-stamped pages.

I-60 After answering the initial question and (a), (d), (e) and the initial question for (h), subparts (b), (c), (f) and (g), the subparts of (h), (i)-(v) and (i), (i)-(iv) and (j) may be answered by identifying the specific Bates-stamped pages.

I-61 After answering the initial question and (b) and the initial question for (d), the remaining questions may be answered by identifying the specific Bates-stamped pages.

I-62 Answer. However, after answering the initial question of (e) and (e)(i), (e)(ii)-(e)(v) may be answered by identifying the specific Bates-stamped pages.

I-63 Answer the initial question and (a), (b), (c) and the initial questions for (h) and (j). The remaining questions and subparts may be answered by identifying the specific Bates-stamped pages.

I-64 After answering the initial question, and (a), (b) and the initial question for (d), the remaining questions may be answered by identifying the specific Bates-stamped pages.

I-65 After answering the initial question and (a), (b) and (h), and the initial question for (e), (f), (k), (l), (m) and (n), the remaining questions may be answered by identifying the specific Bates-stamped pages.

I-66 Answer by identifying the specific Bates-stamped pages.

I-67 After answering the initial question and (a), the remaining questions may be answered by identifying the specific Bates-stamped pages.

I-68 through I-107

After answering the initial question for each of these and their respective subparts (a), the remaining questions may be answered by identifying the particular Bates-stamped pages.

I-108 After answering the initial question and (a) and (b), the remaining questions may be answered by identifying the specific Bates-stamped pages.

I-109 After answering (a)-(m), the remaining subparts (i)-(iii) (each of which apply to (a)-(m)) may be answered by identifying the specific Bates-stamped pages.

I-110 After answering the initial question and (a), (d) and the initial question for (f), the remaining questions may be answered by identifying the particular Bates-stamped pages.

I-111 After answering the initial question and (a), the remaining questions may be answered by identifying the particular Bates-stamped pages.

I-112 After answering the initial question and (a), the remaining questions may be answered by identifying the particular Bates-stamped pages.

I-113 Answer.

I-114 After answering (a) and (b) and the initial question for (i), the remaining questions may be answered by identifying the particular Bates-stamped pages.

I-115 After answering the initial question and (a), (b), and the initial question for (h) and (i), the remaining questions may be answered by identifying the particular Bates-stamped pages.

I-116 Addressed in July 7, 1998 Order Regarding First Prehearing Conference.

I-117 Addressed in July 7, 1998 Order Regarding First Prehearing Conference.

Last, it is observed that Central's answer, at least taken at face value, presents significant issues, denying generally that its Omegas are defective and also denying that the Omegas have a significant malfunction rate. Certainly, the adequacy and reliability of the CPSC testing of

Omegas has been challenged, and Central asserts that there can be a host of innocuous reasons why sprinkler heads may fail to activate, ranging from inadequate temperatures to abuse of the heads, or conditions affecting the water supply to the system. Given Respondents' stance on the charges, it should be forthcoming in its responses, anxious to meet the core charges of the Complaint, and to proceed to having its hearing opportunity in order to clear its name of the charges it asserts are unfounded.

William B. Moran

William B. Moran
United States Administrative Law Judge

Dated: July 17, 1998
Washington, D.C.

In the Matter of Central Sprinkler Corp. and Central Sprinkler Co., Respondents - CPSC Docket No. 98-2

CERTIFICATE OF SERVICE

I hereby certify that the foregoing **Order Granting Complaint Counsel's June 18, 1998 Motion Regarding Discovery**, dated July 17, 1998, was sent in the manner indicated to the addressees listed below.

By telefacsimile and Regular Mail to: Respondents

J. Gordon Cooney, Jr., Esquire
Thomas P. Hogan, Esquire
Emily J. Lawrence, Esquire
MORGAN, LEWIS & BOCKIUS, LLP
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Michael F. Healy, Esquire
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Five Neshaminy Interplex, Suite 315
Trevose, Pennsylvania 19053

By hand delivery to: Complaint Counsel

Alan H. Schoem
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Certificate of Service, continued

In the Matter of Central Sprinkler Corp. and Central Sprinkler Co., Respondents - CPSC Docket No. 98-2

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Sadye E. Dunn

Sadye E. Dunn, Secretary
Consumer Product Safety Commissiosn

Date: July 17, 1998

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION
1998 JUL 20 P 5:07

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents.	)	

COMPLAINT COUNSEL'S OPPOSITION TO
TO RESPONDENTS' RENEWED MOTION TO COMPEL

COMES NOW Complaint Counsel and files its Opposition to Respondents' Renewed Motion to Compel Discovery in this matter, and requests that it be protected from further discovery on certain irrelevant issues in this matter.

I. INTRODUCTION

On March 3, 1998, the staff of the Consumer Product Safety Commission filed an Administrative Complaint against Respondents Central Sprinkler Corp. and Central Sprinkler Co. The Complaint seeks a nationwide recall of approximately 10 million "Omega" automatic fire sprinklers manufactured by Respondents since 1982.

On March 26, Respondents served their First Request for Production of Documents and Things, and First Set of Interrogatories, upon Complaint Counsel.

On April 27, Complaint Counsel served its Responses to Respondents' discovery requests, as well as over 2000 Bates-stamped and copied documents. Complaint Counsel has

since sent Respondents six additional supplements, for a total of over thirteen thousand Bates-stamped pages.

Despite the fact that some of the information Complaint Counsel possesses regarding this case is its work product, in the spirit of full and fair disclosure, Complaint Counsel has produced to Respondents nearly everything in the Agency's files pertaining to this case, except results of testing of Omega sprinklers by CPSC engineering consultants that are currently in progress and as yet incomplete, and e-mails between the attorneys in this matter regarding the litigation. Complaint Counsel has, and will continue to, supplement its responses as additional information becomes available. Complaint Counsel has responded to all inquiries presented by Respondents. There is nothing at this time to compel Complaint Counsel to produce.

II. ARGUMENT

A. Complaint Counsel has Produced all Documents Listed in the List and Summary of Documentary Evidence

Respondents claim that Complaint Counsel has failed to produce the documents listed in its List and Summary of Documentary Evidence, filed with the Complaint in this matter. However, all documents listed in the List and Summary have been produced to Respondents.

Complaint Counsel's List and Summary included two items: documents evidencing failure of Omega sprinklers in actual fire situations, and a data compilation depicting over 40% failure rates in testing of Central's Omega sprinklers. Information pertaining to all fires of which the staff is aware, in which Omega sprinklers failed to operate, has been produced to Respondents. In fact, Complaint Counsel immediately supplemented its Interrogatory Responses on May 20 to list a fire that occurred just a few days prior in Scottsdale, Arizona,

that spread to cause hundreds of thousands of dollars worth of property damage, and in which a female victim reportedly suffered burns and smoke inhalation. Complaint Counsel has, and continues to, share with Respondents everything it knows of the Omega problem in the field, including test results and fire data.[1]

As noted above, Complaint Counsel also named in its List and Summary a data compilation that showed an approximate 40% failure rate for Omegas in testing. Complaint Counsel has specifically referred to the document as a data compilation. Complaint Counsel compiled the test results from numerous testing facilities into a database. Complaint Counsel has submitted to Respondents the underlying test data used by the staff to create its compilation. All claims of confidentiality by some of the testing facilities have now been resolved by the Presiding Officer, and the information has been forwarded to Respondents.

Complaint Counsel has been more than open, and more than fair with respect to its compilation. Rather than adhering to a claim of work product, and simply providing the data it used to create the compilation and requesting that Respondents create their own compilation if they wish to determine the aggregate failure rate from testing of Omegas, Complaint

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1 The same cannot be said for Respondents, whom Complaint Counsel have just been informed knew about the Scottsdale fire and attempted to have the failed sprinklers sent to them, and failed to report the incident to the Commission. Moreover, Respondents only recently disclosed to Complaint Counsel by letter dated June 26, 1998, information pertaining to three fires, two of which they have known about for four and five years, respectively. Respondents failed to disclose these fires in their Interrogatory Responses, and failed to supplement their Responses with this information until this past week, after Complaint Counsel submitted a written request asking Respondents to do so.

Counsel produced the staff's compilation, in the spirit of full disclosure. Complaint Counsel cannot do more than give Respondents what they have requested.[2]

B. Complaint Counsel has Provided Documents that Identify Persons Having Knowledge of Discoverable Materials

Respondents requested the names of all persons at the CPSC who investigated the Omega problem, the names of all persons familiar with the allegations of the complaint, and the names of people familiar with the Omega problem. Despite the fact that many of Respondents' identification requests improperly focus upon the propriety of Complaint Counsel's investigation into the Omega matter, Complaint Counsel provided a list of persons in response to Interrogatory Nos. 106 [Eric Singer, Eric Stone, Catherine Anne Cumberland, Andrew Stadnik, Rohit Khanna, Nicholas Marchica]; 107 [David Dixon (David Dixon), Jeffrey Larson (Viking Automatic Sprinkler Company), Fred Jackson (Jackson Fire Protection), William L. Oliver (Oliver Sprinkler Co., Inc.), John C. Livingston, Jr. (Livingston Fire Protection, Inc.), Peter Miller (Miller Fire Protection), Thomas E. Strange (Worsham Sprinkler Company), James Lewis (American Fire Sprinkler Corp.)]; 115 [Catherine Cumberland, Marc Schoem, Eric Stone, Andrew Stadnik, Rohit Khanna, Nicholas Marchica, Mark Kumagi, James Hoebel]; 116 [Catherine A. Cumberland, Marc J. Schoem, Eric L. Stone]; 132 [Marc J. Schoem, Catherine A. Cumberland, Eric H. Singer, Eric Stone, Rohit Khanna, Nicholas Marchica, and Andrew Stadnik]; 145 [the CPSC Commissioners, their staff, the Office of the General Counsel, Alan Schoem, Eric Singer, Eric Stone, Deborah Orlove and Catherine Cumberland].

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2 It appears that Respondents have misunderstood the compilation, and assumed that it is a compilation of the staff's test results. *See* Respondents' Renewed Motion at 27.

Complaint Counsel has also provided nearly all documents it has about this case to Respondents, with the exception of the relatively few communications with its consultants in preparation for litigation. Hundreds of names are contained in the documents Complaint Counsel has produced to Respondents. Having just received approximately 460 boxes of documents from Respondents' counsel, which Complaint Counsel expects will provide hundreds more names of people knowledgeable about the Omegas, Complaint Counsel is still in the process of determining who else is knowledgeable about the Omega problem. Given that there are somewhere between eight and 10 million Omegas in service, the list of those who have or may have knowledge about the Omegas is potentially endless. Complaint Counsel will continue to supplement its responses as additional persons with knowledge are discovered, and will provide the names of those it intends to call as witnesses as soon as those names are available.[3]

Complaint Counsel has produced nearly all of the documents it has gathered for this case to Central. Hundreds of persons are identified in those documents. Complaint Counsel has in no way left Central unable to commence its depositions.

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3 Respondents claim that Complaint Counsel has refused to identify persons with knowledge in response to Interrogatories 83, 87 and 51. *See* Respondents' Renewed Motion at 9 - 10. Complaint Counsel objected to Interrogatories 83 and 87 (although, in the interest of full disclosure, gave information pertaining to the preliminary results of sprinkler testing by its own consultants, done at the request of Complaint Counsel in preparation for litigation, in response to Interrogatory No. 83. Complaint Counsel has not yet determined which of its consultants, if any, it will use as testifying experts in this matter, nor what of its own testing evidence it intends to present at trial). Moreover, all three of the Interrogatories Respondents cite relate to Complaint Counsel's proof of the underlying cause of Omega inactivation in testing -- which Complaint Counsel contends it need not prove at trial, and will brief according to the Presiding Officer's recent Order.

C. Complaint Counsel has Appropriately Responded to Central's Discovery Requests

Respondents claim that Complaint Counsel has refused to respond to certain of its Interrogatories. *See* Respondents' Renewed Motion at 13, *et seq.* For instance, Respondents cite Interrogatory No. 43, which asks whether Complaint Counsel contends that there is a "single standard of temperature at which previously installed sprinkler heads must activate when tested to be deemed by the Complainant as not presenting any substantial risk of injury to the public and/or substantial product hazard." Despite the fact that the question is unclear and overbroad, Complaint Counsel attempted to answer it by stating that (according to Respondents) Omega sprinklers are designed to activate at particularly-defined activation/triggering temperatures, based on the temperature at which the fusible link in their heat collector is intended to convert from solid to liquid form. The question is unanswerable because each sprinkler must activate at its activation/triggering temperature, which is not the same for all sprinklers. It is Complaint Counsel's understanding that the activation/triggering temperature for Omegas are listed on the Omega heads themselves. The temperature at which a sprinkler should operate in testing is the activation/triggering temperature for that sprinkler, which in Omegas, is presumably based on the temperature at which its fusible link in its heat collector unit "melts." Complaint Counsel gave a complete and correct answer to Respondents' Interrogatory. No other answer to this question is possible.

Likewise, Respondents claim that Complaint Counsel has not responded to its Interrogatory No. 42, which asks:

> **42. (a) State whether Complainant contends that there is a single standard of water pressure (in psi) at which previously installed sprinkler heads must activate when tested to be deemed by the**

Complainant as not presenting any substantial risk of injury to the public and/or substantial product hazard;

If so:

(b) identify and describe any such standard;

(c) identify all documents which describe, evidence, refer, support, or relate to any such a standard;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such standard; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Complaint Counsel objected to Respondents' Interrogatory on the grounds that it is vague, ambiguous, confusing, and overbroad. The question asks whether Complaint Counsel deems there to be a single standard of water pressure at which a sprinkler that has been removed from service must activate to be deemed as not presenting a substantial risk of injury to the public. Complaint Counsel does not contend that a sprinkler removed from service presents a substantial risk of injury to the public, and so stated in its response. Respondents now claim that the question they were really asking is what pressure Complaint Counsel deems is the "benchmark to establish a failure" in testing. This is an entirely different question than asked by Respondents. Complaint Counsel agrees that Respondents are entitled to know, if statistical test results are being used to prove sprinkler failure, what the pressure that determines a "failure" is. Complaint Counsel responds to this question that it contends that the pressure that determines a failure may be either 5 or 7 psig, depending on the type of sprinkler and its use. Had Respondents made clear in their Interrogatory that this is the question they were asking, rather than relating it to whether the sprinkler was previously installed and under what standards such a sprinkler

would not present a substantial risk of injury to the public, Complaint Counsel would have been able to respond.[4]

Respondents claim that their questions are "extremely straightforward," "basic" and "fundamental." Respondents' Motion at 13, 16. Several of Respondents' allegedly "basic" and "relevant" questions, such as that cited above, ask what would not constitute a substantial product hazard. Complaint Counsel has provided information to Respondents demonstrating a 40% failure rate for Omegas, data which includes Central's own testing of Omegas, as well as that of several other reputable testing laboratories (none of whom did their testing at the prompting or request of the CPSC). Complaint Counsel has provided to Respondents information pertaining to at least 13 fires in which Omegas did not activate. New fires are occurring, and Complaint Counsel is now hearing about older fires in which Omegas failed to function on a regular basis. *See* Complaint Counsel's Supplemental Interrogatory Responses, May 20, 1998. It is only a matter of time before additional injuries, and even death, occur as a result of Omega failures. Complaint Counsel has notified Respondents that Omegas create a substantial risk of injury to the public, and are a substantial product hazard, and provided supporting documentation of

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4 Respondents also object to the fact that Complaint Counsel has not articulated the contentions it intends to prove at trial. *See* Respondents' Renewed Motion at 15. Respondents cite, for instance, their Interrogatory Nos. 53 - 73, which ask whether Complaint Counsel contends that there are specific causes responsible for the alleged defect in Omegas. Complaint Counsel has filed responses to this question in this litigation, and the Presiding Officer has indicated that it is not Complaint Counsel's duty to prove the underlying cause of the defect in Respondents' product for Respondents; Complaint Counsel need only show that the sprinklers do not work in a sufficient percentage of instances. Pursuant to the Judge's Order, Complaint Counsel will brief what is required to prove its *prima facie* case.

both the test results and the fires. Asking Complaint Counsel to speculate on what failure rate in testing would lead to the opposite conclusion (i.e., that a product is not be a substantial product hazard) is rather irrelevant at this time, in light of what we know to be the actual failure rate of Omegas.

Respondents list Complaint Counsel's Response to Interrogatory No. 57 as an example of a response that is "materially incomplete," *see* Respondents' Renewed Motion at 18, and makes an "invalid relevance and/or vagueness objection." *Id.* at 34. Respondents' Request No. 57 asks for all documents that "constitute, provide evidence of, refer, or relate to the use of silicone o-rings in sprinkler heads." The question encompasses any and all sprinklers, including non-Omegas. As Omegas sprinklers are at issue in this litigation, Complaint Counsel provided responsive information pertaining to silicone "o" ring Omega failures. However, Complaint Counsel preserved a relevance objection for documents that pertain to the use of silicone o-rings in sprinkler heads other than Omegas, which are not at issue herein. Complaint Counsel's relevance objection is well-grounded, and made in good faith.[5]

Respondents further claim that several of Complaint Counsel's responses to their Interrogatories are insufficient because they "refer Central to Complaint Counsel's own self-serving pleadings." *See* Respondents' Renewed Motion at 32. Respondents

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5 Ignoring the information Complaint Counsel has repeatedly provided to Respondents regarding the recent failure of a brand new Omega with a silicone o-ring that was manufactured in February, Respondents continue to allege that Complaint Counsel has no evidence of silicone o-ring Omega failures, and that Complaint Counsel has provided Respondents with no such evidence. *See* Correspondence from Thomas Hogan to Deborah Orlove, May 13, 1998, attached as Exhibit G to Respondents' Renewed Motion.

specifically list Complaint Counsel's responses to Interrogatories 85 and 86. *Id.* Both of these questions are contention interrogatories, and ask in one subsection what documents evidence Complaint Counsel's contention. As the Complaint is such a document, Complaint Counsel listed it in addition to Omega test results and documents pertaining to fires involving Omegas. Respondents' Interrogatory No. 85 asked, for example:

> **85. (a) State whether the Complainant contends that any Omegas used with copper piping systems installed after 1990 constitute a "substantial product hazard" pursuant to 15 U.S.C. § 2064(a). If so:**
> **(b) identify and describe any such hazards;**
> **(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;**
> **(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and**
> **(e) describe in detail the substance of each such person's knowledge and/or information.**

Complaint Counsel indicated in its response that the Interrogatory is unclear, vague and ambiguous, as it is impossible to ascertain whether the Interrogatory seeks information regarding piping systems installed after 1990, or regarding Omegas installed after 1990 (regardless of when the system was installed). Without waiving its objection, Complaint Counsel explained that it "contends that all Omega sprinklers are substantial product hazards pursuant to 15 U.S.C. § 2064, regardless of the type of piping in which they may be used." *See* Complaint Counsel's Response to Respondents' Interrogatory No. 85. Complaint Counsel further explained that it contends that "Omega sprinklers are defective pursuant to 15 U.S.C. § 2064, as they may fail in a fire situation, and thus create a substantial risk of injury to the public." *Id.* Complaint Counsel identified the Complaint as a document that "refers, relates to, and provides evidence of" Complaint Counsel's

contention." Complaint Counsel also listed in its response "Central's test results, and the results of testing of Omegas by or for, among others, UL, FM and CPSC," as well as evidence of fires in which Omegas have reportedly failed to activate, as evidence "supporting and relating to this contention." Complaint Counsel has produced to Respondents all testing and fire data in its possession, except results of testing by its own engineering consultants, which is not yet complete.

D. Complaint Counsel has a Valid Claim of Work Product Privilege for Communications by and between the Attorneys and Consultants on this Case

Most of Respondents' discovery requests are so broad that the information they seek includes privileged communications between the attorneys in this case, and between the attorneys and their consultants, in the investigation of this case and preparation of it for litigation. For example, although Respondents claim that Request #7 requests information provided to Complaint Counsel by "independent" third parties, the Request actually asks for "all documents provided to the CPSC by any person, organization, business, or any other entity regarding or related to the Omegas and/or Respondents." *See* Respondents' Renewed Motion at 20. Complaint Counsel has provided voluminous documents responsive to this Request, despite the fact that it is overbroad and unduly burdensome. Complaint Counsel preserved a work product privilege, however, for documents prepared by or for Complaint Counsel in anticipation of litigation, such as by consultants. Complaint Counsel's claim of privilege is legitimate.[6]

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6 A number of the documents for which Complaint Counsel has made claims of privilege have been submitted to the Presiding Officer for determination of whether and to what extent they should be produced. Complaint Counsel would be pleased to provide the remaining

Moreover, despite its claim of work product, Complaint Counsel has produced most documents that may be subject to the privilege, in the spirit of full disclosure. A prime example of such disclosure is Complaint Counsel's data compilation, which, as noted above, Respondents could themselves have prepared with the same effort as Complaint Counsel, from the underlying data. However, Complaint Counsel gave even its trial preparation materials -- its compilation -- to Respondents in discovery, after Respondents repeatedly claimed that they could not possibly defend this case without it. Respondents now have the compilation. That it does not help them defend their case is merely a reflection of the weight of the evidence that demonstrates that it is imperative that these sprinklers be taken out of service to protect the public.

Complaint Counsel has not refused, as Respondents claim, to produce "virtually all materials in its possession" on claims of work product. *See* Respondents' Renewed Motion at 19. In fact, Complaint Counsel has done the opposite -- it has produced nearly all of the documents in its possession, including some of its work product. Contrary to Respondents' suggestions, Complaint Counsel has produced documents such as those relating to CPSC's communications with sprinkler contractors (responsive to Interrogatory #120, cited in Respondents' Renewed Motion at 18, *et seq.*) and Authorities Having Jurisdiction (responsive to Interrogatory #121, cited in Respondents' Renewed Motion at 18, *et seq.*).

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documents listed in its Privilege Log to the Presiding Officer *in camera* for such a determination, if necessary.

Complaint Counsel has produced substantial evidence in this case. Because Respondents' requests are so broad, and there exists a continuing duty to supplement discovery, Complaint Counsel has preserved any work product privilege it may have by so stating it in its response. Complaint Counsel is not hiding any evidence, as Respondents have suggested in their correspondence, and in fact has no evidence that would demonstrate that Omegas are not a substantial product hazard. Respondents are looking for something that does not exist.

E. Complaint Counsel has not Delayed Producing Information

Respondents claim that Complaint Counsel has "delayed producing information and documents for no apparent reason." Respondents' Renewed Motion at 30.[7] Respondents cite Complaint Counsel's Response to its Interrogatory No. 124:

> **124. Identify and describe any and all testing of the Omegas conducted by or on behalf of the CPSC. Your response should include, without limitation, the following:**
>
> **(a) a description of any testing protocols used by the CPSC in testing the Omegas;**
>
> **(b) the identity of the person(s) who created or established any such testing protocols for the Omegas;**
>
> **(c) a description of the methodology employed during each and every test of the Omegas;**
>
> **(d) the date of each and every test of the Omegas;**
>
> **(e) an identification of the person(s) who conducted, participated in, or were otherwise present during each test of the Omegas;**

7 Respondents base their delay claim, in part, on Complaint Counsel's statement, in response to certain Interrogatories and Requests, that it "will produce" responsive documents. Complaint Counsel has explained to Respondents that this statement was intended to indicate that the documents will be produced **WITH THESE RESPONSES** (except where indicated in the response that the documents were not yet available). The responsive documents have been produced. Complaint Counsel will continue to supplement its responses as additional information is received.

(f) a description of the results of each and every test of the Omegas; and

(g) the identification of any and all documents (including videotapes and audiotapes) relating to any testing of the Omegas.

Response: Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and thus protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel responds that it is currently in the process of testing Omega sprinklers, and will produce all non-privileged documents relating thereto as soon as they are available.

Complaint Counsel's engineering consultants began testing Omega sprinklers at the request of Complaint Counsel, in preparation for trial of this matter. As such, Complaint Counsel objected to Respondents' Request No. 124 on the ground that the test results are Complaint Counsel's privileged work product. However, regardless of their status as work product, Complaint Counsel indicated that in the interest of full disclosure, it would provide to Respondents its test results as soon as those are available. Complaint Counsel's engineers' testing is still in progress, and Complaint Counsel has not received the final test results. Complaint Counsel is not withholding information from Respondents and, in fact, is told preliminarily by its engineers that they are finding a failure rate of Omegas commensurate with Complaint Counsel's data compilation of other testing results (30 to 40% failure rate). Complaint Counsel has, in fact, already shared some of the preliminary results with Respondents, including the failure in testing of a brand new Omega manufactured just a few months ago, and never even placed in service. Complaint Counsel offered on numerous occasions to share the x-ray that it took of that sprinkler, and even invited Respondents and their counsel to CPSC's offices

at their convenience for that purpose. Respondents only recently responded to Complaint Counsel's many offers, and are now reviewing the x-rays.

Complaint Counsel has wanted for some time to test the sprinklers from fire sites that it has received. Again, in an effort toward full disclosure and fairness, Complaint Counsel informed Respondents months ago that it has the sprinklers, and has preserved them for joint testing by Complaint Counsel and Respondents. In an effort to ensure that the parties have equal input into the testing methodology, Complaint Counsel asked for, and Respondents submitted, a testing proposal. *See* Omega Inspection Protocol from Respondents' Counsel to Complaint Counsel, dated March 17, 1998, attached hereto as Exhibit I. Complaint Counsel requested scientific clarification of several aspects of Respondents' proposal three months ago. *See* Correspondence from Deborah S. Orlove, Esq. to Frank A. Mazzeo and John C. Fenningham, dated April 21, 1998, attached hereto as Exhibit J. Respondents still have not submitted a response so that joint testing of these units may begin, yet they continue to claim that the staff is unwilling to share test results. Respondents are the sole reason why the staff has been unable to secure (much less provide) test results with respect to the fire site sprinklers.

F. Complaint Counsel Should be Protected From Respondents' Irrelevant Interrogatories and Document Requests, and From Providing to Respondents the Very Documents Respondents Provided to Complaint Counsel

Respondents' Motion, as well as their position during this entire investigation and litigation to date, has been to attempt to force the United States Government to do

Central's work -- to figure out what is wrong with the Omegas, to come up with a solution, and now, to do its trial preparation.

Respondents request that Complaint Counsel be compelled to answer a number of Interrogatories, including ones that are completely irrelevant. Respondents accuse Complaint Counsel of making illegitimate relevance objections, and "treating discovery to date as a game of 'hide-and-seek'." Respondents' Renewed Motion at 34.

Complaint Counsel's objections to Respondents' discovery are entirely valid. For instance, in Interrogatory No. 129, cited by Respondents in their Motion as an example of such alleged "gamesmanship," Respondents ask Complaint Counsel to identify "proposed alterative design features" for the Omega. Respondents' Renewed Motion at 34. Respondents leave these terms completely undefined. More significantly, though, this question, like so many others in Respondents' discovery requests, asks Complaint Counsel to tell Central what Central itself should know or attempt to find out, not what Complaint Counsel needs to prove its case. Respondents ask Complaint Counsel to devise alternative sprinklers, and to speculate about what Central should do to change its sprinklers to make them work. It is not Complaint Counsel's place to solve this problem for Respondents. Complaint Counsel's role under the CPSA is to protect consumers from defective products, not to devise alternative designs for products that do not work. *See* 15 U.S.C. § 2064, *et seq.*

Respondents claim that they are entitled to determine via discovery what documents and information are in the staff's possession. As explained above, with very

few and specific exceptions, Complaint Counsel has given Respondents everything in its possession regarding this case. Respondents claim that Complaint Counsel has provided responsive documents to only 12 of its Requests for Production. *See* Respondents' Renewed Motion at 13. Complaint Counsel's discovery responses, and supplements thereto, prove otherwise. *See* Complaint Counsel's First, Second, Third, Fourth, Fifth and Sixth Notices of Service of Supplemental Documents (with letters to Respondents' counsel), and Complaint Counsel's Supplemental and Second Supplemental Responses to Respondents' Interrogatories, attached hereto as Exhibits A through H. Complaint Counsel has provided Respondents and/or the Presiding Officer with all responsive information to Respondents' discovery requests, and will continue to supplement its responses as appropriate.

Complaint Counsel should not be required to respond to Respondents' Request for Production No. 6, however, which requests "all documents provided to the CPSC by Respondents regarding the Omegas." This request is unnecessary, unduly burdensome, and violates the spirit of discovery. However, if Respondents have lost any specific information submitted to the staff, the staff will respond to any focused requests for such information.

G. Verification of Interrogatory Responses

Complaint Counsel attaches hereto, and serves herewith, a verification of its Interrogatory Responses, and apologizes that this was inadvertently omitted from its original responses.

III. CONCLUSION

Respondents served upon Complaint Counsel **148** Interrogatories and **71** Requests for Production. Complaint Counsel served timely and complete responses to these Interrogatories and Requests, and has supplemented its Responses regularly as additional information was discovered or became available. Complaint Counsel has given Respondents Bates-stamped copies of nearly everything in its files, except correspondence with consultants and internal memoranda between the attorneys regarding the litigation. Respondents have claimed on numerous occasions that they have not received any discovery that is "meaningful to them." Perhaps this is because Omegas are so clearly problematic that everything that Complaint Counsel has gathered in its investigation and for trial in this matter only provides more proof that Omegas are a substantial product hazard.

Respondents claim that "Complaint Counsel's discovery responses provided little information to Central." *See* Respondents' Renewed Motion at 4. Perhaps this is because Complaint Counsel had little or, and in some cases, no information that Respondents did not already have regarding the fire sites, fire investigations, and testing done on Omegas. In fact, most of the testing of Omegas was done by Central itself, or by others on Central's behalf. Central is familiar with most, if not all, persons who have information pertaining to the Omega problem. Complaint Counsel's preliminary review of the documents provided by Respondents demonstrates that Respondents have known for many years about Omega failures, and many of the reasons for those failures --

information they withheld from the Commission and the public. Yet, in what can only be seen as another effort to distract from the true issues in this litigation, Respondents now attempt to portray Complaint Counsel as non-forthcoming and evasive.

Based on the foregoing, Complaint Counsel requests that it be protected from further response to Respondents' Interrogatories, other than providing additional responsive information as that becomes available in its continuing investigation of this matter, and that Respondents' Motion to Compel be DENIED.

Dated: July 20, 1998

Respectfully submitted,

Deborah S. Orlove

Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.
Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, MD 20814
(301) 504-0626

Of Counsel
Eric L. Stone, Esq.
Director, Legal Division
Alan H. Schoem, Esq.
Assistant Executive Director
Office of Compliance
dso\central\compel.opp

VERIFICATION

I, Catherine A. Cumberland, hereby verify pursuant to 16 C.F.R. § 1025.32(b), that Complaint Counsel's responses to Respondents' First Set of Interrogatories are true and correct, to the best of my knowledge, information and belief.

Dated: July 20, 1998

Catherine A. Cumberland
Compliance Officer
US Consumer Product Safety Commission
Office of Compliance

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, **COMPLAINT COUNSEL'S OPPOSITION TO RESPONDENTS' RENEWED MOTION TO COMPEL** was filed with the Secretary of the Commission, and deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

J. Gordon Cooney, Jr., Esq.
Thomas P. Hogan, Jr., Esq.
Emily J. Lawrence, Esq.
MORGAN, LEWIS & BOCKIUS LLP
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Philadelphia, PA 19103
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fax (215) 639-8995

Attorneys for Central Sprinkler Corporation and Central Sprinkler Company

The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
401 M St., S.W.
Mail Code 1900 L
Washington, DC 20460
fax (202) 565-0044

Dated: 7/20/98

Signed: Kenn Bern

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION

1998 MAY -7 P 4:03

U.S. CONSUMER PRODUCT SAFETY COMMISSION
WASHINGTON, D.C. 20207-0001

OFFICE OF COMPLIANCE
Legal Division

Deborah S. Orlove
Trial Attorney
Tel: 301-504-0626 ext. 1347
Fax: 301-504-0359

May 7, 1998

VIA CERTIFIED UNITED STATES MAIL
J. Gordon Cooney, Jr., Esq.
Thomas P. Hogan, Jr., Esq.
Emily J. Lawrence, Esq.
MORGAN, LEWIS & BOCKIUS LLP
2000 One Logan Square
Philadelphia, PA 19103

Re: ***In the Matter of Central Sprinkler Corp. and Central Sprinkler Co.*****, CPSC Docket No. 98-2**
Complaint Counsel's Responses to Respondents' First Request for Production of Documents

Dear Counsel:

Pursuant to the parties' continuing duty to supplement discovery responses as mandated by 16 C.F.R. § 1025.31(f), enclosed please find a supplemental package of documents responsive to Respondents' First Request for Production of Documents. Bates pages 2141 - 2212 are or may be responsive to Request Nos. 1, 9, 48, 49, 50, 51, 52, 53 and 60; Bates page 2213 may be responsive to Request Nos. 42 and/or 43; Bates pages 2214 - 2215 are responsive to Request No. 4; Bates page 2216 is responsive to Request No. 5; and Bates pages 2217 - 2227 are or may be responsive to Request Nos. 1, 9, 48, 49, 50, 51, 52, 53 and 60. All documents are provided without waiving objections stated in Complaint Counsel's Responses to Respondents' First Request for Production of Documents.

As we indicated in our letter yesterday, a number of documents that Complaint Counsel has that may be responsive to Respondents' requests were provided to Complaint Counsel by third parties. As you know, Complaint Counsel is prohibited by statute from disclosing any information received from third parties that may be confidential commercial information or trade secret. To ensure speedy disclosure of information to Respondents, Complaint Counsel has attempted to negotiate with the third parties directly to obtain permission to provide all such information to Central.

At this time, we have received such permission from two parties - Marriott and Sheraton. The Marriott documents were produced in the box of documents forwarded to you

last week. Having just received final permission from counsel for Sheraton, those documents have been Bates stamped and copied, and are being produced to you at this time.

We continue to await a final response regarding possible claims of confidentiality and/or trade secret from counsel for a testing laboratory that has provided information to Complaint Counsel regarding the Omega. Complaint Counsel will prepare and forward those documents to Respondents immediately upon receipt of permission to disclose. If such permission is not granted by next Wednesday, May 13, 1998, we will forward the documents to the Presiding Officer for a determination of whether the third party's claims are valid, and for appropriate disclosure procedures.

You indicated in your correspondence your desire to obtain a copy of the data compilation prepared by Complaint Counsel with respect to Omega failures. Although Complaint Counsel has provided you with the underlying test data upon which its compilation is based, and although the compilation is continually evolving and is Complaint Counsel and its staff's work product, in the interest of full disclosure, Complaint Counsel has included in this supplemental response a copy of its compilation as it existed at the time the complaint was filed, with probability range categories (which are Complaint Counsel's analysis of the compilation) redacted.

Sincerely,

Deborah S. Orlove

Deborah S. Orlove, Esq.
Complaint Counsel

cc: The Honorable William B. Moran
Sayde Dunn, Secretary
Michael F. Healy, Esq.
John C. Fenningham, Esq.

dso/discov3ltr

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents	)	

COMPLAINT COUNSEL'S NOTICE OF SERVICE OF SUPPLEMENTAL DOCUMENTS IN RESPONSE TO RESPONDENTS' FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS

Pursuant to its continuing duty to supplement discovery responses as mandated by 16 C.F.R. § 1025.31(f), Complaint Counsel hereby provides supplemental documents in response to Respondents' First Request for Production of Documents and Things.

DATED: May 7, 1998

Deborah S. Orlove

Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.

Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, Maryland 20814
301-504-0626

supp.doc

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, **COMPLAINT COUNSEL'S NOTICE OF SERVICE OF SUPPLEMENTAL DOCUMENTS IN RESPONSE TO RESPONDENTS' FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS** was filed with the Secretary of the Commission, and deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

J. Gordon Cooney, Jr., Esq.
Thomas P. Hogan, Jr., Esq.
Emily J. Lawrence, Esq.
MORGAN, LEWIS & BOCKIUS LLP
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CORR, STEVENS & FENNINGHAM
Five Neshaminy Interplex, Suite 315
Trevose, PA 19053
(215) 639-4070
Attorneys for Central Sprinkler Corporation and Central Sprinkler Company

Pursuant to Respondents' instructions, documents were served only upon J. Gordon Cooney, Jr., Esq., at the above address.

A copy was also served on the Presiding Officer pursuant to 16 C.F.R. § 1025.31(h) at:

The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
401 M St., S.W.
Mail Code 1900 L
Washington, DC 20460

Linda V. Mitchell Dated: 5/7/98

certif.sup

COPY

U.S. CONSUMER PRODUCT SAFETY COMMISSION
WASHINGTON, D.C. 20207-0001

OFFICE OF COMPLIANCE
Legal Division

Deborah S. Orlove
Trial Attorney
Tel: 301-504-0626 ext. 1347
Fax: 301-504-0359

May 20, 1998

VIA TELECOPIER AND OVERNIGHT EXPRESS

J. Gordon Cooney, Jr., Esq.
Thomas P. Hogan, Jr., Esq.
Emily J. Lawrence, Esq.
MORGAN, LEWIS & BOCKIUS LLP
2000 One Logan Square
Philadelphia, PA 19103

Re: ***In the Matter of Central Sprinkler Corp. and Central Sprinkler Co.*, CPSC Docket No. 98-2**
Complaint Counsel's Responses to Respondents' Interrogatories; Complaint Counsel's Responses to Respondents' First Request for Production of Documents

Dear Counsel:

Pursuant to the parties' continuing duty to supplement discovery responses as mandated by 16 C.F.R. § 1025.31(f), enclosed please find a supplemental response to Respondents' Interrogatories, as well as a package of documents responsive to Respondents' First Request for Production of Documents.

With respect to the documents, Bates pages 11769 - 11919, and 12157 - 12170 are or may be responsive to Request Nos. 3, 4, 9, 12, 14, 38, 40, 44, 45 and 60, and may also be responsive to Respondents' Interrogatory No. 122. Bates pages 11920 - 12156, and 12363 are or may be responsive to Request Nos. 3, 4, 9, 12, 14, 38, 41, 44, 45 and 60, and may also be responsive to Respondents' Interrogatory No. 123. Bates pages 12171 - 12361 are or may be responsive to Request Nos. 3, 5, 7, 12, 14, 15, and may also contain information responsive to, among others, Request Nos. 9, 23, 24, 25 and 27, and may also be responsive to Respondents' Interrogatory No. 122. Bates page 12362 is or may be responsive to Request Nos. 3, 5, 7, 12 and 41, and Respondents' Interrogatory No. 123. Bates pages 12364 - 12430, and pages 12438 - 12450 are or may be responsive to Request Nos. 3, 4, 5, 7, 9, 14, 15, 23, 37, 38, 40, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 61 and 69, and may also be responsive to Respondents' Interrogatory No. 119. Please note that portions of the documents including consumer names, addresses, and telephone numbers have been redacted in accordance with 16 C.F.R. § 1015.17 and 15 U.S.C. § 2074(c). Bates pages 12431 - 12437, and 12451 - 12456

are or may be responsive to Request Nos. 3, 4, 5, 7, 9, 14, 21, 22, 25, 26, 27, 37, 39, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 57, 58, 68, 69 and 70, and may also be responsive to Respondents' Interrogatory No. 120. Bates pages 12457 - 12479 are or may be responsive to Request Nos. 3, 7, 14, 15, 38, 40, 46, 47, 48, 49, 50, 51, 52, 53, 61, 62 and 69, and may also be responsive to, among others, Respondents' Interrogatories 46, 51, 52, 53 - 73, 74, 76, 77, 88, 89 and 118. Please be advised that all documents are provided without waiving objections stated in Complaint Counsel's Responses to Respondents' First Set of Interrogatories and Complaint Counsel's Responses to Respondents' First Request for Production of Documents.

Sincerely,

Deborah S. Orlove

Deborah S. Orlove, Esq.
Complaint Counsel

cc: The Honorable William B. Moran
Sayde Dunn, Secretary, Consumer Product Safety Commission
Michael F. Healy, Esq.
John C. Fenningham, Esq.

dso/discov6.ltr

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents.	)	

COMPLAINT COUNSEL'S NOTICE OF SERVICE OF SECOND SET OF SUPPLEMENTAL DOCUMENTS IN RESPONSE TO RESPONDENTS' FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS

Pursuant to its continuing duty to supplement discovery responses as mandated by 16 C.F.R. § 1025.31(f), Complaint Counsel hereby provides supplemental documents in response to Respondents' First Request for Production of Documents and Things. Complaint Counsel provides these documents without waiving objections stated in Complaint Counsel's Responses to Respondents' First Set of Interrogatories and Complaint Counsel's Responses to Respondents' First Request for Production of Documents.

DATED: May 20, 1998

Deborah S. Orlove

Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.
Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, Maryland 20814
301-504-0626

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, **COMPLAINT COUNSEL'S NOTICE OF SERVICE OF SECOND SET OF SUPPLEMENTAL DOCUMENTS IN RESPONSE TO RESPONDENTS' FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS, and COMPLAINT COUNSEL'S SUPPLEMENTAL RESPONSES TO RESPONDENTS' FIRST SET OF INTERROGATORIES** were filed with the Secretary of the Commission, and telecopied and sent via overnight express to the following:

J. Gordon Cooney, Jr., Esq.
Thomas P. Hogan, Jr., Esq.
Emily J. Lawrence, Esq.
MORGAN, LEWIS & BOCKIUS LLP
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Five Neshaminy Interplex, Suite 315
Trevose, PA 19053
(215) 639-4070
fax (215) 639-8995
Attorneys for Central Sprinkler Corporation and Central Sprinkler Company

Pursuant to Respondents' instructions, documents were served only upon J. Gordon Cooney, Jr., Esq., at the above address. A copy was also served on the Presiding Officer pursuant to 16 C.F.R. § 1025.31(h) at:

The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
401 M St., S.W.
Mail Code 1900 L
Washington, DC 20460
(202) 564-6256
fax (202) 565-0044

Rolanda V. Mitchell

Dated: 5/20/98

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OFFICE OF THE SECRETARY
98 MAY 22 P 5:32

U.S. CONSUMER PRODUCT SAFETY COMMISSION
WASHINGTON, D.C. 20207-0001

OFFICE OF COMPLIANCE
L Division

Deborah S. Orlove
Trial Attorney
Tel: 301-504-0626 ext. 1347
Fax: 301-504-0359

May 22, 1998

VIA OVERNIGHT EXPRESS

J. Gordon Cooney, Jr., Esq.
Thomas P. Hogan, Jr., Esq.
Emily J. Lawrence, Esq.
MORGAN, LEWIS & BOCKIUS LLP
2000 One Logan Square
Philadelphia, PA 19103

Re: ***In the Matter of Central Sprinkler Corp. and Central Sprinkler Co.*****, CPSC Docket No. 98-2**
Complaint Counsel's Responses to Respondents' Interrogatories; Complaint Counsel's Responses to Respondents' First Request for Production of Documents

Dear Counsel:

Pursuant to the parties' continuing duty to supplement discovery responses as mandated by 16 C.F.R. § 1025.31(f), enclosed please find a second supplemental response to Respondents' Interrogatories, as well as an additional package of documents responsive to Respondents' First Request for Production of Documents.

With respect to the documents, Bates pages 12480 - 12527, 12537 - 12540, 12555 - 12573, 12598 - 12666, 12667 - 12809, 12834 - 12849, and 12853 - 12859 are or may be responsive to Request Nos. 3, 4, 5, 7, 9, 14, 15, 23, 37, 38, 40, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 61 and 69. Bates pages 12529 - 12535, 12818 - 12833, and 12860 - 12861 are or may be responsive to Request Nos. 3, 4, 5, 7, 9, 14, 21, 22, 25, 26, 27, 37, 39, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 57, 58, 68, 69 and 70, and may also be responsive to Respondents' Interrogatory Nos. 114 and 120. Bates pages 12549 - 12554 are or may be responsive to Request Nos. 3, 4, 5, 7, 9, 14, 15, 19, 20, 31, 44, 46, 50, 51, and 57. Bates pages 12551 - 12552 may also be responsive to Request No. 58. Bates pages 12810 - 12817, and Bates page 12902 (which belongs between Bates pages 12814 and 12815, and has been so placed, as it was mistakenly not initially Bates-stamped), and Bates pages 12890 - 12900 are or may be responsive to Request Nos. 3, 4, 9, 12, 14, 38, 40, 44, 45 and 60, and may also be responsive to Respondents' Interrogatory Nos. 79 and 121. Bates pages 12574 - 12597 are or may be responsive to Request Nos. 3, 4, 9, 12, 14, 38, 40, 44, 45 and 60, and may also be

responsive to Respondents' Interrogatory No. 122. Bates pages 12536, 12541 - 12548, and 12850 - 12851 are or may be responsive to, among other Requests, Request Nos. 3, 4, 5, 6, 9, 12, 14, 15, 31, and 56. Bates page 12528 is or may be responsive to Request Nos. 3, 7, 14, 15, 38, 40, 46, 47, 48, 49, 50, 51, 52, 53, 61, 62 and 69, and may also be responsive to, among others, Respondents' Interrogatories 46, 51, 52, 53 - 73, 74, 76, 77, 88, 89 and 118. Bates pages 12852, 12862 - 12889, and 12901 are or may be responsive to Request Nos. 3, 4, 9, 12, 14, 38, 41, 44, 45 and 60, and may also be responsive to Respondents' Interrogatory No. 123. Bates page 12901 may also be responsive to Respondents' Request No. 16. Please be advised that all documents are provided without waiving objections stated in Complaint Counsel's Responses to Respondents' First Set of Interrogatories and Complaint Counsel's Responses to Respondents' First Request for Production of Documents.

Sincerely,

Deborah S. Orlove, Esq.
Complaint Counsel

cc: The Honorable William B. Moran
Sayde Dunn, Secretary, Consumer Product Safety Commission
Michael F. Healy, Esq.
John C. Fenningham, Esq.

dso/discov7.ltr

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents.	)	

COMPLAINT COUNSEL'S NOTICE OF SERVICE OF THIRD SET OF SUPPLEMENTAL DOCUMENTS IN RESPONSE TO RESPONDENTS' FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS

Pursuant to its continuing duty to supplement discovery responses as mandated by 16 C.F.R. § 1025.31(f), Complaint Counsel hereby provides supplemental documents in response to Respondents' First Request for Production of Documents and Things. Complaint Counsel provides these documents without waiving objections stated in Complaint Counsel's Responses to Respondents' First Set of Interrogatories and Complaint Counsel's Responses to Respondents' First Request for Production of Documents.

DATED: May 22, 1998

Deborah S. Orlove

Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.
Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, Maryland 20814
301-504-0626

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, **COMPLAINT COUNSEL'S NOTICE OF SERVICE OF THIRD SET OF SUPPLEMENTAL DOCUMENTS IN RESPONSE TO RESPONDENTS' FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS**, and **COMPLAINT COUNSEL'S SECOND SUPPLEMENTAL RESPONSES TO RESPONDENTS' FIRST SET OF INTERROGATORIES** were filed with the Secretary of the Commission, and sent via overnight express to the following:

J. Gordon Cooney, Jr., Esq.
Thomas P. Hogan, Jr., Esq.
Emily J. Lawrence, Esq.
MORGAN, LEWIS & BOCKIUS LLP
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fax (202) 467-7176

John C. Fenningham, Esq.
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Five Neshaminy Interplex, Suite 315
Trevose, PA 19053
(215) 639-4070
fax (215) 639-8995
Attorneys for Central Sprinkler Corporation and Central Sprinkler Company

Pursuant to Respondents' instructions, documents were served only upon J. Gordon Cooney, Jr., Esq., at the above address. A copy was also served on the Presiding Officer pursuant to 16 C.F.R. § 1025.31(h) at:

The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
401 M St., S.W.
Mail Code 1900 L
Washington, DC 20460
(202) 564-6256
fax (202) 565-0044

Dated: 5/22/98

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1998 JUN 18 P 3:39

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents.	)	

COMPLAINT COUNSEL'S NOTICE OF SERVICE OF FOURTH SET OF SUPPLEMENTAL DOCUMENTS IN RESPONSE TO RESPONDENTS' FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS

Pursuant to its continuing duty to supplement discovery responses as mandated by 16 C.F.R. § 1025.31(f), and pursuant to the Presiding Officer's June 5, 1998 Confidentiality Order and Order Regarding Complaint Counsel's *In Camera* Submission of Documents and Request for Disclosure Determination, Complaint Counsel hereby provides supplemental documents in response to Respondents' First Request for Production of Documents and Things. The documents are Bates-stamped documents 2228 - 11768, with an intentional gap at Bates pages 8701 - 8999. These documents may be responsive to Respondents' First Request for Production of Documents and Things Nos. 2, 3, 5, 7, 9, 12, 13, 14, 23, 24, 25, 27, 31, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 56, 57, 58, 60, 66, 68, 69, 70 and/or 71. Complaint Counsel provides these documents without waiving objections stated in Complaint Counsel's Responses to Respondents' First Set of Interrogatories and Complaint Counsel's Responses to Respondents' First Request for Production of Documents. Complaint Counsel provides these documents to Counsel for Respondents subject to the Presiding Officer's Confidentiality Order, dated June 5, 1998.

DATED: June 5, 1998

Deborah S. Orlove

Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.
Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, Maryland 20814
301-504-0626

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U.S. CONSUMER PRODUCT SAFETY COMMISSION
WASHINGTON, D.C. 20207-0001

OFFICE OF COMPLIANCE
Legal Division

Deborah S. Orlove
Trial Attorney
Tel: 301-504-0626 ext. 1347
Fax: 301-504-0359

June 12, 1998

VIA TELECOPIER AND CERTIFIED MAIL

J. Gordon Cooney, Jr., Esq.
Thomas P. Hogan, Jr., Esq.
Emily J. Lawrence, Esq.
MORGAN, LEWIS & BOCKIUS LLP
2000 One Logan Square
Philadelphia, PA 19103

Re: ***In the Matter of Central Sprinkler Corp. and Central Sprinkler Co.*****, CPSC Docket No. 98-2**
Complaint Counsel's Responses to Respondents' Interrogatories; Complaint Counsel's Responses to Respondents' First Request for Production of Documents

Dear Counsel:

We are in receipt of your letter dated June 8, 1998, advising us that certain Bates numbered pages were missing from our latest production of documents. We have searched our files, and determined the following:

1. Bates pages 12199, 12242, 12361, 12370 and 12874 do not exist (there was an error in Bates-stamping, such that the stamp accidently skipped forward);

2. Bates pages 12234, 12244, 12246, 12335, 12337, 12345 and 12353 were located in our original set, but were also missing from our copy; it appears that they were inadvertently missed in the copying process. They are attached hereto;

3. The document attached to the fax cover page at Bates No. 12316 was inadvertently omitted from stamping altogether; we have stamped and attached the entire document as Bates pages 12977 - 12988.

Please accept our apologies for these unintentional oversights.

Sincerely,

Deborah S. Orlove

Deborah S. Orlove, Esq.
Complaint Counsel

cc: The Honorable William B. Moran
Sayde Dunn, Secretary, Consumer Product Safety Commission (hand delivery)
Michael F. Healy, Esq. (letter only)
John C. Fenningham, Esq. (letter only)

dso/discov10.ltr

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FILED
98 JUN 12 P 12:33

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents.	)	

COMPLAINT COUNSEL'S NOTICE OF SERVICE OF FIFTH SET OF SUPPLEMENTAL DOCUMENTS IN RESPONSE TO RESPONDENTS' FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS

Pursuant to its continuing duty to supplement discovery responses as mandated by 16 C.F.R. § 1025.31(f), Complaint Counsel hereby provides the following supplemental documents in response to Respondents' First Request for Production of Documents and Things, that were inadvertently omitted in its SECOND SET of supplemental documents in response to Respondents' First Request for Production of Documents and Things:

Bates pages 12234, 12244, 12246, 12335, 12337, 12345, 12353, 12977 - 12988.

DATED: June 12, 1998

Deborah S. Orlove

Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.
Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, Maryland 20814
301-504-0626

supp5.doc

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, **COMPLAINT COUNSEL'S NOTICE OF SERVICE OF FIFTH SET OF SUPPLEMENTAL DOCUMENTS IN RESPONSE TO RESPONDENTS' FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS** was filed with the Secretary of the Commission, and deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

J. Gordon Cooney, Jr., Esq.
Thomas P. Hogan, Jr., Esq.
Emily J. Lawrence, Esq.
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Michael F. Healy, Esq.
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1800 M Street, NW
Washington, DC 20036-5869
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fax (202) 467-7176

John C. Fenningham, Esq.
CORR, STEVENS & FENNINGHAM
Five Neshaminy Interplex, Suite 315
Trevose, PA 19053
(215) 639-4070
fax (215) 639-8995

Attorneys for Central Sprinkler Corporation and Central Sprinkler Company

The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
401 M St., S.W.
Mail Code 1900 L
Washington, DC 20460
fax (202) 565-0044

The documents at issue were hand-delivered to the Secretary of the Commission on this day, and forwarded via telecopier and certified mail to the Presiding Officer, and, pursuant to Respondents' instructions, to Respondents addressed to J. Gordon Cooney, Jr., Esq., et al., at the above address.

Signed: Kenn Berri

Dated: 6/12/98

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION
1993 JUL -7 P 4:00

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents.	)	

COMPLAINT COUNSEL'S NOTICE OF SERVICE OF SIXTH SET OF SUPPLEMENTAL DOCUMENTS IN RESPONSE TO RESPONDENTS' FIRST INTERROGATORIES AND FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS

Pursuant to its continuing duty to supplement discovery responses as mandated by 16 C.F.R. § 1025.31(f), Complaint Counsel hereby provides the following supplemental documents in response to Respondents' First Interrogatories and First Request for Production of Documents and Things. The Documents consist of five X Ray pictures (Bates pages 0013817 - 0013821) and one X Ray film (Bates page 0013822) that are or may be responsive to Respondents' Interrogatory Nos. 124, 126 and/or 127, as well as Respondents' Request for Production of Documents Nos. 8, 13, 14, 23, 24, 25, 27, 28, 36, 44, 46, 47, 48, 49, 50, 51, 52 and/or 57.

DATED: July 7, 1998

Deborah S. Orlove

Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.
Complaint Counsel
United States Consumer Product Safety Commission

Office of Compliance
4330 East West Highway
Bethesda, Maryland 20814
301-504-0626

supp6.doc

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, **COMPLAINT COUNSEL'S NOTICE OF SERVICE OF SIXTH SET OF SUPPLEMENTAL DOCUMENTS IN RESPONSE TO RESPONDENTS' FIRST INTERROGATORIES AND FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS** was filed with the Secretary of the Commission, and deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

J. Gordon Cooney, Jr., Esq.
Thomas P. Hogan, Jr., Esq.
Emily J. Lawrence, Esq.
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2000 One Logan Square
Philadelphia, PA 19103
(215) 963-5000
fax (215) 963-5299

Michael F. Healy, Esq.
MORGAN, LEWIS & BOCKIUS LLP
1800 M Street, NW
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(202) 467-7000
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Five Neshaminy Interplex, Suite 315
Trevose, PA 19053
(215) 639-4070
fax (215) 639-8995

Attorneys for Central Sprinkler Corporation and Central Sprinkler Company

The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
401 M St., S.W.
Mail Code 1900 L
Washington, DC 20460
fax (202) 565-0044

The documents at issue were hand-delivered to the Secretary of the Commission on this day (with photocopy of X Ray Film, Bates page 0013822 only), and forwarded via certified mail to the Presiding Officer (with photocopy of X Ray Film, Bates page 0013822 only) and, pursuant to Respondents' instructions, to Respondents via courier to the attention of Kathleen Sanzo, Esq. at the office of Michael F. Healy, Esq., above.

Dated: July 7, 1998

Signed: Deborah S. Clowe

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of CENTRAL SPRINKLER CORP., and CENTRAL SPRINKLER CO., Respondents.	CPSC DOCKET NO. 98-2

COMPLAINT COUNSEL'S SUPPLEMENTAL RESPONSES TO RESPONDENTS' FIRST SET OF INTERROGATORIES

Complaint Counsel hereby supplements its responses to Respondents' First Set of Interrogatories.

118. Identify and describe any and all incidents known to the CPSC in which a consumer or other person has reported a fire in connection with use of the Omegas. For each such incident, state the following:

(a) the name and address of the consumer;

(b) the date of the incident involving the fire;

(c) a description of any and all property damage, if any, caused by or associated with the fire; and

(d) a description of any and all personal injuries, if any, sustained as a result of or associated with the fire.

Response: Complaint Counsel incorporates herein its objections and response to Interrogatory No. 118 as stated in its initial Response to Respondents' First Set of

Interrogatories. Without waiving its objections, Complaint Counsel provides the following information on fires and injuries due to failure of Omega sprinklers to function that have occurred since Complaint Counsel's initial Responses were filed, and/or of which Complaint Counsel has become aware since its initial Responses were filed:

9. (a) Location: Joshua Tree Apartments, 11545 N. Frank Lloyd Wright Blvd., Scottsdale, AZ

(b) 05/12/98

(c) several hundred thousand dollars damage to structure and contents (investigation continuing)

(d) burns and smoke inhalation to female victim (investigation continuing into whether other injuries occurred)

10. (a) Location: Jackson Memorial Hospital, 1611 N.W. 12th Ave., Miami, FL 33136

(b) 07/31/90

(c) damage to hospital room and facilities (investigation continuing)

(d) burns and smoke inhalation to female victim, requiring emergency room treatment and amputation of right hand; injuries to male victim requiring emergency room treatment (investigation continuing into whether other injuries occurred)

11. (a) Location: Escondido Gardens, 2500 South Escondido Blvd., Escondido, CA 92075

(b) Complaint Counsel has insufficient information at this time with which

to respond to this subpart.

(c) Complaint Counsel has insufficient information at this time with which to respond to this subpart.

(d) Complaint Counsel has insufficient information at this time with which to respond to this subpart.

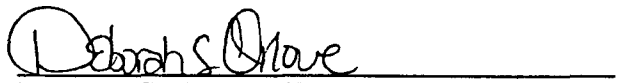
12. (a) Location: Escondido Gardens, 2500 South Escondido Blvd., Escondido, CA 92075

(b) Complaint Counsel has insufficient information at this time with which to respond to this subpart; however, Complaint Counsel adds that this fire and Omega nonactivation reportedly occurred several years prior to the fire and non-activation listed in #11.

(c) Complaint Counsel has insufficient information at this time with which to respond to this subpart.

(d) Complaint Counsel has insufficient information at this time with which to respond to this subpart.

DATED: May 20, 1998



Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.
Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, Maryland 20814
301-504-0626

dso\central\int2.req

COPY

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents.	)	

COMPLAINT COUNSEL'S SECOND SUPPLEMENTAL RESPONSES TO RESPONDENTS' FIRST SET OF INTERROGATORIES

Complaint Counsel hereby supplements its responses to Respondents' First Set of Interrogatories, to include the following information on additional injuries reportedly sustained in a fire in which an Omega failed to activate, as well as information pertaining to a fire at the Department of the Treasury in which Omegas reportedly did activate, though Complaint Counsel has not confirmed this information. Additionally, Complaint Counsel amends its responses to Respondents' First Set of Interrogatories to include information pertaining to the failure in testing of an Omega manufactured after 1990, which had been installed in plastic piping. Amendments to Complaint Counsel's Responses are depicted in bold print.

Interrogatory

118. Identify and describe any and all incidents known to the CPSC in which a consumer or other person has reported a fire in connection with use of the Omegas. For each such incident, state the following:

(a) the name and address of the consumer;

(b) the date of the incident involving the fire;

(c) a description of any and all property damage, if any, caused by or associated with the fire; and

(d) a description of any and all personal injuries, if any, sustained as a result of or associated with the fire.

Response: Complaint Counsel incorporates herein its objections and response to Interrogatory No. 118 as stated in its initial Response to Respondents' First Set of Interrogatories. Without waiving its objections, Complaint Counsel amends its Response to Interrogatory No. 118 to include the following additional information on injuries sustained in fires in which Omega sprinklers reportedly failed to function, of which Complaint Counsel has become aware since its initial Responses were filed:

10. (a) Location: Jackson Memorial Hospital, 1611 N.W. 12th Ave., Miami, FL 33136

(b) 07/31/90

(c) damage to hospital room and facilities (investigation continuing)

(d) burns and smoke inhalation to female victim, requiring emergency room treatment and amputation of right hand; injuries to male victim requiring emergency room treatment;

injuries to two fire-fighters

(investigation continuing into whether other injuries occurred)

Complaint Counsel also amends its response to this Interrogatory to add the

following information that may be responsive, regarding a fire in which Omegas reportedly did activate, though the staff has not confirmed the reported activation, nor has it confirmed that the alleged activation was complete, and that it occurred within the appropriate time after the sprinkler(s) were exposed to their activation/triggering temperature(s):

13. (a) Location: Treasury Department

(b) unknown at this time

(c) unknown at this time

(d) unknown at this time

Interrogatory

79. (a) State whether the Complainant contends that any Omegas used with plastic piping systems installed after 1990 have ever failed to activate under any type of testing.

If so:

(b) identify and describe any such a contention;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

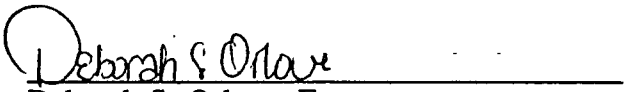
(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it is unclear,

vague and ambiguous, as it is impossible to ascertain whether the Interrogatory seeks information regarding piping systems installed after 1990, or regarding Omegas installed after 1990 (regardless of when the system was installed). Complaint Counsel further objects to this Interrogatory to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory on the ground that the term "failed to activate" is undefined, unclear, vague and ambiguous. Complaint Counsel is unable to formulate a response to this Interrogatory without clarification of how Respondents define a failure to activate. Without waiving its objections, Complaint Counsel will provide all non-privileged information it has with respect to testing of Omega sprinklers. **Without waiving its objections, and assuming that Respondents refer to Omegas manufactured after 1990 that were installed in plastic piping systems, that failed to activate in testing as defined in Complaint Counsel's discovery to Respondents, Complaint Counsel responds that it has information pertaining to such failures, and has supplied such information to Respondents in its supplemental document production of this date.**

DATED: May 22, 1998



Deborah S. Orlove, Esq.
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301-504-0626

dso\central\int3.req

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, **COMPLAINT COUNSEL'S NOTICE OF SERVICE OF THIRD SET OF SUPPLEMENTAL DOCUMENTS IN RESPONSE TO RESPONDENTS' FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS, and COMPLAINT COUNSEL'S SECOND SUPPLEMENTAL RESPONSES TO RESPONDENTS' FIRST SET OF INTERROGATORIES** were filed with the Secretary of the Commission, and sent via overnight express to the following:

J. Gordon Cooney, Jr., Esq.
Thomas P. Hogan, Jr., Esq.
Emily J. Lawrence, Esq.
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(215) 639-4070
fax (215) 639-8995
Attorneys for Central Sprinkler Corporation and Central Sprinkler Company

Pursuant to Respondents' instructions, documents were served only upon J. Gordon Cooney, Jr., Esq., at the above address. A copy was also served on the Presiding Officer pursuant to 16 C.F.R. § 1025.31(h) at:

The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
401 M St., S.W.
Mail Code 1900 L
Washington, DC 20460
(202) 564-6256
fax (202) 565-0044

Dated: 5/22/98

certif3.sup

Omega Inspection Protocol

For sprinkler heads damaged in fires and undamaged.

1. Visual examination of the head. Record the model, temperature rating, date of manufacture and finish (i.e. chrome, brass, white).

2. Look for thread sealant on the NPT threads - this may be Teflon Tape, Pipe dope, or some type of hardening sealant. Note and record the type of sealant and relative amount.

3. Look for damage or tool marks on the dust cover, wrench bosses, deflector and heat collector. Note and record any damage found. *Damage may have affected activation.*

4. Look for paint, plaster, or other foreign material on the sprinkler body, deflector and heat collector. Preserve deposits as found for later evaluation. If possible, remove samples for further evaluation. *Foreign material may have affected activation.*

5. Look in the bore for foreign material, corrosion. Note and record any material found. Preserve deposits as found for later evaluation. *Foreign material may have affected activation.*

6. Count the number of exposed threads on the retaining nut. Typically 1-1/2 to 2-1/2 threads will be exposed. *More or less may indicate a tampering problem.*

7. Check the heat collector, is the heat collector "tight"? *A loose heat collector may indicate that the head was exposed to heat above its rating.* Are the heat fins bent? *Bent heat fins could indicate field damage to the heat collector.* Is the heat collector generally parallel to the main axis of the sprinkler? Record all observations.

8. If the deflector has deployed:

   a) Look for balls and springs. *In a normal activation the balls are lost. The springs may be lost.* Look for damage/tool marks at the heat collector and deflector. Look for any visible ball marks at the plunger and body groove. *The heat collector should be "loose", if not, look for cause.*

9. If the deflector has not deployed (*typically the case when a sprinkler has not activated*):

   a) Check the tightness of the heat collector. *A loose heat collector may indicate exposure to heat above the rating.*

   b) Look for ejector springs (*these should be visible between the deflector and the body*).

10. Remove the retaining nut (only using the special wrench for this purpose), note the number of threads which are engaged. Is Loctite / Stake present? (*The retaining nut should have either Loctite or a mechanical stake present)*

11. Check for visible eutectic. Is any eutectic visible in the plunger housing or on the Plunger? *This is usually "splatter" of eutectic pellet from a heat activation.* Is the plunger retained in the heat collector? *This is usually a result of molten eutectic pellet from heat activation.*

12. Count the number of ball impressions on the plunger, ½" heads should have 6 ball impressions. 7/16" heads should have 3 ball impressions. *Shape and depth of impresssions may indicate cause of activation, or various types of abuse. Impressions which are overly deep can indicate excessive pressure. Note and record (both quantitatively and qualitatively) all information regarding the ball impressions.*

13. Examine the plunger.

   a) If plunger falls freely from heat collector: measure the assembled height of the heat collector. This should be checked against the relevant assembly drawing(s) for the year of manufacture. *The heat collector should be sectioned to examine the eutectic pellet and bearing disc.*

   b) If the plunger is retained in the heat collector: this usually indicates that the eutectic pellet has melted and flowed around the shaft of the plunger.

14. Check the shaft of the plunger for straightness. If this is bent, check to direction of bend in relation to the shape of the ball impressions for clues to the cause of activation. *If the ball impressions are regular and consistent the bending probably occurred after activation (when the balls were already out).* Measure and record the angle of any bend.

15. Remove and examine the insulator ring. Check the bore of the heat collector for straightness and damage.

16. If the deflector did not deploy when the heat collector was removed, pry the plunger housing loose from the waterway. Look for any deposits in the waterway or on the plunger housing. *There may be deposits adhering the o-ring / plunger housing to the waterway, or the o-ring may be adhered directly to the waterway.* Preserve deposits as found for later evaluation.

17. Check straightness of the guide pins, see if they interfere with the dust cover. *Tight or bent guide pins may impede activation.* Measure and record the angle of any bend.

18. Look at the condition of the o-ring with the naked eye, then examine under magnification. Look for signs of attack, extrusion, deterioration, etc. Note and record all observations. If necessary, remove from the plunger housing. Measure the o-ring inner diameter and cross-section. Several measurements may be required to ensure accurate measurement. *The o-ring may be swollen, or portions may have remained adhered to the bore or plunger housing.*

19. Examine any visible ball impressions in the body. *Impressions through the retaining flange may indicate excess pressure.*

20. If necessary, section the body to look at corrosion, deposits, adhered portions of the o-ring or ball impressions.

General Notes

1. Take photographs at various stages of the examination.
2. Measure dimensions and locations of parts whenever possible.
3. Suitable document all observations, measurements, etc.
4. Suitably preserve any materials (i.e. foreign substances) for further analysis.

COPY

U.S. CONSUMER PRODUCT SAFETY COMMISSION
WASHINGTON, D.C. 20207-0001

OFFICE OF COMPLIANCE
Legal Division

Deborah S. Orlove
Trial Attorney
Tel: 301-504-0626 ext. 1347
Fax: 301-504-0359

April 21, 1998

VIA TELECOPIER AND FIRST CLASS MAIL
(215) 639-8995

Frank A. Mazzeo, Esq.
John C. Fenningham, Esq.
CORR, STEVENS & FENNINGHAM
Five Neshaminy Interplex, Suite 315
Trevose, PA 19053

Re: *In the Matter of Central Sprinkler Corp. and Central Sprinkler Co.*, CPSC Docket No. 98-2
Testing Protocol for Omega fire sprinklers: Fort Wayne Children's Home and Kent Manor Inn

Dear Mr. Mazzeo and Mr. Fenningham:

As you know, the CPSC staff has obtained Omega sprinklers from the above-referenced fire sites, and has offered to test these jointly with Respondents. We are in receipt of your proposed "Omega Inspection Protocol," and appreciate your submission. However, in order to ensure that the investigation is fruitful, additional details regarding the protocol are required. Toward that end, we offer the following questions and comments:

1. Paragraph 2: What is meant by "relative amount" of sealant - how does one measure and determine this amount?

2. Paragraph 3: What is meant by "damage" and "tool marks," and how is this determined? How are "tool marks" distinguished from other "damage," and to what "tools" does your protocol refer?

3. Please delete all conclusions, legal or scientific, from your proposed protocol, e.g., "damage may have affected activation."

4.	Paragraph 4:	How does one determine what substance may be on the heat collector? What is meant by "foreign material?" How do you propose to "remove" samples; how do you propose the samples be analyzed and/or preserved?
5.	Paragraph 5:	What is meant by "foreign material?" Please define and describe "corrosion." How are deposits to be collected? Preserved? Evaluated?
6.	Paragraph 6:	How are threads on the retaining nut to be counted (they are angled)?
7.	Paragraph 7:	Please provide the protocol and suggested list of tools for measuring whether a heat collector is "tight." Please provide the protocol and suggested list of tools for measuring whether the heat fins are "bent." Please provide the protocol and suggested list of tools for measuring whether the heat collector is "generally parallel" to the main axis of the sprinkler. Please define "generally parallel" and "main axis of the sprinkler."
8.	Paragraph 8:	Define "deployed." Where and how does one "look for" "balls and springs?" What is meant by "damage" and "tool marks" at the heat collector and deflector? How is the tester to "look" for damage and/or tool marks? What is meant by "visible ball marks?" How is the tester to determine whether the heat collector is "loose?" What does "look for cause" refer to? Please provide protocol and list of equipment/tools for determining cause of "non-loose" heat collector.
9.	Paragraph 9:	Again, define "deployed." How does one check the "tightness of the heat collector?" Additionally, what do you propose if the ejector springs cannot be seen because the sprinkler has not activated?
10.	Paragraph 10:	What is meant by "number of threads which are "engaged?"" How is this to be determined/measured? Please provide protocol for determining whether "Loctite" or "Stake" is present, including comparison chemical analyses of all forms of "Loctite" and "Stake" you wish to have tester analyze for.

11. Paragraph 11: What is meant by "visible eutectic?" How is it to be determined/measured? Only with the naked eye? Please define "splatter" and indicate the scientific measurement therefor.

12. Paragraph 12: Please provide protocol for determining how "ball impressions" are to be counted/measured. What is "all information" that is to be "noted and recorded" regarding the ball impressions; how is the information to be noted and/or recorded?

13. Paragraph 13: What does "fall freely" from the heat collector mean? Please provide detailed scientific protocol for determining whether this occurs. What constitutes "assembled height of the heat collector?" How and with what is it to be measured? Please provide detailed protocol. Provide "relevant" assembly drawing(s) for the "year of manufacture" that the assembled height of the heat collector is to be measured against.

13a: How and in what plane is the heat collector to be "sectioned" to examine the eutectic pellet and bearing disc? Provide detailed protocol for sectioning, and for any and all examinations and/or measurements to be done on the eutectic pellet and bearing disc.

13b: How does one conclude why the plunger is retained in the heat collector?

14. Paragraph 14: What is "straightness" of the shaft of the plunger? How does one "check" for it? Please provide detailed scientific protocol to be used by the tester. How does one determine if it is "bent;" how does one determine and measure the "shape" of "ball impressions?" How is the examination conducted? What is meant by "check to [sic] direction of the bend in relation to the shape of the ball impressions? Please provide more specific definitions of what the tester is to examine, and what testing methods and procedures should be followed. What bearing do these measurements have on "cause of activation?" n.b. - are only shafts that activated to be examined? Why not the ones that did not activate? How is the angle of the "bend" to be measured and/or recorded?

15. Paragraph 15: Has the insulator ring been sectioned (paragraph 13(a))? If so, it cannot be properly removed and examined. How is it to be examined, and what is to be evaluated? Please provide detailed protocol. How is the bore of the heat collector to be checked for "straightness and damage," and how is this to be determined when sectioning by definition will have "damaged" the bore?

16. Paragraph 16: How is "deployment" determined? How is the plunger housing to be "pried?" Please provide a detailed protocol. What "deposits" are being "looked for" in the waterway; how are these identified and/or quantified? What are the ramifications of measuring deposits in the waterway if the system is altered and some of those deposits are removed in "prying" the plunger housing? How are the "deposits" to be preserved for later evaluation? What evaluation is to be done? Please provide detailed protocol for all preservation and evaluation.

17. Paragraph 17: What is "straightness" of the guide pins, and how does the tester "check" for it or "see" if the pins "interfere" with the dust cover? Please provide detailed protocol of what the tester is to do, what is to be analyzed, and exactly how it is to be analyzed.

18. Paragraph 18: What type of microscope, and what magnification is the tester to look at the "condition" of the o ring with? What is to be seen and/or recorded in the "naked eye" analysis? What are the criteria for determining the "signs of attack, extrusion, deterioration, etc."? What is the "etc.?" How is its existence determined and/or confirmed? What are the "several measurements" that "may be required" with respect to the o ring diameter and cross-section? How are they measured, how many measurements are "several," and is the mean, median, or most-frequently measured diameter and cross section the one that is recorded? Please provide a scientific protocol for review and analysis of the o ring.

19. Paragraph 19: How are "visible" ball impressions to be examined and/or determined? With the naked eye? Please provide detailed protocol for the examination.

20. Paragraph 20: Please provide detailed instructions for determining whether and when sectioning of the body is "necessary" to "look" at corrosion, "deposits," "adhered portions" of the o ring, or "ball impressions. Please provide detailed protocol for sectioning. Please define "corrosion," "deposits," "adhered portions," and "ball impressions."

21. General Notes: What are the "various stages" of the examination during which photographs should be taken?

What dimensions and/or "locations" or what parts are referred to; what determines when measurement of a "dimension" or "location" is possible? How does one measure these locations? What is the measurement in relation to?

What is meant by "suitabl[e] [sic] documentation? Please provide details on what documentation is requested, and to what extent each component of each analysis should be so documented.

What is meant by "suitably preserve" any materials; what qualifies as a "foreign substance?" Please provide protocol for preservation of all materials and substances that you request be preserved.

Please contact me if you have any questions regarding the foregoing. We look forward to hearing from you at your earliest convenience.

Sincerely,

Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Complaint Counsel

dso/protocol.ltr

********** -COMM. JOURNAL- ********** DATE APR-21-1998 ***** TIME 09:59 *** P.01

MODE = MEMORY TRANSMISSION START=APR-21 09:57 END=APR-21 09:59

FILE NO.= 006

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-CPSC COMPLIANCE -

********** -301 504 0359 - ***** - 301 504 0359- **********

U.S. CONSUMER PRODUCT SAFETY COMMISSION
WASHINGTON, D.C. 20207-0001

OFFICE OF COMPLIANCE
LEGAL DIVISION

Facsimile: (301) 504-0359
Office: (301) 504-0626

DATE: 4/21/98 PAGES TRANSMITTED 5 + COVER

TO: Frank Mazzeo, Esq.

John C. Fenningham, Esq.

OFFICE: _____

FAX: _____

FROM: Deborah Orlove, Esq.

TELEPHONE: (301) 504-0626 Ext. 1347

REMARKS: _____

☒ Confirmation copy to follow by U.S. Mail

☐ Fax Transmission Only

Note: If all pages are not received, or if you have any problems with this transmittal, please contact the person listed above.

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ROBINS, KAPLAN, MILLER & CIRESI L.L.P.
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CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION
1998 JUL 21 P 12:23

ROSEMARY CONNOLLY

July 20, 1998

The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
401 M Street, SW
Mail Code 1900 L
Washington, DC 20460

RE: *In the Matter of Central Sprinkler Corp.*
CPSC Docket No. 98-2

Dead Judge Moran,

This firm represents Factory Mutual Research Corporation ("FMRC") in connection with the above pending action. Per an order of this court dated June 3, 1998 FMRC hereby submits the attached Log in which FMRC identifies the documents and portions of documents that it requests be exempted from public disclosure should FMRC's documents be placed in the public domain. As instructed in the court's order we hereby submit:

1. A copy of each document with highlighting to indicate the portions of the document that FMRC seeks to redact and/or exempt;

2. Attached to each highlighted document is a redacted and/or exempted version of the document to illustrate how the document would read in its proposed redacted and or exempted state, and

3. A log explaining the reason for seeking redaction and or exemption for each document.

Due to the volume of materials we have not served the CPSC or Central Sprinkler with copies of the individually highlighted pages of the redactions and or exemptions. However, via Federal Express for delivery on Tuesday, July 21, 1998, FMRC has served the CPSC and Central

Sprinkler ("Central") with a copy of the Log along with a set of the documents as they would appear if redacted and or exempted. FMRC proposes that the CPSC and Central discuss the redactions and or exemptions sought by FMRC and then advise the court whether there is agreement among the parties regarding the requested redactions and exemptions from public disclosure and, further, to identify those redactions and or exemptions that the parties dispute.

Thank you for your attention to this matter.

Very Truly Yours,

ROBINS, KAPLAN, MILLER & CIRESI L.L.P.

Rosemary Connolly, Esq.

RC/meh
Encls.
cc: The United States Consumer Product Safety Commission
Office of Secretary
c/o Sadye Dunn
Room 502
4330 East West Highway
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UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETARY
OFFICE OF INFORMATION

1998 JUL 22 A 11: 17

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents.	)	

COMPLAINT COUNSEL'S NOTICE OF SERVICE OF SEVENTH SET OF SUPPLEMENTAL DOCUMENTS IN RESPONSE TO RESPONDENTS' FIRST INTERROGATORIES AND FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS

Pursuant to its continuing duty to supplement discovery responses as mandated by 16 C.F.R. § 1025.31(f), Complaint Counsel hereby provides the following supplemental documents in response to Respondents' First Interrogatories and First Request for Production of Documents and Things. The documents, Bates-stamped pages 12,989 through 13,816, are Hilton Hotels Corporation's response to the Commission's subpoena in this litigation. The documents are responsive to Respondents' Request for Production No. 5. The documents are or may also be responsive to Respondents' Interrogatory Nos. 1, 2, 3, 5 - 24, 25, 37, 40, 41, 51, 52, 53 - 72, 73, 76, 77, 79, 81, 84, 85, 87, 88, 89, 94, 95, 96, 102, 105, 114, 117, 130, 131, 141 and/or 142, as well as Respondents' Request for Production of Documents Nos. 1 (to the extent that copies of some of the test results included in Complaint Counsel's data compilation are contained in the subpoena response), 2, 3, 4, 7, 9, 12, 13, 14, 39, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 56, 57, 58, 69 and/or 70.

DATED: July 22, 1998

Deborah S. Orlove

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Howard N. Tarnoff, Esq.
Complaint Counsel
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supp7.doc

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, **COMPLAINT COUNSEL'S NOTICE OF SERVICE OF SEVENTH SET OF SUPPLEMENTAL DOCUMENTS IN RESPONSE TO RESPONDENTS' FIRST INTERROGATORIES AND FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS** was filed with the Secretary of the Commission, and deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

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Attorneys for Central Sprinkler Corporation and Central Sprinkler Company

The Honorable William B. Moran
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Environmental Protection Agency
401 M St., S.W.
Mail Code 1900 L
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The documents at issue were hand-delivered to the Secretary of the Commission on this day, and forwarded via certified mail to the Presiding Officer and, pursuant to Respondents' instructions, to J. Gordon Cooney, Jr., Esq. at the above address.

Dated: 7/22/98

Signed: Vinu Bawa

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UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETARY
OFFICE OF INFORMATION

1998 JUL 22 A 11: 17

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents.	)	

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DATED: July 22, 1998

Deborah S. Orlove

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, **COMPLAINT COUNSEL'S NOTICE OF SERVICE OF SEVENTH SET OF SUPPLEMENTAL DOCUMENTS IN RESPONSE TO RESPONDENTS' FIRST INTERROGATORIES AND FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS** was filed with the Secretary of the Commission, and deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

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The documents at issue were hand-delivered to the Secretary of the Commission on this day, and forwarded via certified mail to the Presiding Officer and, pursuant to Respondents' instructions, to J. Gordon Cooney, Jr., Esq. at the above address.

Dated: 7/22/98

Signed: Vinu Bawa

DECISION
7/24/98

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446	:	**CPSC Docket No. 98-2**
	:	
and	:	**Motion For Reconsideration Or, In The**
	:	**Alternative, For An Extension Of Time**
Central Sprinkler Co., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446,	:	
	:	
Respondents.	:	
	:	

RESPONDENTS' MOTION FOR RECONSIDERATION OR, IN THE ALTERNATIVE, FOR AN EXTENSION OF TIME

Respondents Central Sprinkler Corporation and Central Sprinkler Company (collectively, "Central") hereby move for reconsideration of the July 17, 1998 Order Granting Complaint Counsel's June 18, 1998 Motion Regarding Discovery. Central respectfully submits that the Order should be reconsidered because: (1) the Order did not give proper regard to the authorities which demonstrate that Complaint Counsel's interrogatories are oppressive and unduly burdensome; (2) the Order erroneously rejected Central's reliance on of 16 C.F.R. § 1025.32(d) based on erroneous factual assumptions about the parties' respective burdens; and (3) the Order should not have required Central to cite documents by Bates number in order to comply with § 1025.32(d). At the very least, the Order should be modified to require answers only to the interrogatories identified by Complaint Counsel in Appendix "A" of its Reply memorandum as the ones of greatest interest to Complaint Counsel.

In the alternative, Central moves for an extension of time in which to comply with the Order. Simply stated, it is impossible for Central to complete the task mandated by the Order within the prescribed seven (7) days, particularly where Complaint Counsel possess the full production set of pertinent documents.

WHEREFORE, Central respectfully requests that the Presiding Officer grant this Motion For Reconsideration Or, In The Alternative, For An Extension Of Time.

Further support for this Motion is contained in the attached Memorandum Of Law, which is incorporated by reference herein.

Respectfully submitted,

Dated: July 24, 1998

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Attorneys for Respondents
CENTRAL SPRINKLER CORP. and
CENTRAL SPRINKLER COMPANY

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp., a Corporation,	:	
451 North Cannon Avenue	:	**CPSC Docket No. 98-2**
Lansdale, PA 19446	:	
	:	**Memorandum of Law in Support of**
and	:	**Motion For Reconsideration Or, In The**
	:	**Alternative, For An Extension Of Time**
Central Sprinkler Co., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446,	:	
	:	
Respondents.	:	
	:	

MEMORANDUM OF LAW IN SUPPORT OF RESPONDENTS' MOTION FOR RECONSIDERATION OR, IN THE ALTERNATIVE, FOR AN EXTENSION OF TIME

I. INTRODUCTION

On July 17, 1998, the Presiding Officer issued an Order Granting Complaint Counsel's June 18, 1998 Motion Regarding Discovery (the "Order"). Respondents Central Sprinkler Corporation and Central Sprinkler Company (collectively, "Central") hereby move for reconsideration of the Order. At a minimum, Central requests the Court to modify the Order to limit it to the interrogatories Complaint Counsel has identified as most pertinent.

In the alternative, the Presiding Officer should grant Central an extension of time in which to comply with the Order, as it is not physically possible to comply with the Order within seven days.

II. FACTS

As detailed in Central's Opposition To Complaint Counsel's Motion, Complaint Counsel served nearly 1,500 interrogatories and subparts on Central. (See Central's Opp. to Compl. Counsel's Mot., pp. 3-10.) Complaint Counsel also served Central with document requests, the breadth of which required Central to conduct an exhaustive search and produce more than 450 boxes of documents. Because of the breadth and scope of Complaint Counsel's document requests, completing the initial sweep of the documents required almost 1,500 hours of work by Central's counsel and employees.

After the initial sweep and gathering of documents, Central reviewed the documents for privileged and confidential information. Such a review, however, did not and could not include a detailed review of subject matter and content that would have been sufficient to address to Complaint Counsel's 1,500 interrogatories. Rather, the focus was on readily identifiable confidential and trade secret information, identification of documents protected by the attorney-client privilege and work-product doctrine, and determination of the general subject matter of the documents. Even so, 16 lawyers worked 1,346 hours on this preliminary stage of document production. Nearly all of those lawyers were temporary staff hired for the sole task of complying with Complaint Counsel's document requests in the limited time permitted. They were not, and are not, engaged in the full extent of this or related litigation. Nor were they, or are they, familiar with Central's files, facilities, organization or employees. Once the privilege/confidential stage of production was completed, the documents were Bates-stamped and copied by several outside copy services. Central employees or counsel were not present when the documents were Bates-stamped and copied. Central provided all 450 or so boxes of documents to Complaint Counsel.

Although the Order refers to "a mass" or "tidal wave" of documents, it is important to recognize that Central produced the documents at significant expense and great effort in response to Complaint Counsel's extraordinarily broad document requests. In addition, in order to comply with the Presiding Officer's directive, Central prepared a detailed, extensive index of the approximately 450 boxes of documents, two examples of which are attached as Exhibits "B" and "C" to Central's Opposition to Complaint Counsel's Motion To Compel. The index identifies the source, department and Bates range of the documents in Central's document production. More importantly, the index describes the contents of the documents. In total, Central's comprehensive index provided to Complaint Counsel totaled 5,000 pages. As stated in the Declaration of Stephanie A. Graboyes, indexing just the first 100 boxes of documents required the work of 19 attorneys, 20 legal staff members and approximately 1,000 hours. (See Central's Opp. to Compl. Counsel's Mot., ex. A, ¶ 11.) As with the initial stage of production, nearly all of the lawyers involved in indexing were temporary staff hired for that task; administrative staff typed the index but did not review or even see the documents.

III. ARGUMENT

Although the Order granting Complaint Counsel's Motion To Compel refers to cases on which Central relied in support of its view that the interrogatories were unduly burdensome, Central respectfully submits that the Order does not focus on the courts' holdings or the main principles underlying those holdings. Further, the Order incorrectly concludes that the burden on Central would be less significant than that borne by Complaint Counsel in reviewing the documents to answer Complaint Counsel's interrogatories. Further, the Order imposes a

deadline with which it is impossible for Central to comply. Therefore, the Presiding Officer should reconsider the Order and deny Complaint Counsel's Motion, or, at a minimum, modify the Order to address only the interrogatories listed in Appendix "A" of Complaint Counsel's Reply memorandum. If Complaint Counsel's Motion is not denied, the Presiding Officer should, at the very least, grant Central's Motion for an extension of time.

A. The Cases Cited In The Order Do Not Support Its Conclusions.

The Order refers primarily to cases cited by Central in opposition to Complaint Counsel's Motion. Rather than relying on the holdings and the overall import of those cases, however, the Order focuses either on isolated sentences in the courts' general commentary, or on seemingly distinct facts which, upon closer inspection, actually mirror those in this matter.

For example, as the Order notes, Central cited In re U.S. Financial Securities Litigation, 74 F.R.D. 497 (S.D. Cal. 1975), and Breeland v. Yale and Towne Manufacturing Company, 26 F.R.D. 119 (E.D.N.Y. 1960), for the proposition that excessively long interrogatories are burdensome, an abuse of discovery and need not be answered. In discussing In re U.S. Financial Securities Litigation, the Order does not reflect the Court's holding that excessively long and detailed interrogatories are an abuse of the discovery process. Instead, the Order refers to the U.S. Financial Court's observation that, "in general, the frequency and scope of interrogatories are not limited." (July 17, 1998 Order, p. 3.) (hereinafter "Order").

Moreover, even with respect to that general observation by the U.S. Financial court, the Order does not take into account that, due to the very type of interrogatory abuse present here, the "frequency" of interrogatories has, in fact, been limited under the Federal Rules since the date of the case. As amended in 1993, Federal Rule of Civil Procedure 33(a) provides that without

leave of court or stipulation, "any party may serve upon any other party written interrogatories, not exceeding 25 in number including all discrete subparts . . . ." Fed. R. Civ. P. 33(a) (emphasis added). The limit on the number of interrogatories was added after federal courts' experience confirmed that limitations were necessary to avoid abuse. As the Advisory Committee observed, "because the device [interrogatories] can be costly and may be used as a means of harassment, it is desirable to subject its use to the control of the court . . . ." Id. (Advisory Comm. Notes to 1993 Amends.)

Likewise, the Order distinguishes Breeland, in which the court sustained the defendant's exceptions to answering more than 200 interrogatories, on the basis that the plaintiff sought both to depose defendant's witnesses and to receive interrogatory answers. (Order at p. 3.) In this regard, the Breeland court noted that "an adverse party should not be required to perform burdensome labors or to execute difficult tasks, in searching for facts, and classifying and compiling data." 26 F.R.D. at 120 (quotations omitted). In the instant matter, however, Complaint Counsel, like the Breeland plaintiff, also intends to use multiple discovery procedures. As Complaint Counsel's Preliminary Proposed Discovery And Litigation Schedule indicates, Complaint Counsel anticipates depositions of fact witnesses to commence after document production and to continue for a specified length of time thereafter. Thus, there is no basis to distinguish Breeland on this ground.

The Order next discusses United States v. Procter & Gamble Company, 25 F.R.D. 252, 254 (D.N.J. 1960), in which the Court held that compelling the plaintiff to provide specific detail about the topics discussed on certain occasions by individual persons was unduly burdensome and unnecessary The Order sought to distinguish the case by pointing out that the plaintiff

objecting to interrogatories had "already furnished defendants with all its documents, properly keyed to the general topic discussed." Id. at 254-55. In the instant matter, Central, like the objecting plaintiff in Procter & Gamble, has already furnished Complaint Counsel with all of its documents and a detailed and costly index specifying the source, department and topic description of each document. In addition, the interrogatory answers refer Complaint Counsel to particular categories of documents that are responsive to the interrogatory and that correspond to the descriptions in the index. Moreover, the Order cites Procter & Gamble for the proposition that it was reasonable to require the plaintiff to specify the "general nature" of certain subjects, but that providing specific details would be unduly burdensome. Id. at 254. Complaint Counsel's Interrogatories, however, seek the very kind of detailed information that the Court rejected in Procter & Gamble. The relevance of Complaint Counsel's exacting, detailed and overarching interrogatories is dubious at best. See Hilt v. SFC, Inc., 170 F.R.D. 182, 188 (D. Kan. 1997) (defendant provided no reason or justification for indiscriminate sweep of interrogatories requiring plaintiff to provide a "running narrative or description of the entire case, together with identifications of all knowledgeable persons and supporting documents").

Moreover, as the Procter & Gamble court recognized, certain discovery details are best left to depositions or personal inquiry. (Order at p. 3 (citing Procter & Gamble, 25 F.R.D. at 255.)) As Complaint Counsel clearly intends to depose Central employees and others, has already admitted that it has conducted an investigation and inquiry with former and current Central employees, and has received the voluminous documents they requested with a detailed index, requiring Central to answer Complaint Counsel's voluminous and detailed interrogatories is unduly burdensome and duplicative.

The Order also discussed Krantz v. United States, 56 F.R.D. 555, 558 (W.D. Va. 1972), where the Court found that the government's propounding of 1,500 interrogatories was "unreasonable, harsh, oppressive and unnecessary in light of the fact that the government already has the information which it seeks." In its discussion of Krantz, the Order noted that the requesting party already had the information sought by the interrogatories and that the court permitted the government to select a few of the interrogatories for answers. Here, however, Complaint Counsel also has conducted a lengthy investigation of Central that has included subpoenas to Central and third parties, as well as interviews of third parties and (apparently) for new Central employees. In addition, Complaint Counsel has received additional information from Central in the recent document productions.

In Milsen v. Southland Corporation, 1972 U.S. Dist. Lexis 14071, *4 (N.D. Ill. Apr. 21, 1972), the court denied plaintiffs' attempt to compel the defendant to respond to an interrogatory where the requested information was contained in business records already produced. The Order acknowledges that the Court reached its conclusion because "the burden of locating the requested information from Open Pantry's records would be substantially the same for either party." The same is true here. The Milsen court also rejected the contention that Rule 33 requires a party to specify the documents responsive to interrogatories by Bates number, stating that requiring the defendant to identify specific page numbers where interrogatory answers may be found would frustrate the Federal Rules' purpose of placing the burden of research "on the party who seeks the information." Id. at *4. Nonetheless, the Order distinguishes Milsen on the ground that the defendant offered to cooperate with plaintiffs in their research. (Order at p. 4 (citing Milsen, 1972 U.S. Dist. Lexis 14071 at *4.)) Although Milsen does not specify the nature of the offered

cooperation, it is important to note that Central also has cooperated with Complaint Counsel's discovery requests by providing a detailed, extensive person- and department-specific index.

The Order also cites Petroleum Insurance Agency v. Hartford Accident and Indemnity Company, 111 F.R.D. 318 (D. Mass. 1983), to support its mandate that Central must "point to the place in the record where the answer is found" and if it cannot, it must provide a written answer to the interrogatory. (Order at p. 5 (citing Petroleum Insurance Agency, 111 F.R.D. at 319, 320.)) The preceding language of the court in Petroleum Insurance Agency, however, makes clear that the initial burden of searching the business records for interrogatory answers lies with the interrogating party:

> if the defendants claim that the answers are in the records, and the plaintiffs disagree, counsel for the plaintiffs shall notify counsel for the defendants in writing as to what specific items called for in the interrogatories he cannot find in the records which the defendants have specified. If the defendants cannot then point to the place in the record where the answer is found, the defendants shall provide the answer in the from of a written answer to the interrogatory.

Petroleum Insurance Agency, 111 F.R.D. at 320 (emphasis added).

Central respectfully submits that, as Petroleum Insurance Agency shows, Complaint Counsel should first peruse the documents with the assistance of the index and interrogatory answers already provided by Central, and then, if it cannot find the responsive documents, then work with Central to locate the responsive information. Indeed, as the Order acknowledged with its citation to Halder v. International Telephone and Telegraph Company, 75 F.R.D. 657, 658 (E.D.N.Y. 1977), a defendant "should not be forced to engage in extensive research and compilation, particularly when the purpose of the effort is to assist plaintiff in the preparation of his case."

Consequently, the Presiding Officer should grant Central's motion for reconsideration and deny Complaint Counsel's Motion To Compel.

B. The Order Is Based On Erroneous Determinations About The Parties' Respective Burdens.

Both 16 C.F.R. § 1025.32(d) and its Federal Rules counterpart, Rule 33(d), expressly permit a party to respond to an interrogatory by specifying the records from which an answer may be derived from the business records of the party where the burden of deriving the answer "is substantially the same" for both parties. In reaching its conclusions in this matter, however, the Order mistakenly concludes that the parties' burdens are not substantially the same. The Order is based on six determinations that are either factually inaccurate or, if adopted, would completely eviscerate the Rule: (1) the effort required by an interrogated party to examine its own documents to divine the answers should not be considered in weighing burdens; (2) because they are Central's own documents, Central is presumed to have greater familiarity with them; (3) each document has been Bates-stamped; (4) that Central maintains an index to retrieve its own documents; (5) that Central has been engaged in litigation over Omega sprinklers for two years and has digested the documents in this matter pursuant to other litigation; and (6) that Central conducted a privilege review of the documents. (Order at p. 6.)

First, the Order incorrectly concludes that the burden on a party to glean detailed information from its own business record documents is not the sort of burden contemplated by 16 C.F.R. § 1025.32(d) or Federal Rule 33. To the contrary, the burden of reviewing one's own documents to fashion an interrogatory answer is precisely the burden to which the Rules refer. See 7 Moore's Fed. Practice § 33.105 (Matthew Bender 3d ed.) (purpose of the business records

option is to place burden of research on party seeking information "instead of requiring the responding party to conduct a burdensome or expensive search of its own records"). The Advisory Committee Notes to Rule 33 also explains that this was the purpose of the Rule, noting that a party may opt to "place the burden of research of [sic] the party who seeks the information." Fed. R. Civ. P. 33 (Adv. Comm. Notes, 1970 Amend.). In addition, the Committee stated that a party offering documents in lieu of interrogatory answers "should offer them in a manner that permits the same direct and economical access that is available to the party." Id., 1980 Amend. Complaint Counsel seeks to place on Central the considerable burden of researching the documents currently in Complaint Counsel's possession and fashioning Complaint Counsel's case for it. The Rule does not require Central to undertake that burden, particularly where the business records were offered to Complaint Counsel in the same manner and with the same index that Central would use to attempt to answer the interrogatories.

The Order's reference to Pascale v. G.D. Searle & Company, 90 F.R.D. 55 (D.R.I. 1981), does not support the Order's conclusion. In Pascale, the court stated that answering interrogatories "often requires the interrogated party to refer to written documents," and that "[r]eferring to a document in order to answer an interrogatory is not the kind of burden contemplated by the rule [Federal Rule 33(c)]." Id. at 60. "Referring" to a document, however, is not the same as searching through hundreds of thousands of documents to extract and compile information. For example, a responding party might refer to a letter to answer an interrogatory about from and to whom the letter was sent, as no one would be expected to memorize their correspondence by date, sender and recipient. It is a different matter, however, going far beyond simply referring to a document or looking something up, to answer interrogatories about "each

make and model of Omega sprinkler" and its parts, specifications, chemicals, tools and substances used in its manufacture, (Compl. Counsel Interrogatory No. 17), about meetings or discussions on specific, narrow topics, (Compl. Counsel Interrogatory No. 109), and about information requests to contractors, (Compl. Counsel Interrogatory No. 112).

Second, the Order does not provide any explanation of why a presumption that Central has greater familiarity with the documents should serve as a disqualifying factor under the Rule. Were that the case, then the business records option provided in 16 C.F.R. § 1025.32(d) and Federal Rule 33 would never apply, because the producing party would always be more knowledgeable about its documents than the requesting party. Moreover, as Central's counsel stated in her unrefuted declaration, the documents came from 127 employees in 17 departments and from six separate storage facilities. (Central's Opp. to Compl. Counsel's Mot., ex. A, ¶ 4.) Given the numerous sources and sites from which the documents were gathered, no single Central employee or group of employees is familiar with all of the documents produced. Moreover, given the tremendous number of attorneys used to perform the document production, and the fact that, due to the exigencies of time, almost of all of them were temporary attorneys, there is no basis to suggest that Central's counsel have any greater familiarity with the documents than do Complaint Counsel.

Third, the Order is incorrect in stating that "each document has already received a degree of attention by Central as each page has been Bates-stamped." (Order at p. 6.) Bates-stamping is a purely mechanical process, however, involving no perusal or review of the page being stamped.

Moreover, Central employees and counsel did not perform the Bates-stamping. To the contrary, employees of various copy services had the documents stamped as part of the copying process.

Fourth, despite the Order's assumption, Central does not "maintain some sort of index to retrieve its own documents." (Order at p. 6.) To the contrary, in the ordinary course of its business, Central neither organizes nor maintains its documents by subject matters that correspond to the interrogatories and it does not keep an overall index of the documents it retains. (Central's Opp. to Compl. Counsel's Mot., ex. A, ¶¶ 12, 13.) Indeed, the only comprehensive index compiled or maintained by Central regarding the documents at issue in this litigation is the index produced specifically for this litigation with the CPSC. That index has been provided to Complaint Counsel with Central's documents. The parties are thus on equal footing with regard to the organization and indexing of Central's documents.[1/]

Fifth, the fact that Central has been recently involved in other Omega-related lawsuits has no bearing on its supposed familiarity with the documents. To the contrary, the document sweep for the Hart class action litigation involved only 40 boxes of documents; the remaining 410 or so boxes of documents were gathered after the sweeping document requests made by Complaint Counsel. Indeed, as the Declaration points out, Complaint Counsel's discovery requests were the precipatory causes for the massive document search and there is simply no basis to conclude otherwise. (Central's Opp. to Compl. Counsel's Mot., ex. A ¶ 3). In fact, although the Order refers to a "mass of documents" or a "tidal wave of documents" produced by Central, it was

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1/ With regard to access to the documents, however, Complaint Counsel is in a better position than Central to study the documents because Complaint Counsel has the only complete production set of documents. Making spare copies of a complete production totaling 800,000 pages was prohibitively expensive.

Complaint Counsel's very broad document requests that required Central to undertake massive production efforts.

Finally, the Order erroneously assumes that Central's review of documents for privilege and work product involved the kind of scrutiny of the documents that would justify a determination that Central should now provide textual answers. (Order at p. 6.) Although a privilege review certainly requires care and attention, such attention necessarily focuses on ascertaining whether the documents are protected by the attorney-client privilege or the work product doctrine, not to whether a particular document is responsive to a particular Interrogatory.[2/] Thus, Central's privilege review cannot be viewed as a substantive review of the documents that would be particularly useful with regard to answering interrogatories. Moreover, there is nothing in either § 1025.32 or Rule 33 that suggests that the option to produce business records is lost if the responding party exercises its right to invoke the attorney-client privilege with respect to documents being produced to its adversary.

Because the Order erroneously presumes that the burden of deriving answers from Central's documents is not substantially the same for both Central and Complaint Counsel, the Presiding Officer should grant Central's Motion For Reconsideration and deny Complaint Counsel's Motion To Compel.

2/ A privilege review does not necessarily involve the close scrutiny of each document. (Order at 6.) For example, an engineering blueprint of an Omega part would clearly not involve attorney advice or work product; thus, no scrutiny or inspection of the blueprint is necessary to make a privilege determination. In contrast, close scrutiny would be necessary -- but would be equally burdensome for Central as for Complaint Counsel -- to ascertain in which make and/or model of sprinkler the piece is used, as well as the specifications, chemicals, tools and substances used in manufacturing the piece in the blueprint. See Compl. Counsel Interrogatory. No. 17.

At the very least, the Presiding Officer should modify its Order to include only those interrogatories specified in Appendix "A" to Complaint Counsel's Reply memorandum as going to the heart of Central's defenses: Interrogatory Nos. 5, 6, 16, 18, 21, 25, 27, 28, 29, 34, 37, 38, 39, 42, 43, 45, 46, 47, 48, 49, 52, 55, 56, 58, 59, 60, 62 and 115. Although that modification would still pose a burden that is substantially the same for both Central and Complaint Counsel, the modification would at least pose a slightly more manageable task, albeit one for which more time will be necessary.

C. It Is Not Possible To Comply With The Mandates Of The Order Within Seven Days.

If Central's Motion For Reconsideration is denied, and even if it is only modified as described above, then Central's Motion For An Extension Of Time should be granted. The Order directed Central to provide textual answers and/or particular Bates-stamped page numbers from a potential universe of 800,000 pages, for almost all of Complaint Counsel's 1,500 interrogatories within seven days of service of the Order. Respectfully, it is not possible for Central to comply with that order. As an initial matter, Central does not possess the produced documents. Complaint Counsel has received more than 450 boxes, the full set of which Central did not retain.[3/] Moreover, as detailed above, 19 attorneys worked for an estimated 4,000 hours

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3/ Central could have insisted that Complaint Counsel inspect the documents in its counsel's offices. See 16 C.F.R. § 1025.33 (responding party produces the document for inspection and copying). As a courtesy and a sign of cooperation, however, Central agreed to loan Complaint Counsel its only full set of documents produced, so long as Complaint Counsel returned them on a rolling basis as quickly as possible and with a list of documents copied by Complaint Counsel. See June 19, 1998 Ltr. from J. Gordon Cooney, Jr. (attached hereto as Exhibit "A.") To date, Complaint Counsel has not produced to Central a list of documents it has selected for copying, although it has agreed to have Central pick up 50 boxes and return them to Philadelphia.

to compile the 5,000-page comprehensive index to Central's 800,000 pages of documents. Answering Complaint Counsel's interrogatories will require an even more significant effort, since compliance will require Central to consider which of the 800,000 pages respond to each of the nearly 1,500 questions that the Order requires Central to answer. The index alone stands nearly two feet high. Perusing it to find specific Bates ranges of documents will require a considerable investment in time and money.[4/]

Although Central submits that its Motion is well-founded and should be granted for the reasons stated above, Central nonetheless immediately sought to comply with the Order as written. Counsel have met with Central personnel to outline supplemental interrogatory answers and to assign responsibilities of gathering, organizing and verifying raw data needed to draft answers; more meetings are scheduled in the coming week. Central's employees have begun to collect the requested data and forward it to counsel, who will then begin drafting textual supplemental answers. In addition, counsel has begun the lengthy process of perusing the 5,000-page index to locate specific Bates ranges of the document categories already identified to Complaint Counsel in Central's interrogatory responses. These efforts confirm that the task Central faces to Comply with the Order as written is monumental.

Therefore, if Central's Motion For Reconsideration is denied, or even if it is only modified as discussed above, the Presiding Officer should grant Central's Motion For An

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4/ As Emily J. Lawrence, Esquire explained to Complaint Counsel by telephone, Central did not scan its documents into a database because of the expense to do so and the delay it would have caused in producing the documents to Complaint Counsel.

Extension Of Time to enable Central to produce the answers on a rolling basis as promptly as is reasonably possible.

IV. CONCLUSION

For the reasons stated herein, the Order should be reconsidered and Complaint Counsel's Motion To Compel denied or modified. In the alternative, or even if the Order is modified, Central's Motion For An Extension Of Time should be granted.

Respectfully submitted,

Dated: July 24, 1998

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COUNSELORS AT LAW

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June 19, 1998

VIA TELECOPY

Deborah S. Orlove, Esquire
Complaint Counsel
U.S. Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
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Eric L. Stone, Esquire
Director
Division of Administrative Litigation
Consumer Product Safety Commission
4330 East West Highway
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Re: In the Matter of Central Sprinkler Corporation, et al.
CPSC Docket No. 98-2

Dear Deborah and Eric:

This letter confirms our conversation of June 17, 1998 with regard to the production and indexing of the first 100 boxes of Respondents' documents in the above matter. Given the volume of documents involved, you agreed that Central could produce its first 50 boxes of documents by the end of the day today, with the index for those documents to follow on Tuesday, June 23, 1998. We will produce to you the remaining 50 boxes on Wednesday, June 24, 1998, with the index to follow on Friday, June 26. We are doing our utmost to deliver the remaining 300 or so boxes, as well as the index for those boxes, within the times specified by Judge Moran.

As we have previously advised you, these copies represent our only complete set of the Company's original documents, which have been returned to the numerous individuals and departments from whom and which they were obtained at the Company. Although it would have been proper for us to insist that you visit our offices to inspect and copy the documents, we agreed to your request that we provide you with temporary custody of the documents so that you may review them in your own offices. We are doing so, however, based on your agreement that you will provide us with a listing, by Bates number, of the documents that you have selected for copying, and that you will return the documents to us on a rolling basis as quickly as possible and in the same manner in which they are being provided to you. The prompt return of the documents and listing of Bates numbers is essential both so that we can

EXHIBIT "A"

conduct the confidentiality analysis required by the Court and so that we may continue to prepare our defense.

Thank you for your courtesy regarding the schedule for the 100 boxes of documents, and please call me if you have any questions.

Very truly yours,

J. Gordon Cooney, Jr.

JGC/ss

cc: John C. Fenningham, Esquire
Michael F. Healy, Esquire

CERTIFICATE OF SERVICE

I, Emily J. Lawrence, hereby certify that I have served the attached document, the Motion For Reconsideration Or, In The Alternative, For An Extension Of Time, and supporting Memorandum of Law, upon all parties and participants of record in these proceedings by First Class mail, postage prepaid, a copy to each on July 24, 1998, and additionally by telefax on the same date to the Presiding Officer, Ms. Orlove, and Ms. Dunn.

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Howard N. Tarnoff, Esq.
U. S. Consumer Product Safety Commission
Office of Compliance
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Bethesda, MD 20814

The Honorable William B. Moran
U.S. Environmental Protection Agency
Office of Administrative Law Judges
401 M. Street, S.W.
Mail Code 1900 L
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Bethesda, MD 20814

Emily J. Lawrence

Emily J. Lawrence

For: Respondents Central Sprinkler Corporation and Central Sprinkler Company

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446	:	**CPSC Docket No. 98-2**
	:	
and	:	
	:	
Central Sprinkler Co., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446,	:	
	:	
Respondents.	:	
	:	

ORDER

AND NOW, this _____ day of _____, 1998, it is hereby ORDERED that Respondents' Motion For Reconsideration is GRANTED, and Complaint Counsel's Motion To Compel is DENIED.

BY THE COURT:

_____
The Hon. William B. Moran
United States Administrative Law Judge

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446	:	**CPSC Docket No. 98-2**
	:	
and	:	
	:	
Central Sprinkler Co., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446,	:	
	:	
Respondents.	:	
	:	

ORDER

AND NOW, this _____ day of _____, 1998, it is hereby ORDERED that Respondents' Motion For Reconsideration is GRANTED. The Order dated July 17, 1998 is hereby modified, and Respondents shall answer the Interrogatories listed in Appendix "A" of Complaint Counsel's Reply as promptly as is reasonably possible on a rolling basis.

BY THE COURT:

_____
The Hon. William B. Moran
United States Administrative Law Judge

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446	:	**CPSC Docket No. 98-2**
	:	
and	:	
	:	
Central Sprinkler Co., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446,	:	
	:	
Respondents.	:	
	:	

ORDER

AND NOW, this _____ day of _____, 1998, it is hereby ORDERED that Respondents' Motion For An Extension Of Time is GRANTED. Respondents shall produce the answers to Complaint Counsel's interrogatories as promptly as is reasonably possible on a rolling basis.

BY THE COURT:

_____
The Hon. William B. Moran
United States Administrative Law Judge

PH03A/37170.1

DECISION
7/24/98

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446	:	**CPSC Docket No. 98-2**
	:	
and	:	**Motion For Reconsideration Or, In The**
	:	**Alternative, For An Extension Of Time**
Central Sprinkler Co., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446,	:	
	:	
Respondents.	:	
	:	

RESPONDENTS' MOTION FOR RECONSIDERATION OR, IN THE ALTERNATIVE, FOR AN EXTENSION OF TIME

Respondents Central Sprinkler Corporation and Central Sprinkler Company (collectively, "Central") hereby move for reconsideration of the July 17, 1998 Order Granting Complaint Counsel's June 18, 1998 Motion Regarding Discovery. Central respectfully submits that the Order should be reconsidered because: (1) the Order did not give proper regard to the authorities which demonstrate that Complaint Counsel's interrogatories are oppressive and unduly burdensome; (2) the Order erroneously rejected Central's reliance on of 16 C.F.R. § 1025.32(d) based on erroneous factual assumptions about the parties' respective burdens; and (3) the Order should not have required Central to cite documents by Bates number in order to comply with § 1025.32(d). At the very least, the Order should be modified to require answers only to the interrogatories identified by Complaint Counsel in Appendix "A" of its Reply memorandum as the ones of greatest interest to Complaint Counsel.

In the alternative, Central moves for an extension of time in which to comply with the Order. Simply stated, it is impossible for Central to complete the task mandated by the Order within the prescribed seven (7) days, particularly where Complaint Counsel possess the full production set of pertinent documents.

WHEREFORE, Central respectfully requests that the Presiding Officer grant this Motion For Reconsideration Or, In The Alternative, For An Extension Of Time.

Further support for this Motion is contained in the attached Memorandum Of Law, which is incorporated by reference herein.

Respectfully submitted,

Dated: July 24, 1998

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Attorneys for Respondents
CENTRAL SPRINKLER CORP. and
CENTRAL SPRINKLER COMPANY

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp., a Corporation,	:	
451 North Cannon Avenue	:	**CPSC Docket No. 98-2**
Lansdale, PA 19446	:	
	:	**Memorandum of Law in Support of**
and	:	**Motion For Reconsideration Or, In The**
	:	**Alternative, For An Extension Of Time**
Central Sprinkler Co., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446,	:	
	:	
Respondents.	:	
	:	

MEMORANDUM OF LAW IN SUPPORT OF RESPONDENTS' MOTION FOR RECONSIDERATION OR, IN THE ALTERNATIVE, FOR AN EXTENSION OF TIME

I. INTRODUCTION

On July 17, 1998, the Presiding Officer issued an Order Granting Complaint Counsel's June 18, 1998 Motion Regarding Discovery (the "Order"). Respondents Central Sprinkler Corporation and Central Sprinkler Company (collectively, "Central") hereby move for reconsideration of the Order. At a minimum, Central requests the Court to modify the Order to limit it to the interrogatories Complaint Counsel has identified as most pertinent.

In the alternative, the Presiding Officer should grant Central an extension of time in which to comply with the Order, as it is not physically possible to comply with the Order within seven days.

II. FACTS

As detailed in Central's Opposition To Complaint Counsel's Motion, Complaint Counsel served nearly 1,500 interrogatories and subparts on Central. (See Central's Opp. to Compl. Counsel's Mot., pp. 3-10.) Complaint Counsel also served Central with document requests, the breadth of which required Central to conduct an exhaustive search and produce more than 450 boxes of documents. Because of the breadth and scope of Complaint Counsel's document requests, completing the initial sweep of the documents required almost 1,500 hours of work by Central's counsel and employees.

After the initial sweep and gathering of documents, Central reviewed the documents for privileged and confidential information. Such a review, however, did not and could not include a detailed review of subject matter and content that would have been sufficient to address to Complaint Counsel's 1,500 interrogatories. Rather, the focus was on readily identifiable confidential and trade secret information, identification of documents protected by the attorney-client privilege and work-product doctrine, and determination of the general subject matter of the documents. Even so, 16 lawyers worked 1,346 hours on this preliminary stage of document production. Nearly all of those lawyers were temporary staff hired for the sole task of complying with Complaint Counsel's document requests in the limited time permitted. They were not, and are not, engaged in the full extent of this or related litigation. Nor were they, or are they, familiar with Central's files, facilities, organization or employees. Once the privilege/confidential stage of production was completed, the documents were Bates-stamped and copied by several outside copy services. Central employees or counsel were not present when the documents were Bates-stamped and copied. Central provided all 450 or so boxes of documents to Complaint Counsel.

Although the Order refers to "a mass" or "tidal wave" of documents, it is important to recognize that Central produced the documents at significant expense and great effort in response to Complaint Counsel's extraordinarily broad document requests. In addition, in order to comply with the Presiding Officer's directive, Central prepared a detailed, extensive index of the approximately 450 boxes of documents, two examples of which are attached as Exhibits "B" and "C" to Central's Opposition to Complaint Counsel's Motion To Compel. The index identifies the source, department and Bates range of the documents in Central's document production. More importantly, the index describes the contents of the documents. In total, Central's comprehensive index provided to Complaint Counsel totaled 5,000 pages. As stated in the Declaration of Stephanie A. Graboyes, indexing just the first 100 boxes of documents required the work of 19 attorneys, 20 legal staff members and approximately 1,000 hours. (See Central's Opp. to Compl. Counsel's Mot., ex. A, ¶ 11.) As with the initial stage of production, nearly all of the lawyers involved in indexing were temporary staff hired for that task; administrative staff typed the index but did not review or even see the documents.

III. ARGUMENT

Although the Order granting Complaint Counsel's Motion To Compel refers to cases on which Central relied in support of its view that the interrogatories were unduly burdensome, Central respectfully submits that the Order does not focus on the courts' holdings or the main principles underlying those holdings. Further, the Order incorrectly concludes that the burden on Central would be less significant than that borne by Complaint Counsel in reviewing the documents to answer Complaint Counsel's interrogatories. Further, the Order imposes a

deadline with which it is impossible for Central to comply. Therefore, the Presiding Officer should reconsider the Order and deny Complaint Counsel's Motion, or, at a minimum, modify the Order to address only the interrogatories listed in Appendix "A" of Complaint Counsel's Reply memorandum. If Complaint Counsel's Motion is not denied, the Presiding Officer should, at the very least, grant Central's Motion for an extension of time.

A. The Cases Cited In The Order Do Not Support Its Conclusions.

The Order refers primarily to cases cited by Central in opposition to Complaint Counsel's Motion. Rather than relying on the holdings and the overall import of those cases, however, the Order focuses either on isolated sentences in the courts' general commentary, or on seemingly distinct facts which, upon closer inspection, actually mirror those in this matter.

For example, as the Order notes, Central cited In re U.S. Financial Securities Litigation, 74 F.R.D. 497 (S.D. Cal. 1975), and Breeland v. Yale and Towne Manufacturing Company, 26 F.R.D. 119 (E.D.N.Y. 1960), for the proposition that excessively long interrogatories are burdensome, an abuse of discovery and need not be answered. In discussing In re U.S. Financial Securities Litigation, the Order does not reflect the Court's holding that excessively long and detailed interrogatories are an abuse of the discovery process. Instead, the Order refers to the U.S. Financial Court's observation that, "in general, the frequency and scope of interrogatories are not limited." (July 17, 1998 Order, p. 3.) (hereinafter "Order").

Moreover, even with respect to that general observation by the U.S. Financial court, the Order does not take into account that, due to the very type of interrogatory abuse present here, the "frequency" of interrogatories has, in fact, been limited under the Federal Rules since the date of the case. As amended in 1993, Federal Rule of Civil Procedure 33(a) provides that without

leave of court or stipulation, "any party may serve upon any other party written interrogatories, not exceeding 25 in number including all discrete subparts . . . ." Fed. R. Civ. P. 33(a) (emphasis added). The limit on the number of interrogatories was added after federal courts' experience confirmed that limitations were necessary to avoid abuse. As the Advisory Committee observed, "because the device [interrogatories] can be costly and may be used as a means of harassment, it is desirable to subject its use to the control of the court . . . ." Id. (Advisory Comm. Notes to 1993 Amends.)

Likewise, the Order distinguishes Breeland, in which the court sustained the defendant's exceptions to answering more than 200 interrogatories, on the basis that the plaintiff sought both to depose defendant's witnesses and to receive interrogatory answers. (Order at p. 3.) In this regard, the Breeland court noted that "an adverse party should not be required to perform burdensome labors or to execute difficult tasks, in searching for facts, and classifying and compiling data." 26 F.R.D. at 120 (quotations omitted). In the instant matter, however, Complaint Counsel, like the Breeland plaintiff, also intends to use multiple discovery procedures. As Complaint Counsel's Preliminary Proposed Discovery And Litigation Schedule indicates, Complaint Counsel anticipates depositions of fact witnesses to commence after document production and to continue for a specified length of time thereafter. Thus, there is no basis to distinguish Breeland on this ground.

The Order next discusses United States v. Procter & Gamble Company, 25 F.R.D. 252, 254 (D.N.J. 1960), in which the Court held that compelling the plaintiff to provide specific detail about the topics discussed on certain occasions by individual persons was unduly burdensome and unnecessary The Order sought to distinguish the case by pointing out that the plaintiff

objecting to interrogatories had "already furnished defendants with all its documents, properly keyed to the general topic discussed." Id. at 254-55. In the instant matter, Central, like the objecting plaintiff in Procter & Gamble, has already furnished Complaint Counsel with all of its documents and a detailed and costly index specifying the source, department and topic description of each document. In addition, the interrogatory answers refer Complaint Counsel to particular categories of documents that are responsive to the interrogatory and that correspond to the descriptions in the index. Moreover, the Order cites Procter & Gamble for the proposition that it was reasonable to require the plaintiff to specify the "general nature" of certain subjects, but that providing specific details would be unduly burdensome. Id. at 254. Complaint Counsel's Interrogatories, however, seek the very kind of detailed information that the Court rejected in Procter & Gamble. The relevance of Complaint Counsel's exacting, detailed and overarching interrogatories is dubious at best. See Hilt v. SFC, Inc., 170 F.R.D. 182, 188 (D. Kan. 1997) (defendant provided no reason or justification for indiscriminate sweep of interrogatories requiring plaintiff to provide a "running narrative or description of the entire case, together with identifications of all knowledgeable persons and supporting documents").

Moreover, as the Procter & Gamble court recognized, certain discovery details are best left to depositions or personal inquiry. (Order at p. 3 (citing Procter & Gamble, 25 F.R.D. at 255.)) As Complaint Counsel clearly intends to depose Central employees and others, has already admitted that it has conducted an investigation and inquiry with former and current Central employees, and has received the voluminous documents they requested with a detailed index, requiring Central to answer Complaint Counsel's voluminous and detailed interrogatories is unduly burdensome and duplicative.

The Order also discussed Krantz v. United States, 56 F.R.D. 555, 558 (W.D. Va. 1972), where the Court found that the government's propounding of 1,500 interrogatories was "unreasonable, harsh, oppressive and unnecessary in light of the fact that the government already has the information which it seeks." In its discussion of Krantz, the Order noted that the requesting party already had the information sought by the interrogatories and that the court permitted the government to select a few of the interrogatories for answers. Here, however, Complaint Counsel also has conducted a lengthy investigation of Central that has included subpoenas to Central and third parties, as well as interviews of third parties and (apparently) for new Central employees. In addition, Complaint Counsel has received additional information from Central in the recent document productions.

In Milsen v. Southland Corporation, 1972 U.S. Dist. Lexis 14071, *4 (N.D. Ill. Apr. 21, 1972), the court denied plaintiffs' attempt to compel the defendant to respond to an interrogatory where the requested information was contained in business records already produced. The Order acknowledges that the Court reached its conclusion because "the burden of locating the requested information from Open Pantry's records would be substantially the same for either party." The same is true here. The Milsen court also rejected the contention that Rule 33 requires a party to specify the documents responsive to interrogatories by Bates number, stating that requiring the defendant to identify specific page numbers where interrogatory answers may be found would frustrate the Federal Rules' purpose of placing the burden of research "on the party who seeks the information." Id. at *4. Nonetheless, the Order distinguishes Milsen on the ground that the defendant offered to cooperate with plaintiffs in their research. (Order at p. 4 (citing Milsen, 1972 U.S. Dist. Lexis 14071 at *4.)) Although Milsen does not specify the nature of the offered

cooperation, it is important to note that Central also has cooperated with Complaint Counsel's discovery requests by providing a detailed, extensive person- and department-specific index.

The Order also cites Petroleum Insurance Agency v. Hartford Accident and Indemnity Company, 111 F.R.D. 318 (D. Mass. 1983), to support its mandate that Central must "point to the place in the record where the answer is found" and if it cannot, it must provide a written answer to the interrogatory. (Order at p. 5 (citing Petroleum Insurance Agency, 111 F.R.D. at 319, 320.)) The preceding language of the court in Petroleum Insurance Agency, however, makes clear that the initial burden of searching the business records for interrogatory answers lies with the interrogating party:

> if the defendants claim that the answers are in the records, and the plaintiffs disagree, counsel for the plaintiffs shall notify counsel for the defendants in writing as to what specific items called for in the interrogatories he cannot find in the records which the defendants have specified. If the defendants cannot then point to the place in the record where the answer is found, the defendants shall provide the answer in the from of a written answer to the interrogatory.

Petroleum Insurance Agency, 111 F.R.D. at 320 (emphasis added).

Central respectfully submits that, as Petroleum Insurance Agency shows, Complaint Counsel should first peruse the documents with the assistance of the index and interrogatory answers already provided by Central, and then, if it cannot find the responsive documents, then work with Central to locate the responsive information. Indeed, as the Order acknowledged with its citation to Halder v. International Telephone and Telegraph Company, 75 F.R.D. 657, 658 (E.D.N.Y. 1977), a defendant "should not be forced to engage in extensive research and compilation, particularly when the purpose of the effort is to assist plaintiff in the preparation of his case."

Consequently, the Presiding Officer should grant Central's motion for reconsideration and deny Complaint Counsel's Motion To Compel.

B. The Order Is Based On Erroneous Determinations About The Parties' Respective Burdens.

Both 16 C.F.R. § 1025.32(d) and its Federal Rules counterpart, Rule 33(d), expressly permit a party to respond to an interrogatory by specifying the records from which an answer may be derived from the business records of the party where the burden of deriving the answer "is substantially the same" for both parties. In reaching its conclusions in this matter, however, the Order mistakenly concludes that the parties' burdens are not substantially the same. The Order is based on six determinations that are either factually inaccurate or, if adopted, would completely eviscerate the Rule: (1) the effort required by an interrogated party to examine its own documents to divine the answers should not be considered in weighing burdens; (2) because they are Central's own documents, Central is presumed to have greater familiarity with them; (3) each document has been Bates-stamped; (4) that Central maintains an index to retrieve its own documents; (5) that Central has been engaged in litigation over Omega sprinklers for two years and has digested the documents in this matter pursuant to other litigation; and (6) that Central conducted a privilege review of the documents. (Order at p. 6.)

First, the Order incorrectly concludes that the burden on a party to glean detailed information from its own business record documents is not the sort of burden contemplated by 16 C.F.R. § 1025.32(d) or Federal Rule 33. To the contrary, the burden of reviewing one's own documents to fashion an interrogatory answer is precisely the burden to which the Rules refer. See 7 Moore's Fed. Practice § 33.105 (Matthew Bender 3d ed.) (purpose of the business records

option is to place burden of research on party seeking information "instead of requiring the responding party to conduct a burdensome or expensive search of its own records"). The Advisory Committee Notes to Rule 33 also explains that this was the purpose of the Rule, noting that a party may opt to "place the burden of research of [sic] the party who seeks the information." Fed. R. Civ. P. 33 (Adv. Comm. Notes, 1970 Amend.). In addition, the Committee stated that a party offering documents in lieu of interrogatory answers "should offer them in a manner that permits the same direct and economical access that is available to the party." Id., 1980 Amend. Complaint Counsel seeks to place on Central the considerable burden of researching the documents currently in Complaint Counsel's possession and fashioning Complaint Counsel's case for it. The Rule does not require Central to undertake that burden, particularly where the business records were offered to Complaint Counsel in the same manner and with the same index that Central would use to attempt to answer the interrogatories.

The Order's reference to Pascale v. G.D. Searle & Company, 90 F.R.D. 55 (D.R.I. 1981), does not support the Order's conclusion. In Pascale, the court stated that answering interrogatories "often requires the interrogated party to refer to written documents," and that "[r]eferring to a document in order to answer an interrogatory is not the kind of burden contemplated by the rule [Federal Rule 33(c)]." Id. at 60. "Referring" to a document, however, is not the same as searching through hundreds of thousands of documents to extract and compile information. For example, a responding party might refer to a letter to answer an interrogatory about from and to whom the letter was sent, as no one would be expected to memorize their correspondence by date, sender and recipient. It is a different matter, however, going far beyond simply referring to a document or looking something up, to answer interrogatories about "each

make and model of Omega sprinkler" and its parts, specifications, chemicals, tools and substances used in its manufacture, (Compl. Counsel Interrogatory No. 17), about meetings or discussions on specific, narrow topics, (Compl. Counsel Interrogatory No. 109), and about information requests to contractors, (Compl. Counsel Interrogatory No. 112).

Second, the Order does not provide any explanation of why a presumption that Central has greater familiarity with the documents should serve as a disqualifying factor under the Rule. Were that the case, then the business records option provided in 16 C.F.R. § 1025.32(d) and Federal Rule 33 would never apply, because the producing party would always be more knowledgeable about its documents than the requesting party. Moreover, as Central's counsel stated in her unrefuted declaration, the documents came from 127 employees in 17 departments and from six separate storage facilities. (Central's Opp. to Compl. Counsel's Mot., ex. A, ¶ 4.) Given the numerous sources and sites from which the documents were gathered, no single Central employee or group of employees is familiar with all of the documents produced. Moreover, given the tremendous number of attorneys used to perform the document production, and the fact that, due to the exigencies of time, almost of all of them were temporary attorneys, there is no basis to suggest that Central's counsel have any greater familiarity with the documents than do Complaint Counsel.

Third, the Order is incorrect in stating that "each document has already received a degree of attention by Central as each page has been Bates-stamped." (Order at p. 6.) Bates-stamping is a purely mechanical process, however, involving no perusal or review of the page being stamped.

Moreover, Central employees and counsel did not perform the Bates-stamping. To the contrary, employees of various copy services had the documents stamped as part of the copying process.

Fourth, despite the Order's assumption, Central does not "maintain some sort of index to retrieve its own documents." (Order at p. 6.) To the contrary, in the ordinary course of its business, Central neither organizes nor maintains its documents by subject matters that correspond to the interrogatories and it does not keep an overall index of the documents it retains. (Central's Opp. to Compl. Counsel's Mot., ex. A, ¶¶ 12, 13.) Indeed, the only comprehensive index compiled or maintained by Central regarding the documents at issue in this litigation is the index produced specifically for this litigation with the CPSC. That index has been provided to Complaint Counsel with Central's documents. The parties are thus on equal footing with regard to the organization and indexing of Central's documents.[1/]

Fifth, the fact that Central has been recently involved in other Omega-related lawsuits has no bearing on its supposed familiarity with the documents. To the contrary, the document sweep for the Hart class action litigation involved only 40 boxes of documents; the remaining 410 or so boxes of documents were gathered after the sweeping document requests made by Complaint Counsel. Indeed, as the Declaration points out, Complaint Counsel's discovery requests were the precipatory causes for the massive document search and there is simply no basis to conclude otherwise. (Central's Opp. to Compl. Counsel's Mot., ex. A ¶ 3). In fact, although the Order refers to a "mass of documents" or a "tidal wave of documents" produced by Central, it was

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1/ With regard to access to the documents, however, Complaint Counsel is in a better position than Central to study the documents because Complaint Counsel has the only complete production set of documents. Making spare copies of a complete production totaling 800,000 pages was prohibitively expensive.

Complaint Counsel's very broad document requests that required Central to undertake massive production efforts.

Finally, the Order erroneously assumes that Central's review of documents for privilege and work product involved the kind of scrutiny of the documents that would justify a determination that Central should now provide textual answers. (Order at p. 6.) Although a privilege review certainly requires care and attention, such attention necessarily focuses on ascertaining whether the documents are protected by the attorney-client privilege or the work product doctrine, not to whether a particular document is responsive to a particular Interrogatory.[2/] Thus, Central's privilege review cannot be viewed as a substantive review of the documents that would be particularly useful with regard to answering interrogatories. Moreover, there is nothing in either § 1025.32 or Rule 33 that suggests that the option to produce business records is lost if the responding party exercises its right to invoke the attorney-client privilege with respect to documents being produced to its adversary.

Because the Order erroneously presumes that the burden of deriving answers from Central's documents is not substantially the same for both Central and Complaint Counsel, the Presiding Officer should grant Central's Motion For Reconsideration and deny Complaint Counsel's Motion To Compel.

2/ A privilege review does not necessarily involve the close scrutiny of each document. (Order at 6.) For example, an engineering blueprint of an Omega part would clearly not involve attorney advice or work product; thus, no scrutiny or inspection of the blueprint is necessary to make a privilege determination. In contrast, close scrutiny would be necessary -- but would be equally burdensome for Central as for Complaint Counsel -- to ascertain in which make and/or model of sprinkler the piece is used, as well as the specifications, chemicals, tools and substances used in manufacturing the piece in the blueprint. See Compl. Counsel Interrogatory. No. 17.

At the very least, the Presiding Officer should modify its Order to include only those interrogatories specified in Appendix "A" to Complaint Counsel's Reply memorandum as going to the heart of Central's defenses: Interrogatory Nos. 5, 6, 16, 18, 21, 25, 27, 28, 29, 34, 37, 38, 39, 42, 43, 45, 46, 47, 48, 49, 52, 55, 56, 58, 59, 60, 62 and 115. Although that modification would still pose a burden that is substantially the same for both Central and Complaint Counsel, the modification would at least pose a slightly more manageable task, albeit one for which more time will be necessary.

C. It Is Not Possible To Comply With The Mandates Of The Order Within Seven Days.

If Central's Motion For Reconsideration is denied, and even if it is only modified as described above, then Central's Motion For An Extension Of Time should be granted. The Order directed Central to provide textual answers and/or particular Bates-stamped page numbers from a potential universe of 800,000 pages, for almost all of Complaint Counsel's 1,500 interrogatories within seven days of service of the Order. Respectfully, it is not possible for Central to comply with that order. As an initial matter, Central does not possess the produced documents. Complaint Counsel has received more than 450 boxes, the full set of which Central did not retain.[3/] Moreover, as detailed above, 19 attorneys worked for an estimated 4,000 hours

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3/ Central could have insisted that Complaint Counsel inspect the documents in its counsel's offices. See 16 C.F.R. § 1025.33 (responding party produces the document for inspection and copying). As a courtesy and a sign of cooperation, however, Central agreed to loan Complaint Counsel its only full set of documents produced, so long as Complaint Counsel returned them on a rolling basis as quickly as possible and with a list of documents copied by Complaint Counsel. See June 19, 1998 Ltr. from J. Gordon Cooney, Jr. (attached hereto as Exhibit "A.") To date, Complaint Counsel has not produced to Central a list of documents it has selected for copying, although it has agreed to have Central pick up 50 boxes and return them to Philadelphia.

to compile the 5,000-page comprehensive index to Central's 800,000 pages of documents. Answering Complaint Counsel's interrogatories will require an even more significant effort, since compliance will require Central to consider which of the 800,000 pages respond to each of the nearly 1,500 questions that the Order requires Central to answer. The index alone stands nearly two feet high. Perusing it to find specific Bates ranges of documents will require a considerable investment in time and money.[4/]

Although Central submits that its Motion is well-founded and should be granted for the reasons stated above, Central nonetheless immediately sought to comply with the Order as written. Counsel have met with Central personnel to outline supplemental interrogatory answers and to assign responsibilities of gathering, organizing and verifying raw data needed to draft answers; more meetings are scheduled in the coming week. Central's employees have begun to collect the requested data and forward it to counsel, who will then begin drafting textual supplemental answers. In addition, counsel has begun the lengthy process of perusing the 5,000-page index to locate specific Bates ranges of the document categories already identified to Complaint Counsel in Central's interrogatory responses. These efforts confirm that the task Central faces to Comply with the Order as written is monumental.

Therefore, if Central's Motion For Reconsideration is denied, or even if it is only modified as discussed above, the Presiding Officer should grant Central's Motion For An

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4/ As Emily J. Lawrence, Esquire explained to Complaint Counsel by telephone, Central did not scan its documents into a database because of the expense to do so and the delay it would have caused in producing the documents to Complaint Counsel.

Extension Of Time to enable Central to produce the answers on a rolling basis as promptly as is reasonably possible.

IV. CONCLUSION

For the reasons stated herein, the Order should be reconsidered and Complaint Counsel's Motion To Compel denied or modified. In the alternative, or even if the Order is modified, Central's Motion For An Extension Of Time should be granted.

Respectfully submitted,

Dated: July 24, 1998

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Attorneys for Respondents
CENTRAL SPRINKLER CORP. and
CENTRAL SPRINKLER COMPANY

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Morgan, Lewis
& Bockius LLP
COUNSELORS AT LAW

J. Gordon Cooney, Jr.
215-963-4806

June 19, 1998

VIA TELECOPY

Deborah S. Orlove, Esquire
Complaint Counsel
U.S. Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, MD 20814

Eric L. Stone, Esquire
Director
Division of Administrative Litigation
Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

Re: In the Matter of Central Sprinkler Corporation, et al.
CPSC Docket No. 98-2

Dear Deborah and Eric:

This letter confirms our conversation of June 17, 1998 with regard to the production and indexing of the first 100 boxes of Respondents' documents in the above matter. Given the volume of documents involved, you agreed that Central could produce its first 50 boxes of documents by the end of the day today, with the index for those documents to follow on Tuesday, June 23, 1998. We will produce to you the remaining 50 boxes on Wednesday, June 24, 1998, with the index to follow on Friday, June 26. We are doing our utmost to deliver the remaining 300 or so boxes, as well as the index for those boxes, within the times specified by Judge Moran.

As we have previously advised you, these copies represent our only complete set of the Company's original documents, which have been returned to the numerous individuals and departments from whom and which they were obtained at the Company. Although it would have been proper for us to insist that you visit our offices to inspect and copy the documents, we agreed to your request that we provide you with temporary custody of the documents so that you may review them in your own offices. We are doing so, however, based on your agreement that you will provide us with a listing, by Bates number, of the documents that you have selected for copying, and that you will return the documents to us on a rolling basis as quickly as possible and in the same manner in which they are being provided to you. The prompt return of the documents and listing of Bates numbers is essential both so that we can

EXHIBIT "A"

conduct the confidentiality analysis required by the Court and so that we may continue to prepare our defense.

Thank you for your courtesy regarding the schedule for the 100 boxes of documents, and please call me if you have any questions.

Very truly yours,

J. Gordon Cooney, Jr.

JGC/ss

cc: John C. Fenningham, Esquire
Michael F. Healy, Esquire

CERTIFICATE OF SERVICE

I, Emily J. Lawrence, hereby certify that I have served the attached document, the Motion For Reconsideration Or, In The Alternative, For An Extension Of Time, and supporting Memorandum of Law, upon all parties and participants of record in these proceedings by First Class mail, postage prepaid, a copy to each on July 24, 1998, and additionally by telefax on the same date to the Presiding Officer, Ms. Orlove, and Ms. Dunn.

Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.
U. S. Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, MD 20814

The Honorable William B. Moran
U.S. Environmental Protection Agency
Office of Administrative Law Judges
401 M. Street, S.W.
Mail Code 1900 L
Washington, D.C. 20460

Ms. Sadye E. Dunn, Secretary
U. S. Consumer Product Safety Commission
Office of the Secretary
4330 East West Highway, Building 4340
Bethesda, MD 20814

Eric Stone, Esq.
Director
Division of Administrative Litigation
U. S. Consumer Product Safety Commission
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Alan H. Schoem, Esq.
Assistant Executive Director
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4330 East West Highway
Bethesda, MD 20814

Emily J. Lawrence

Emily J. Lawrence

For: Respondents Central Sprinkler Corporation and Central Sprinkler Company

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446	:	**CPSC Docket No. 98-2**
	:	
and	:	
	:	
Central Sprinkler Co., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446,	:	
	:	
Respondents.	:	
	:	

ORDER

AND NOW, this _____ day of _____, 1998, it is hereby ORDERED that Respondents' Motion For Reconsideration is GRANTED, and Complaint Counsel's Motion To Compel is DENIED.

BY THE COURT:

_____
The Hon. William B. Moran
United States Administrative Law Judge

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446	:	**CPSC Docket No. 98-2**
	:	
and	:	
	:	
Central Sprinkler Co., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446,	:	
	:	
Respondents.	:	
	:	

ORDER

AND NOW, this _____ day of _____, 1998, it is hereby ORDERED that Respondents' Motion For Reconsideration is GRANTED. The Order dated July 17, 1998 is hereby modified, and Respondents shall answer the Interrogatories listed in Appendix "A" of Complaint Counsel's Reply as promptly as is reasonably possible on a rolling basis.

BY THE COURT:

_____
The Hon. William B. Moran
United States Administrative Law Judge

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446	:	**CPSC Docket No. 98-2**
	:	
and	:	
	:	
Central Sprinkler Co., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446,	:	
	:	
Respondents.	:	
	:	

ORDER

AND NOW, this _____ day of _____, 1998, it is hereby ORDERED that Respondents' Motion For An Extension Of Time is GRANTED. Respondents shall produce the answers to Complaint Counsel's interrogatories as promptly as is reasonably possible on a rolling basis.

BY THE COURT:

_____
The Hon. William B. Moran
United States Administrative Law Judge

PH03A/37170.1

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J. Gordon Cooney, Jr.
215-963-4806

Morgan, Lewis
& Bockius LLP
COUNSELORS AT LAW
125 years
1873 1998

July 27, 1998

VIA TELECOPY and FIRST-CLASS MAIL

Sadye E. Dunn, Secretary
U.S. Consumer Product Safety Commission
Office of the Secretary
4330 East West Highway, Building 4340
Bethesda, MD 20814

Re: In the Matter of Central Sprinkler Corp. and Central Sprinkler Co.;
CPSC Docket No. 98-2

Dear Ms. Dunn:

Enclosed please find Reply Brief in Support of Respondents' Renewed Motion to Compel Full and Complete Responses to Interrogatories and Document Requests.

Respectfully,

J. Gordon Cooney, Jr.

JGC/ss

Enclosure

cc: The Honorable William B. Moran (w/enclosure) (via telecopy and first-class mail)
Deborah S. Orlove (w/enclosure) (via telecopy and first-class mail)

2000 One Logan Square
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Morgan, Lewis
& Bockius LLP
COUNSELORS AT LAW
125 years
1873 1998

July 27, 1998

VIA TELECOPY and FIRST-CLASS MAIL

The Honorable William B. Moran
Offices of the Administrative Law Judges
U.S. Environmental Protection Agency
401 M Street, S.W.
Mail Code 1900L
Washington, DC 20460

Re: In the Matter of Central Sprinkler Corp. and Central Sprinkler Co.;
CPSC Docket No. 98-2

Dear Judge Moran:

Enclosed please find Reply Brief in Support of Respondents' Renewed Motion to Compel Full and Complete Responses to Interrogatories and Document Requests.

Complaint Counsel has been served with copies of this pleading.

Respectfully,

J. Gordon Cooney, Jr.

JGC/ss

Enclosure

cc: Complaint Counsel (w/enclosure) (via telecopy and first-class mail)

2000 One Logan Square
Philadelphia, PA 19103-6993
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Morgan, Lewis
& Bockius LLP
COUNSELORS AT LAW
125 years

July 27, 1998

VIA TELECOPY and FIRST-CLASS MAIL

Deborah S. Orlove, Esquire
Complaint Counsel
U.S. Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, MD 20814

Re: In the Matter of Central Sprinkler Corp. and Central Sprinkler Co.;
CPSC Docket No. 98-2

Dear Ms. Orlove:

Enclosed please find Reply Brief in Support of Respondents' Renewed Motion to Compel Full and Complete Responses to Interrogatories and Document Requests.

Very truly yours,

J. Gordon Cooney, Jr.

JGC/ss

Enclosure

cc: The Honorable William B. Moran (w/enclosure) (via telecopy and first-class mail)
Sadye E. Dunn (w/enclosure) (via telecopy and first-class mail)

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446	:	**CPSC Docket No. 98-2**
	:	
and	:	
	:	**Reply Brief In Support Of Respondents' Renewed Motion To Compel Full And Complete Responses To Interrogatories And Document Requests**
Central Sprinkler Co., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446,	:	
	:	
Respondents.	:	
	:	

REPLY BRIEF IN SUPPORT OF RESPONDENTS' RENEWED MOTION TO COMPEL FULL AND COMPLETE RESPONSES TO INTERROGATORIES AND DOCUMENT REQUESTS

I. INTRODUCTION

Pursuant to the July 8, 1998 Order Directing Replies, Respondents Central Sprinkler Company and Central Sprinkler Corporation (collectively, "Central") hereby file their Reply to Complaint Counsel's Opposition to Central's Renewed Motion To Compel. Because Complaint Counsel has failed to provide critical documents and interrogatory responses requested by Central, and because there is no basis for Complaint Counsel's non-production, the Presiding Officer should grant Central's Renewed Motion To Compel.

II. ARGUMENT

A. Complaint Counsel Has Failed To Identify Persons Having Knowledge Of Relevant Information.

As reflected in the CPSC's own regulations, a basic foundation of any discovery in litigation is identification of the people having knowledge of relevant information. See 16

C.F.R. § 1025.31(c)(1). Complaint Counsel has refused to provide a complete list of such persons in response to Central's Interrogatories, claiming in part that the information is protected by the work product doctrine. See Central's Renewed Mot., p. 11 (citing Complaint Counsel's Response to Interrogatory No. 102); see also, e.g., Nos. 83 and 87. Moreover, as indicated in the examples provided in Complaint Counsel's Opposition, most of the people named are the CPSC's own employees, including several counsel working on this matter. (Compl. Counsel Opp., p. 4.) Further, Complaint Counsel's opposition repeats many names in an attempt to make it appear that they have provided more information than they actually have furnished to Central. For example, Eric Stone, a CPSC attorney, is listed five times on page 4 of Complaint Counsel's Response, as is Catherine Cumberland, albeit as "Catherine Anne Cumberland," "Catherine Cumberland," and "Catherine A. Cumberland." CPSC attorneys and staff presumably are not fact witnesses, however; indeed, Complaint Counsel would surely object to any attempt to depose any of the CPSC attorneys who are prosecuting this matter. Rather, if those people have knowledge of pertinent information, which CPSC admits they do, their information must have been derived during the CPSC's 18-month investigation from people who do have relevant factual knowledge. It is the latter persons who must be identified -- not the CPSC employees and attorneys who were made aware of such information.

Moreover, of the persons identified in Complaint Counsel's Opposition who are not CPSC employees, virtually all appear to be contractors with knowledge of issues relating to remedy such as sprinkler change-out procedures and/or the labor and costs involved. (Compl. Counsel Opp. at 4.) Complaint Counsel has identified virtually no one with purported knowledge about the alleged defect issues, including alleged sprinkler failures, testing of Omega

sprinklers, sprinkler standards, or alleged hazards from Omega sprinklers. Given that these topics form the basis of the Administrative Complaint, it is incumbent upon Complaint Counsel to identify all persons with factual knowledge regarding Complaint Counsel's allegations.

Further, referring Central to people identified in Complaint Counsel's and Central's own documents is not a sufficient response. Indeed, as the Presiding Officer has stated in the Order granting Complaint Counsel's Motion To Compel, the option to refer to business records in lieu of providing textual answers to interrogatories "is not unqualified." (Order of July 17, 1998, p. 2.) Nor can an answering party "discharge its duty to answer interrogatories by simply delivering a tidal wave of documents, the effect of which makes the information exceedingly difficult to locate." (Id. at 7.) Although Central has filed a motion For Reconsideration of the July 17 Order, Complaint Counsel must be held to at least the same standard in providing textual, rather than documentary, interrogatory responses. Complaint Counsel's duty to provide meaningful textual answers is particularly compelling where, as here, it has to review only a small fraction of the huge volume of documents the Presiding Officer has directed Central to review in providing answers. In any event, Complaint Counsel cannot invoke the business records option by referring to information they "believe" may be found in Central's documents, as the documents are, by definition, not Complaint Counsel's own business records. See 7 Moore's § 33.105[1] (Matthew Bender 3d ed.) ("when the answer to an interrogatory may be derived from business records of the responding party, it may, in lieu of answering, specify the records from which the answer may be derived or ascertained . . . ." (emphasis added)). Moreover, information obtained during Complaint Counsel's investigation, which presumably included discussions and interviews, would not necessarily be contained within documents.

Likewise, Complaint Counsel's explanation that "the list of those who have or may have knowledge about the Omegas is potentially endless" due to the millions of sprinklers in service is unavailing. (Compl. Counsel Opp. at 5.) As an initial matter, Central did not ask Complaint Counsel to identify everyone who has or may have knowledge about Omega sprinklers generally. Rather, Central sought identification of each and every person whom Complainant knows and/or believes to have such knowledge of specific matters raised by Complaint Counsel in this matter. See, e.g., Interrogatory Nos. 53-72. This litigation is not about how many sprinklers a building owner has, who installed them, or whether they have ever leaked. Rather, as Complaint Counsel repeatedly asserts, this matter concerns alleged defects in Omega-model sprinklers, purported product hazards, and consumer protection. It is those topics that go to the heart of this matter, and it is those topics about which Central served Complaint Counsel with interrogatories. Unless Complaint Counsel provides Central with the most basic information Central seeks -- identification of persons with knowledge about the particular topics and allegations of Complaint Counsel's investigation and Complaint, Central will not be able to take the necessary depositions and prepare adequately for the hearing in this matter.

B. Complaint Counsel Has Failed To Provide Complete Discovery Responses.

A critical issue in this litigation is what constitutes a "failure" of an Omega sprinkler and whether Omega sprinklers are "defective" within the meaning of the Consumer Product Safety Act. Complaint Counsel's coy answer that it "does not contend that a sprinkler removed from service presents a substantial risk of injury to the public" is a non-response. Although Complaint Counsel has finally admitted that Central is entitled to know what pressure Complaint Counsel

considers in determining a sprinkler "failure," and has further suggested that a pressure of 5 or 7 psig establishes sprinkler failure, (Compl. Counsel Opp. at 7), Complaint Counsel has not answered the rest of Interrogatory 42, which seeks identification of: whether those pressures are based on a standard, documents relating to such a standard, the identity of persons with knowledge of any such standard, and the substance of each person's knowledge.

Similarly, Complaint Counsel has failed to answer interrogatories seeking evidence of Complaint Counsel's factual contentions. It is obvious from the Administrative Complaint that Complaint Counsel made certain contentions. Referring to the Complaint in a discovery response, however, does nothing to inform Central of the factual bases behind the contentions in the Complaint. If Complaint Counsel has factual information it believes support its contentions, it must provide the information to Central. If Complaint Counsel has no such information, it must inform Central of that fact as well. Pleadings are not proof, and Complaint Counsel will not be able to rely on its Complaint as factual evidence of defect or product hazard. If Complaint Counsel has factual support for its allegations, it must provide it to Central.

In addition, Complaint Counsel's general, boilerplate objections obfuscate their discovery responses. It is not clear from the objections whether Complaint Counsel is merely preserving its objections, or actually has information that it is withholding on some asserted ground. Thus, Complaint Counsel's objections fail to reveal the full extent of what Complaint Counsel has withheld information from production. The Presiding Officer noted in his July 17, 1998 Order that Complaint Counsel had criticized Central for, inter alia, raising "blanket objections." (Order at 1.) If such objections are unsatisfactory when made by Central, they are, similarly, unacceptable when made by Complaint Counsel.

C. Complaint Counsel Has Improperly Claimed Privilege And Work Product Protection Rather Than Providing Responsive Discovery.

Despite Complaint Counsel's representation that they have produced "nearly all" of the documents in their possession "with very few and specific exceptions," (Compl. Counsel Opp. at 12, 16-17), in fact, Complaint Counsel has withheld nearly 320 pages (plus audiotapes) of relevant documents. As argued in Central's Renewed Motion To Compel, Complaint Counsel has improperly invoked the attorney-client privilege and work product doctrine rather than respond to Central's discovery requests.

In their response, Complaint Counsel has offered no factual or legal justification for their designation of documents on its privilege log. See Montgomery v. Leftwich, Moore & Douglas, 161 F.R.D. 224, 225 (D.D.C. 1995) (burden is on party asserting the privilege). For example, Complaint Counsel has not established that the individuals named in their privilege log are CPSC attorneys or "clients" providing or seeking legal advice. Indeed, with the exception of the few individuals known to be litigating this matter, the majority of individuals are not identified as attorneys or CPSC employee-"clients," and the descriptions in Complaint Counsel's privilege log do not evince confidential communications made outside the presence of strangers for the purpose of obtaining legal advice. See, e.g., Doc. No. 8 ("meeting with UL and Central Sprinkler"); No. 18 ("notes, third-party subpoena"); 21 ("teleconference with state fire marshal's office).

Further, Complaint Counsel has not established that the documents for which it claims the work product protection are properly exempt from discovery, because documents prepared for or by non-parties to litigation are not protected by the work product doctrine. 6 Moore's Fed.

Practice, § 26.70 [4] (Matthew Bender 3d ed.) Therefore, as discussed in Central's renewed Motion, information created by independent entities and supplied to Complaint Counsel, or provided to independent non-parties by Complaint Counsel, are not protected from discovery. Moreover, even if such documents or compilations were somehow protected, the facts and data within them are not. Complaint Counsel's attempt to hide its case behind the attorney-client privilege and work product doctrine is contrary to the purpose of discovery and to the Commission's own regulations.

Complaint Counsel claims that it has produced "most documents that may be subject to the [work product] privilege." (Compl. Counsel Opp. at 12.) This argument is disingenuous, as it is precisely the withheld documents on Complaint Counsel's privilege log about which Central is arguing. More importantly, in admitting that it advertently produced some of its work product documents -- purportedly "in the spirit of full disclosure," -- Complaint Counsel has waived any claim of work product protection for any of its documents, and all such documents must be produced to Central forthwith. In re Chrysler Motors Corp., 860 F.2d 844, 846 (8th Cir. 1988) (Chrysler voluntarily waived any work product protection by voluntarily disclosing computer tape to its adversary); Fujisawa Pharm. Cp., Ltd. v. Kapoor, 162 F.R.D. 539, 541 (N.D. Ill. 1995) (voluntary disclosure of privileged information about a matter waives privilege as to all information on the same subject matter). Complaint Counsel is not permitted to pick and choose which "protected" documents it will disclose -- presumably those helpful to its case -- while continuing to withhold others. Hercules, Inc. v. Exxon Corp., 434 F. Supp. 136, 156 (D. Del. 1977) (party cannot disclose only facts beneficial to its case and refuse to disclose, on grounds of privilege, related facts adverse to its position). Therefore, Complaint Counsel must produce to

Central all documents for which it has claimed the work product protection, which protection it has now waived by its own admission.

D. Complaint Counsel Has Refused To Provide Relevant Discovery And Textual Responses To Central's Discovery Requests.

Complaint Counsel argues that Central's discovery requests are irrelevant because they seek discovery from Complaint Counsel about, inter alia, sprinkler design features, alleged design defects and Central-related information provided to the CPSC. (Compl. Counsel Opp. at 16, 17.) Contrary to Complaint Counsel's very narrow view of relevance, Central's discovery requests are relevant and also "reasonably calculated to lead to the discovery of admissible evidence." 16 C.F.R. § 1025.31(c)(1). For example, Complaint Counsel objects to Interrogatory No. 129 as requiring Complaint Counsel "to solve this problem for Respondents." (Compl. Counsel Opp. at 16). To the contrary, this Interrogatory seeks information from Complaint Counsel about the perceived design flaws in Omega sprinklers, designs that Complaint Counsel would consider not to be defective -- which designs may or may not already be incorporated into Omega sprinklers, -- and the state of the art of sprinkler design. In addition, although the Presiding Officer's Order Regarding First Prehearing Conference stated that Complaint Counsel "is not obligated to establish the cause" of the alleged Omega defect, that Order also provided that "should Complaint Counsel also intend to introduce evidence of the alleged *cause* of the defect(s), Central is entitled to be so informed." (Order Regarding First Prehearing Conf., pp. 4-5.) Complaint Counsel's interrogatory responses fail to disclose even whether Complaint Counsel intends to introduce evidence of the alleged cause of alleged defects, much less what Complaint Counsel alleges the defect is. At a minimum, Complaint Counsel must answer, with

regard to interrogatories concerning Complaint Counsel's contentions of defect, if it intends to try to prove the alleged cause of any defect.

Moreover, Complaint Counsel must provide textual responses to Central in response to Central's discovery requests. As Complaint Counsel has argued so vehemently with regard to Central's responses to Complaint Counsel's discovery requests, it is not sufficient to refer to documents one has produced where the producing party has carefully examined each of those documents over a length of time. This is particularly true where Complaint Counsel has conducted its investigation over a substantial period of time, has produced relatively few documents to Central (13,000, as opposed to the 800,000 pages that Central produced) and can fashion answers to Central's interrogatories relatively easily. As the Presiding Officer's July 17 Order states with regard to Central, one's duty to answer interrogatories is not discharged simply by delivering documents to the opposing party. (Order at 7.) Just as the Presiding Officer directed Central to answer Complaint Counsel's interrogatories by "providing a complete written response to the questions or by identifying the *particular* Bates-stamped page(s) corresponding to each question and subpart," so too must Complaint Counsel answer Central's interrogatories with complete written responses or identification of specific document pages. (Id. at 7.)

III. CONCLUSION

Discovery must be a two-way street. Both the letter and the purpose of the Commission's regulations is violated by Complaint Counsel's continued refusal to provide documents and interrogatory answers responsive to Central's discovery requests, all while hiding behind ill-claimed objections of privilege, work product, relevance and vagueness. Particularly where Complaint Counsel has initiated an administrative action that threatens Central's continued

existence and ability to address any perceived problems with Omega sprinklers, Complaint Counsel has a duty to produce information regarding the factual bases for, and the information supporting, the allegations charged in its Administrative Complaint. Central therefore respectfully requests that this court grant its Renewed Motion To Compel Full And Complete Responses To Interrogatories And Document Requests.

Respectfully submitted,

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Washington, D.C. 20036-5869
202-467-7000

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Five Neshaminy Interplex, Suite 315
Trevose, PA 19053
215-639-4070

DATED: July 27, 1998

Attorneys for Central Sprinkler Corporation and Central Sprinkler Company

CERTIFICATE OF SERVICE

I, J. Gordon Cooney, Jr., hereby certify that I have served the attached document, the Reply Brief In Support Of Renewed Motion To Compel, upon all parties and participants of record in these proceedings by First Class mail, postage prepaid, a copy to each on July 27, 1998, and additionally by telefax on the same date to the Presiding Officer, Ms. Orlove, and Ms. Dunn.

Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.
U. S. Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, MD 20814

The Honorable William B. Moran
U.S. Environmental Protection Agency
Office of Administrative Law Judges
401 M. Street, S.W.
Mail Code 1900 L
Washington, D.C. 20460

Ms. Sadye E. Dunn, Secretary
U. S. Consumer Product Safety Commission
Office of the Secretary
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Director
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J. Gordon Cooney, Jr.

For: Respondents Central Sprinkler Corporation and Central Sprinkler Company

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETARY
DISCLOSURE OF INFORMATION

1998 JUL 28 A 11:06

In the Matter of	:	
Central Sprinkler Corp., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446	:	**CPSC Docket No. 98-2**
	:	
and	:	**Preliminary Disclosure**
	:	**of Fact Witnesses**
Central Sprinkler Co., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446,	:	
	:	
Respondents.	:	
	:	

RESPONDENTS' PRELIMINARY DISCLOSURE OF FACT WITNESSES

Pursuant to the Presiding Officer's Order dated July 7, 1998, Respondents hereby submit their preliminary disclosure of fact witnesses whom they may call to testify at trial. Because written discovery is not complete and depositions have not commenced, Respondents reserve the right to supplement or revise this list as discovery continues:

J. Robert Anderson
Robert Bandura
Kerry Bell
E. Talbot Briddell
James Brunetti
William Campbell
Michael Churchill
Ron Coleman
Kevin Dolan
Michael Fries
Eric Goetter
James E. Golinveaux
Dr. Victor Greenhut
Richard C. Hobbs
Iqbal Chopra

Eric Korn
Kevin Maughn
George G. Meyer
William J. Meyer
Paul Panattoni
William J. Pardue
George S. Polan (formerly Pieczykolan)
Brian Reilly
Douglas F. Rice
Stacy Sack
Vincent Same
Carmine L. Schiavone
Albert H. Schoenberger
Robert Skibjak
Walter Walsperger
Lisa Wambold
Alisha Wayman
Drew Yuhas

Dated: July 24, 1998

Emily J. Lawrence

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(215) 639-4070

Attorneys for Respondents
CENTRAL SPRINKLER CORP. and
CENTRAL SPRINKLER COMPANY

CERTIFICATE OF SERVICE

I, Emily J. Lawrence, hereby certify that I have served the attached document, the Preliminary Disclosure of Fact Witnesses, upon all parties and participants of record in these proceedings by First Class mail, postage prepaid, a copy to each on July 24, 1998, and additionally by telefax on the same date to the Presiding Officer, Ms. Orlove, and Ms. Dunn.

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Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.
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The Honorable William B. Moran
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Emily J. Lawrence

Emily J. Lawrence

For: Respondents Central Sprinkler Corporation and Central Sprinkler Company

DATED: July 24, 1998

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Morgan, Lewis & Bockius LLP
COUNSELORS AT LAW

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION

1998 JUL 28 · A 11: 06

Stephanie A. Graboyes
215-963-5161

July 24, 1998

VIA TELEFAX AND FIRST-CLASS MAIL

COPY

Deborah S. Orlove , Esq.
Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, MD 20814

Re: In the Matter of Central Sprinkler Corp., et al. (CPSC Docket No. 98-2)

Dear Ms. Orlove:

Enclosed is Respondents' Preliminary Disclosure of Fact Witnesses.

Very truly yours,

Stephanie A. Graboyes
cd
Enclosure
cc: Service List

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

OFFICE OF THE SECRETARY

1998 JUL 31 P 4:39

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents	)	

COMPLAINT COUNSEL'S OPPOSITION TO RESPONDENTS' MOTION FOR RECONSIDERATION OR, IN THE ALTERNATIVE, FOR AN EXTENSION OF TIME

COMES NOW Complaint Counsel and respectfully submits its Opposition to Respondents' Motion for Reconsideration or, in the Alternative, for an Extension of Time.

I. INTRODUCTION

On June 18, 1998, Complaint Counsel in this action filed a Motion to Compel Respondents to answer the staff's First Set of Interrogatories and to provide documents responsive to the staff's First Requests for Production of Documents. After full briefing of the matter by the parties, the Presiding Officer issued an order, dated July 17, 1998, granting Complaint Counsel's Motion to Compel. *See* Order Granting Complaint Counsel's June 18, 1998 Motion Regarding Discovery. The Presiding Officer directed Respondents to answer the Interrogatories specifically listed in the Order within seven (7) days of service of the Order.

On July 24, 1998, the day the responses were due, Respondents filed a Motion for Reconsideration or, in the Alternative, for an Extension of Time to respond to Complaint Counsel's discovery. Respondents have not provided Complaint Counsel with responses to any of the Interrogatories listed in the Judge's Order.

II. RESPONDENTS SHOULD BE COMPELLED TO PROVIDE COMPLAINT COUNSEL WITH FULL AND COMPLETE DISCOVERY RESPONSES

In a continuing effort to block discovery in this case, Respondents now request that the Presiding Officer reconsider his Order compelling Central to provide responses to Complaint Counsel's discovery requests. In the alternative, Respondents request that they be given additional time to complete the task of answering the questions. There is no justification for a ruling other than that expressed in the Judge's July 17, 1998 Order, nor is there any reason to give Central additional time to answer.

A. THERE IS NO LEGAL JUSTIFICATION FOR RECONSIDERATION OF THE JUDGE'S ORDER ON COMPLAINT COUNSEL'S MOTION TO COMPEL

Respondents request that the Presiding Officer reconsider his July 17, 1998 Order because it allegedly "does not focus on the courts' holdings [of the cases it cites] or the main principles underlying those holdings." Respondents' Motion at 3. Respondents further claim that "the Order incorrectly concludes that the burden on Central would be less significant than that borne by Complaint Counsel in reviewing the documents to answer Complaint Counsel's interrogatories." *Id.* Respondents' arguments on both counts must fail.

Central claims that the Order fails to reflect the court's holding in *In re U.S. Financial Securities Litigation*, 74 F.R.D. 497 (S.D. Cal. 1975), "that excessively long and detailed interrogatories are an abuse of the discovery process." Respondents' Motion at 4.

Respondents claim that the Order addresses only the *U.S. Financial* Court's statement that "the frequency and scope of interrogatories are not limited." Respondents' Motion at 4. However, the Order in this case, and the Court in *U.S. Financial*, both pointed out that "unfettered discovery of all materials relevant to the case should be permitted . . ." Order on Motion to Compel at 3; *U.S. Financial*, 74 F.R.D. at 498.

Respondents further claim that the staff has engaged in "interrogatory abuse" by serving too many interrogatories. Respondents cite the current limitation on the number of written interrogatories in the Federal Rules of Civil Procedure, claiming that the limitation was necessary to avoid abuse. However, as the rule and the Advisory Committee notes that Respondents cite point out, more interrogatories are allowed by agreement of the parties, or by leave of court. Fed. R. Civ. P. 33, and Advisory Comm. Notes. The limitation in the Federal Rules was imposed to "allow judicial scrutiny" of the discovery process, to ensure that interrogatories are not used as harassment. Fed. R. Civ. P. 33, Advisory Comm. Notes to 1993 Amendments. In the instant case, the rules applicable to discovery do not limit the number of interrogatories. *See* 16 C.F.R. 1025.32. Moreover, Complaint Counsel's Interrogatories are clearly not designed or intended to harass Respondents, nor are they of "dubious relevance," *see* Respondents' Motion at 6, as Respondents claim; they are legitimate requests for information that is or would lead to discoverable evidence regarding Omega sprinklers.

Respondents maintain that compelling them to "answer Complaint Counsel's voluminous and detailed interrogatories is unduly burdensome and duplicative." Respondents'

Motion at 6. Complaint Counsel's interrogatories may be comprehensive and detailed. However, they are not unduly burdensome, nor are they duplicative.[1]

Central claims that it has satisfied the requirements of responding to Complaint Counsel's interrogatories, and has "cooperated" with Complaint Counsel by furnishing "all of its documents and a detailed and costly index . . . of each document." Respondents' Motion at 6 (citing *Procter & Gamble Co.*, 25 F.R.D. 252, 254 (D.N.J. 1960); Respondents' Motion at 8. Respondents claim that the burden of locating the requested information from those documents "would be substantially the same for either party," Respondents' Motion at 7 (citing *Milsen v. Southland Corp.*, 1972 U.S. Dist. Lexis 14071, *4 (N.D. Ill., Apr. 21, 1972), and argue that the Judge's Order is based on "erroneous determinations about the parties' respective burdens." Respondents' Motion for Reconsideration at 9.

Complaint Counsel incorporates herein its arguments in support of its Motion to Compel with respect to the burden on the parties, and adds here a practical and instructive example of how the burdens are clearly unequal. During a telephone conversation with Complaint Counsel shortly after the documents were delivered, Respondents' Counsel referenced documents (that had allegedly been provided to Complaint Counsel) relating to actions taken by Central in response to an Omega inactivation in a 1990 fire in which a hospital patient lost her hand. Complaint Counsel has received 460 boxes of documents from

---

[1] Respondents, who have served upon Complaint Counsel 148 interrogatories (many of which seek irrelevant information about the Agency's investigation), as compared to Complaint Counsel's 117 interrogatories, cannot complain that Complaint Counsel's interrogatories are unduly burdensome. *Cf. Precision Instrument Mfg. Co. v. Automotive Maintenance Machinery Co.*, 324 U.S. 806, 814 (1945) (denying relief on the ground that "the unclean hands doctrine closes the door of a court of equity to one tainted with inequitableness or bad faith relative to the matter in which he seeks relief . . .").

Respondents. Complaint Counsel has initially reviewed most of the volumes of indexes received from Respondents. Complaint Counsel has conducted a detailed page-by-page search through the first hundred of the 460 boxes looking for the documents (as counsel for Respondents thought the documents relating to this incident were in the first delivery phase). Complaint Counsel and its staff has now spent over three weeks looking through the boxes for those specific documents. Complaint Counsel has **still** not located the relevant documents.

Respondents, on the other hand, have possessed documents relating to this incident for approximately 8 years, and were involved in litigation regarding the incident. Their counsel has reviewed the documents and, in fact, one of the attorneys of record in this case may have been involved in the investigation and litigation surrounding the incident, and allegedly made recommendations to Central regarding whether to change their sprinkler design. Respondents do not need to sift through 460 boxes to find the answer. Given what they know, Respondents and their counsel could easily have answered Complaint Counsel's questions, with very little effort. Yet, they still claim that it is as easy for Complaint Counsel to search through 460 boxes to find the answer to its interrogatories that ask about fire incidents, injuries and changes to the sprinkler design, as it is for Respondents to simply provide the answer.[2]

---

[2] Rather than simply asking Central's principals to answer the questions, Respondents' counsel hired staff to sift through documents and create an index. Respondents admit in their Motion that "nearly all of the lawyers involved in indexing [the documents] were temporary staff hired for that task," Respondents' Motion at 3, and that the lawyers tasked with complying with Complaint Counsel's document requests "were not, and are not, engaged in the full extent of this or related litigation." Respondents' Motion at 2. Given this information, it is not surprising that the documents often do not comport with their descriptions in the index, that the documents are disorganized, and that even a focused search over several weeks for a particular set of documents has failed to unearth them.

But for the incredible burden placed on Complaint Counsel, Complaint Counsel could have scheduled depositions for today to further inquire about the 1990 failure and injury, and explore defenses that Respondents posed to that claim that they have also posed here -- defenses that Complaint Counsel believes evidence in the 1990 case may disprove. The Judge's Order made no mistake about the relative burdens on Complaint Counsel and Respondents with respect to finding answers to Interrogatories in an "tidal wave" of documents. *See* Order on Motion to Compel at 7. There is absolutely no reason why Central should not be compelled to answer Complaint Counsel's Interrogatories.[3]

B. RESPONDENTS SHOULD BE COMPELLED TO ANSWER COMPLAINT COUNSEL'S DISCOVERY IMMEDIATELY

Complaint Counsel filed and served its Interrogatories and Requests for Production to Respondents on **April 20, 1998, three months ago**. Before the litigation was filed, Central had undergone an extensive governmental investigation over the Omega, and had been sued by several property owners and others over problems with Omegas. Yet, in all the time they have had to do their due diligence and provide answers to the questions posed in Complaint Counsel's discovery requests (most of which are readily available from corporate sources with knowledge about the Omega problem), Respondents have not done so. Respondents now claim that it is "not physically possible to comply" with the Judge's Order, and have not attempted to provide Complaint Counsel **with even a single answer to a single**

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[3] Respondents explain in their Motion that once the documents were marked privileged and confidential, they were Bates-stamped and copied by several outside copy services. *See* Respondents' Motion at 2. Some of the documents submitted to Complaint Counsel are clearly copies of Bates-stamped documents -- i.e., copies of Respondents' copies, which Respondents claimed at the Pre-Hearing Conference of this matter that they did not possess.

Interrogatory in the two weeks that have elapsed since being ordered to do so. *See* Respondents' Motion for Reconsideration at 1. Respondents are obstructing discovery in this case, and should not be given additional time to continue along this course. Trial of this matter is scheduled to begin in December. **Depositions were scheduled to begin today. Complaint Counsel has only a mass of boxes in which to find answers to its questions, evidence for its case, and identities of persons with knowledge.** Respondents should be compelled to answer Complaint Counsel's discovery immediately.

III. CONCLUSION

Based on the foregoing, Complaint Counsel respectfully requests that Respondents' Motion for Reconsideration or, in the Alternative, for Extension of Time, be DENIED.

Dated: July 31, 1998

Respectfully submitted,

Deborah S. Orlove

Deborah S. Orlove, Esq.
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Howard N. Tarnoff, Esq.
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Eric L. Stone, Esq.
Director, Legal Division
Alan H. Schoem, Esq.
Assistant Executive Director
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dso\central\reconsid.opp

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, **COMPLAINT COUNSEL'S OPPOSITION TO RESPONDENTS' MOTION FOR RECONSIDERATION OR, IN THE ALTERNATIVE, FOR AN EXTENSION OF TIME**, was filed with the Secretary of the Commission and telecopied and deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

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Thomas P. Hogan, Jr., Esq.
Emily J. Lawrence, Esq.
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Attorneys for Central Sprinkler Corporation and Central Sprinkler Company

The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
401 M St., S.W.
Mail Code 1900 L
Washington, DC 20460
fax (202) 565-0044

Signed: _____

Dated: 7/31/98

76

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
	)	
CENTRAL SPRINKLER CORP.	)	
	)	CPSC DOCKET NO. 98-2
and	)	
	)	
CENTRAL SPRINKLER CO.,	)	
	)	
Respondents	)	

ORDER

On July 17, 1998, this Court issued an Order granting the June 18, 1998, Motion of the Consumer Product Safety Commission regarding discovery. Central Sprinkler Corp. and Central Sprinkler Co. ("Central" or "Respondents") was ordered to answer the interrogatories within seven (7) days of service. The answers were due July 24, 1998.

Respondents have not complied with the Order. Instead, on July 24, 1998, Central filed a Motion for Reconsideration or, In the Alternative, for an Extension of Time. Complaint Counsel filed an Opposition to Central's Motion on July 3, 1998.

Having considered the Motion, it is DENIED. Central is directed to immediately comply with the Court's July 17th Order.[1]

SO ORDERED.

William B. Moran
William B. Moran
Administrative Law Judge

Dated: August 4, 1998
Washington, D.C.

---

[1] Effectively, by filing the Motion for Reconsideration, Central has already obtained an eleven (11) day extension of the Order.

In the Matter of Central Sprinkler Corp. And Central Sprinkler Co., Respondents
CPSC Docket No. 98-2

CERTIFICATE OF SERVICE

I hereby certify that the foregoing Order, dated August 4, 1998, was sent in the following manner to the addressees below:

By ~~Facsimile and Regular Mail~~ to:
Hand Delivery

Deborah S. Orlove, Esquire
Eric H. Singer, Esquire
Howard N. Tarnoff, Esquire
Office of Compliance
U.S. Consumer Product Safety Commission
4330 East West Highway, Room 502
Bethesda, Maryland 20814

Alan H. Schoem
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Eric Stone, Esquire
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By Facsimile & Regular Mail to:

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Five Neshaminy Interplex, Suite 315
Trevose, Pennsylvania 19053

Sadye E. Dunn

Sadye E. Dunn, Secretary

Dated: August 4, 1998
Bethesda, Maryland

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF
THE ADMINISTRATIVE
LAW JUDGES

August 4, 1998

BY REGULAR MAIL AND FACSIMILE
Sadye E. Dunn, Secretary
U.S. Consumer Product Safety Commission
Office of the Secretary
4330 East West Highway, Building 4340
Bethesda, Maryland 20814

Re: In the Matter of Central Sprinkler Corp., and Central Sprinkler Co.
Docket No. CPSC 98-2

Dear Ms. Dunn:

Enclosed is my Order, which was also sent via facsimile to you this date. Please serve this Order to all parties.

Sincerely,

William B. Moran

William B. Moran
United States Administrative Law Judge

WBM:ebm
Enclosure

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF
THE ADMINISTRATIVE
LAW JUDGES

August 4, 1998

BY REGULAR MAIL AND FACSIMILE
Sadye E. Dunn, Secretary
U.S. Consumer Product Safety Commission
Office of the Secretary
4330 East West Highway, Building 4340
Bethesda, Maryland 20814

Re: In the Matter of Central Sprinkler Corp., and Central Sprinkler Co.
Docket No. CPSC 98-2

Dear Ms. Dunn:

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Sincerely,

William B Moran

William B. Moran
United States Administrative Law Judge

WBM:ebm
Enclosure

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
	)	
CENTRAL SPRINKLER CORP.	)	
	)	CPSC DOCKET NO. 98-2
and	)	
	)	
CENTRAL SPRINKLER CO.,	)	
	)	
Respondents	)	

ORDER

On July 17, 1998, this Court issued an Order granting the June 18, 1998, Motion of the Consumer Product Safety Commission regarding discovery. Central Sprinkler Corp. and Central Sprinkler Co. ("Central" or "Respondents") was ordered to answer the interrogatories within seven (7) days of service. The answers were due July 24, 1998.

Respondents have not complied with the Order. Instead, on July 24, 1998, Central filed a Motion for Reconsideration or, In the Alternative, for an Extension of Time. Complaint Counsel filed an Opposition to Central's Motion on July 3, 1998.

Having considered the Motion, it is DENIED. Central is directed to immediately comply with the Court's July 17th Order.[1]

SO ORDERED.

William B. Moran
William B. Moran
Administrative Law Judge

Dated: August 4, 1998
Washington, D.C.

[1] Effectively, by filing the Motion for Reconsideration, Central has already obtained an eleven (11) day extension of the Order.

In the Matter of Central Sprinkler Corp. And Central Sprinkler Co., Respondents
CPSC Docket No. 98-2

CERTIFICATE OF SERVICE

I hereby certify that the foregoing Order, dated August 4, 1998, was sent in the following manner to the addressees below:

By Facsimile and Regular Mail to:

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Eric H. Singer, Esquire
Howard N. Tarnoff, Esquire
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Corr, Stevens & Fenningham
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Trevose, Pennsylvania 19053

_____
Sadye E. Dunn, Secretary

Dated: _____
Bethesda, Maryland

77

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION

1998 AUG -3 P 4:06

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents	)	

JOINT MOTION FOR TEMPORARY STAY OF PROCEEDINGS

COME NOW Complaint Counsel for the staff of the Consumer Product Safety Commission, and Respondents, Central Sprinkler Corp. and Central Sprinkler Co:, and respectfully request a temporary, two-week stay of the administrative proceeding in the above-captioned matter. Respondents have submitted a proposal for settlement of this case, and Complaint Counsel is currently reviewing and commenting on that proposal. The parties intend to engage in serious settlement discussions during the two-week stay.

WHEREFORE the parties jointly request a temporary, two-week stay of all proceedings in this matter in order to devote all necessary resources toward negotiating a settlement.

Dated: August 4, 1998

Respectfully submitted,

Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.
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J. Gordon Cooney, Jr., Esq.
Emily J. Lawrence, Esq.
MORGAN, LEWIS & BOCKIUS LLP
2000 One Logan Square
Philadelphia, PA 19103
(215) 963-5000

Michael F. Healy, Esq.
MORGAN, LEWIS & BOCKIUS LLP
1800 M Street, NW
Washington, DC 20036-5869
(202) 467-7000

John C. Fenningham, Esq.
CORR, STEVENS & FENNINGHAM
Five Neshaminy Interplex, Suite 315
Trevose, PA 19053
(215) 639-4070

Counsel for Respondents

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents	)	

ORDER GRANTING TWO-WEEK TEMPORARY STAY OF PROCEEDINGS

Upon Joint Motion made by the parties to this Administrative Proceeding, it is hereby ORDERED that the cause be temporarily stayed for a period of two weeks to allow the parties to engage in serious efforts to negotiate a settlement of this action.

DATED:_____

_____
The Honorable William B. Moran
Administrative Law Judge

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, the parties' **JOINT MOTION FOR TEMPORARY STAY OF PROCEEDINGS** was filed with the Secretary of the Commission, telecopied, and deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the Presiding Officer in this matter,

The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
401 M St., S.W.
Mail Code 1900 L
Washington, DC 20460
fax (202) 565-0044.

Signed: _____

Dated: 8/4/98

stay.mot

77

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION

1998 AUG -3 P 4:06

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents	)	

JOINT MOTION FOR TEMPORARY STAY OF PROCEEDINGS

COME NOW Complaint Counsel for the staff of the Consumer Product Safety Commission, and Respondents, Central Sprinkler Corp. and Central Sprinkler Co:, and respectfully request a temporary, two-week stay of the administrative proceeding in the above-captioned matter. Respondents have submitted a proposal for settlement of this case, and Complaint Counsel is currently reviewing and commenting on that proposal. The parties intend to engage in serious settlement discussions during the two-week stay.

WHEREFORE the parties jointly request a temporary, two-week stay of all proceedings in this matter in order to devote all necessary resources toward negotiating a settlement.

Dated: August 4, 1998

Respectfully submitted,

Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.
Complaint Counsel
U.S. Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, MD 20814
(301) 504-0626

Of Counsel
Eric L. Stone, Esq.
Director, Legal Division
Alan H. Schoem, Esq.
Assistant Executive Director
Office of Compliance

Complaint Counsel

J. Gordon Cooney, Jr., Esq.
Emily J. Lawrence, Esq.
MORGAN, LEWIS & BOCKIUS LLP
2000 One Logan Square
Philadelphia, PA 19103
(215) 963-5000

Michael F. Healy, Esq.
MORGAN, LEWIS & BOCKIUS LLP
1800 M Street, NW
Washington, DC 20036-5869
(202) 467-7000

John C. Fenningham, Esq.
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Five Neshaminy Interplex, Suite 315
Trevose, PA 19053
(215) 639-4070

Counsel for Respondents

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents	)	

ORDER GRANTING TWO-WEEK TEMPORARY STAY OF PROCEEDINGS

Upon Joint Motion made by the parties to this Administrative Proceeding, it is hereby ORDERED that the cause be temporarily stayed for a period of two weeks to allow the parties to engage in serious efforts to negotiate a settlement of this action.

DATED:_____

_____
The Honorable William B. Moran
Administrative Law Judge

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, the parties' **JOINT MOTION FOR TEMPORARY STAY OF PROCEEDINGS** was filed with the Secretary of the Commission, telecopied, and deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the Presiding Officer in this matter,

The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
401 M St., S.W.
Mail Code 1900 L
Washington, DC 20460
fax (202) 565-0044.

Signed: _____

Dated: 8/4/98

stay.mot

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
	)	
CENTRAL SPRINKLER CORP.,	)	
	)	
and	)	**CPSC Docket No. 98-2**
	)	
CENTRAL SPRINKLER CO.,	)	
	)	
Respondents	)	

ORDER GRANTING TEMPORARY STAY

The parties have submitted a joint motion seeking a two (2) week stay of the administrative proceedings in this matter and they represent that they intend to engage in "serious settlement discussions" during this time.

For good cause shown, the joint motion is GRANTED. The parties shall file an *in camera* status report with the Court, via facsimile, by August 20, 1998.

William B. Moran
William B. Moran
United States Administrative Law Judge

Dated: August 5, 1998
Washington, D.C.

In the Matter of Central Sprinkler Corp. And Central Sprinkler Co., Respondents
CPSC Docket No. 98-2

CERTIFICATE OF SERVICE

I hereby certify that the foregoing **Order Granting Temporary Stay**, dated August 5, 1998, was sent in the following manner to the addressees listed below.

By Regular Mail & Facsimile to:

J. Gordon Cooney, Jr., Esquire
Thomas P. Hogan, Esquire
Emily J. Lawrence, Esquire
MORGAN, LEWIS & BOCKIUS, LLP
2000 One Logan Square
Philadelphia, Pennsylvania 19103

Michael F. Healy, Esquire
MORGAN, LEWIS & BOCKIUS, LLP
1800 M Street, N.W.,
Washington, D.C. 20036

John C. Fenningham, Esquire
CORR, STEVENS & FENNINGHAM
Five Neshaminy Interplex, Suite 315
Trevose, Pennsylvania 19053

By Hand Delivery to:

Alan H. Schoem
Assistant Executive Director
Office of Compliance
U.S. CONSUMER PRODUCT SAFETY COMMISSION
4330 East West Highway
Bethesda, Maryland 20814

Eric Stone, Esquire
Director, Legal Division
Office of Compliance
U.S. CONSUMER PRODUCT SAFETY COMMISSION
4330 East West Highway
Bethesda, Maryland 20814

Deborah S. Orlove, Esquire
Complaint Counsel
Legal Division
Office of Compliance
U.S. CONSUMER PRODUCT SAFETY COMMISSION
4330 East West Highway

4330 East West Highway
Bethesda, Maryland 20814

Eric H. Singer, Esquire
Complaint Counsel
Legal Division
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4330 East West Highway
Bethesda, Maryland 20814

Howard N. Tarnoff, Esquire
Complaint Counsel
Legal Division
Office of Compliance
U.S. CONSUMER PRODUCT SAFETY COMMISSION
4330 East West Highway
Bethesda, Maryland 20814

Sadye E. Dunn
Secretary, Consumer Product Safety Commission

Date: August 5, 1998

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
	)	
CENTRAL SPRINKLER CORP.,	)	
	)	
and	)	**CPSC Docket No. 98-2**
	)	
CENTRAL SPRINKLER CO.,	)	
	)	
Respondents	)	

ORDER GRANTING TEMPORARY STAY

The parties have submitted a joint motion seeking a two (2) week stay of the administrative proceedings in this matter and they represent that they intend to engage in "serious settlement discussions" during this time.

For good cause shown, the joint motion is GRANTED. The parties shall file an *in camera* status report with the Court, via facsimile, by August 20, 1998.

William B. Moran

William B. Moran
United States Administrative Law Judge

Dated: August 5, 1998
Washington, D.C.

In the Matter of Central Sprinkler Corp. And Central Sprinkler Co., Respondents
CPSC Docket No. 98-2

CERTIFICATE OF SERVICE

I hereby certify that the foregoing **Order Granting Temporary Stay**, dated August 5, 1998, was sent in the following manner to the addressees listed below.

By Regular Mail & Facsimile to:

J. Gordon Cooney, Jr., Esquire
Thomas P. Hogan, Esquire
Emily J. Lawrence, Esquire
MORGAN, LEWIS & BOCKIUS, LLP
2000 One Logan Square
Philadelphia, Pennsylvania 19103

Michael F. Healy, Esquire
MORGAN, LEWIS & BOCKIUS, LLP
1800 M Street, N.W.,
Washington, D.C. 20036

John C. Fenningham, Esquire
CORR, STEVENS & FENNINGHAM
Five Neshaminy Interplex, Suite 315
Trevose, Pennsylvania 19053

Alan H. Schoem
Assistant Executive Director
Office of Compliance
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4330 East West Highway
Bethesda, Maryland 20814

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4330 East West Highway
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Complaint Counsel
Legal Division
Office of Compliance
U.S. CONSUMER PRODUCT SAFETY COMMISSION
4330 East West Highway
Bethesda, Maryland 20814

_____

Sadye E. Dunn
Secretary, Consumer Product Safety Commission

Date: August ___, 1998

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
	)	
CENTRAL SPRINKLER CORP.,	)	
	)	
and	)	**CPSC Docket No. 98-2**
	)	
CENTRAL SPRINKLER CO.,	)	
	)	
Respondents	)	

ORDER GRANTING EXTENSION OF TEMPORARY STAY OF PROCEEDINGS

Upon Joint Motion made by the parties to this Administrative Proceeding, it is hereby ORDERED that the cause be temporarily stayed for an additional one week period to allow the parties to continue to engage in serious efforts to negotiate a settlement of this action. The parties shall file an *in camera* status report with the Court, via facsimile, by August 28, 1998.

William B. Moran
William B. Moran
United States Administrative Law Judge

Dated: August 20, 1998
Washington, D.C.

In the Matter of Central Sprinkler Corp. And Central Sprinkler Co., Respondents
CPSC Docket No. 98-2

CERTIFICATE OF SERVICE

I hereby certify that the foregoing **Order Granting Extension of Temporary Stay of Proceedings**, dated August 20, 1998, was sent in the following manner to the addressees listed below.

By Regular Mail & Facsimile to:

J. Gordon Cooney, Jr., Esquire
Thomas P. Hogan, Esquire
Emily J. Lawrence, Esquire
MORGAN, LEWIS & BOCKIUS, LLP
2000 One Logan Square
Philadelphia, Pennsylvania 19103

Michael F. Healy, Esquire
MORGAN, LEWIS & BOCKIUS, LLP
1800 M Street, N.W.,
Washington, D.C. 20036

John C. Fennington, Esquire
CORR, STEVENS & FENNINGHAM
Five Neshaminy Interplex, Suite 315
Trevose, Pennsylvania 19053

By Hand Delivery to:

Alan H. Schoem
Assistant Executive Director
Office of Compliance
U.S. CONSUMER PRODUCT SAFETY COMMISSION
4330 East West Highway
Bethesda, Maryland 20814

Eric Stone, Esquire
Director, Legal Division
Office of Compliance
U.S. CONSUMER PRODUCT SAFETY COMMISSION
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Bethesda, Maryland 20814

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Office of Compliance
U.S. CONSUMER PRODUCT SAFETY COMMISSION

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Bethesda, Maryland 20814

Howard N. Tarnoff, Esquire
Complaint Counsel
Legal Division
Office of Compliance
U.S. CONSUMER PRODUCT SAFETY COMMISSION
4330 East West Highway
Bethesda, Maryland 20814

Sadye E. Dunn
Secretary, Consumer Product Safety Commission

Date: August 20, 1998

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF ADMINISTRATIVE LAW JUDGES

FROM: ELAINE MALCOLM
(202) 564-6256 (Direct Line)
(202) 565-0044 (Facsimile)

FOR: Judge WM. MORAN

DATE: 8/20/98 PAGES: 4

TO: Sadye Dunn

FACSIMILE NO.: 504-0127 (301) TELEPHONE NO.: _____

TO: _____

FACSIMILE NO.: _____ TELEPHONE NO.: _____

TO: _____

FACSIMILE NO.: _____ TELEPHONE NO.: _____

REMARKS: _____

MAILING ADDRESS:
401 M STREET, S.W., MAIL CODE: 1900L
WASHINGTON, D.C. 20460
DELIVERY ADDRESS:
1099 14TH STREET, N.W., SUITE 350
WASHINGTON, D.C. 20005

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
	)	
CENTRAL SPRINKLER CORP.,	)	
	)	
and	)	**CPSC Docket No. 98-2**
	)	
CENTRAL SPRINKLER CO.,	)	
	)	
Respondents	)	

ORDER GRANTING EXTENSION OF TEMPORARY STAY OF PROCEEDINGS

Upon Joint Motion made by the parties to this Administrative Proceeding, it is hereby ORDERED that the cause be temporarily stayed for an additional one week period to allow the parties to continue to engage in serious efforts to negotiate a settlement of this action. The parties shall file an *in camera* status report with the Court, via facsimile, by August 28, 1998.

William B. Moran

William B. Moran
United States Administrative Law Judge

Dated: August 20, 1998
Washington, D.C.

In the Matter of Central Sprinkler Corp. And Central Sprinkler Co., Respondents
CPSC Docket No. 98-2

CERTIFICATE OF SERVICE

I hereby certify that the foregoing **Order Granting Extension of Temporary Stay of Proceedings**, dated August 20, 1998, was sent in the following manner to the addressees listed below.

By Regular Mail & Facsimile to:

J. Gordon Cooney, Jr., Esquire
Thomas P. Hogan, Esquire
Emily J. Lawrence, Esquire
MORGAN, LEWIS & BOCKIUS, LLP
2000 One Logan Square
Philadelphia, Pennsylvania 19103

Michael F. Healy, Esquire
MORGAN, LEWIS & BOCKIUS, LLP
1800 M Street, N.W.,
Washington, D.C. 20036

John C. Fenningham, Esquire
CORR, STEVENS & FENNINGHAM
Five Neshaminy Interplex, Suite 315
Trevose, Pennsylvania 19053

Alan H. Schoem
Assistant Executive Director
Office of Compliance
U.S. CONSUMER PRODUCT SAFETY COMMISSION
4330 East West Highway
Bethesda, Maryland 20814

Eric Stone, Esquire
Director, Legal Division
Office of Compliance
U.S. CONSUMER PRODUCT SAFETY COMMISSION
4330 East West Highway
Bethesda, Maryland 20814

Deborah S. Orlove, Esquire
Complaint Counsel
Legal Division
Office of Compliance
U.S. CONSUMER PRODUCT SAFETY COMMISSION

4330 East West Highway
Bethesda, Maryland 20814

Eric H. Singer, Esquire
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Legal Division
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U.S. CONSUMER PRODUCT SAFETY COMMISSION
4330 East West Highway
Bethesda, Maryland 20814

Howard N. Tarnoff, Esquire
Complaint Counsel
Legal Division
Office of Compliance
U.S. CONSUMER PRODUCT SAFETY COMMISSION
4330 East West Highway
Bethesda, Maryland 20814

_____

Sadye E. Dunn
Secretary, Consumer Product Safety Commission

Date: August ___, 1998

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
	)	
CENTRAL SPRINKLER CORP.	)	
	)	CPSC DOCKET NO. 98-2
and	)	
	)	
CENTRAL SPRINKLER CO.,	)	
	)	
Respondents	)	

ORDER GRANTING ADDITIONAL ONE-WEEK EXTENSION
OF TEMPORARY STAY OF PROCEEDINGS

Upon Joint Motion made by the parties to this Administrative Proceeding, it is hereby ORDERED that the cause be temporarily stayed for another week period in order to allow the parties to continue their efforts to negotiate a settlement of this action. The parties shall file an *in camera* status report with the Court, via facsimile, by September 4, 1998.

William B. Moran
Administrative Law Judge

Dated: August 31, 1998
Washington, D.C.

In the Matter of Central Sprinkler Corp. And Central Sprinkler Co., Respondents
CPSC Docket No. 98-2

CERTIFICATE OF SERVICE

I hereby certify that the foregoing Order, dated August 31, 1998, was sent in the following manner to the addressees below:

By Facsimile and Regular Mail to:

Deborah S. Orlove, Esquire
Eric H. Singer, Esquire
Howard N. Tarnoff, Esquire
Office of Compliance
U.S. Consumer Product Safety Commission
4330 East West Highway, Room 502
Bethesda, Maryland 20814

Alan H. Schoem
Assistant Executive Director
Office of Compliance
U.S. Consumer Product Safety Commission
4330 East West Highway
Bethesda, Maryland 20814

Eric Stone, Esquire
Director, Legal Division
U.S. Consumer Product Safety Commission
4330 East West Highway
Bethesda, Maryland 20814

J. Gordon Cooney, Jr., Esquire
Thomas P. Hogan, Jr., Esquire
Emily J. Lawrence, Esquire
Morgan, Lewis & Bockius, LLP
2000 One Logan Square
Philadelphia, Pennsylvania 19103

Michael F. Healy, Esquire
Morgan, Lewis & Bockius, LLP
1800 M Street, N.W.
Washington, D.C. 20036

John C. Fenningham, Esquire
Corr, Stevens & Fenningham
Five Neshaminy Interplex, Suite 315
Trevose, Pennsylvania 19053

_____
Sadye E. Dunn, Secretary

Dated: _____
Bethesda, Maryland

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, DC 20460

OFFICE OF
THE ADMINISTRATIVE
LAW JUDGES

August 31, 1998

BY REGULAR MAIL AND FACSIMILE
Sadye E. Dunn, Secretary
U.S. Consumer Product Safety Commission
Office of the Secretary
4330 East West Highway, Building 4340
Bethesda, Maryland 20814

Re: In the Matter of Central Sprinkler Corp., and Central Sprinkler Co.
Docket No. CPSC 98-2

Dear Ms. Dunn:

Enclosed is my Order, which was also sent via facsimile to you this date. Please serve this Order to all parties.

Sincerely,

William B. Moran

William B. Moran
United States Administrative Law Judge

WBM:ebm
Enclosure

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
	)	
CENTRAL SPRINKLER CORP.,	)	
	)	
and	)	CPSC Docket No. 98-2
	)	
CENTRAL SPRINKLER CO.,	)	
	)	
Respondents	)	

ORDER GRANTING ADDITIONAL ONE-WEEK EXTENSION OF TEMPORARY STAY OF PROCEEDINGS

Upon Joint Motion made by the parties to this Administrative Proceeding, it is hereby ORDERED that the cause be temporarily stayed for another week period in order to allow the parties to continue their efforts to negotiate a settlement of this action. The parties shall file an *in camera* status report with the Court, via facsimile, by September 4, 1998.

William B. Moran
Administrative Law Judge

Dated: August 31, 1998
Washington, D.C.

In the Matter of Central Sprinkler Corp. and Central Sprinkler Co., Respondents - CPSC Docket No. 98-2

CERTIFICATE OF SERVICE

I hereby certify that the foregoing **Order Granting Additional One-Week Extension of Temporary Stay of Proceedings**, dated August 31, 1998, was sent in the manner indicated to the addressees listed below.

By telefacsimile and Regular Mail to: Respondents

J. Gordon Cooney, Jr., Esquire
Thomas P. Hogan, Esquire
Emily J. Lawrence, Esquire
MORGAN, LEWIS & BOCKIUS, LLP
2000 One Logan Square
Philadelphia, Pennsylvania 19103

Michael F. Healy, Esquire
MORGAN, LEWIS & BOCKIUS, LLP
1800 M Street, N.W.,
Washington, D.C. 20036

John C. Fenningham, Esquire
CORR, STEVENS & FENNINGHAM
Five Neshaminy Interplex, Suite 315
Trevose, Pennsylvania 19053

By hand delivery to: Complaint Counsel

Alan H. Schoem
Assistant Executive Director
Office of Compliance
U.S. CONSUMER PRODUCT SAFETY COMMISSION
4330 East West Highway
Bethesda, Maryland 20814

Eric Stone, Esquire
Director, Legal Division
Office of Compliance
U.S. CONSUMER PRODUCT SAFETY COMMISSION
4330 East West Highway
Bethesda, Maryland 20814

Certificate of Service, continued

In the Matter of Central Sprinkler Corp. and Central Sprinkler Co., Respondents - CPSC Docket No. 98-2

Deborah S. Orlove, Esquire
Complaint Counsel
Legal Division
Office of Compliance
U.S. CONSUMER PRODUCT SAFETY COMMISSION
4330 East West Highway
Bethesda, Maryland 20814

Eric H. Singer, Esquire
Complaint Counsel
Legal Division
Office of Compliance
U.S. CONSUMER PRODUCT SAFETY COMMISSION
4330 East West Highway
Bethesda, Maryland 20814

Howard N. Tarnoff, Esquire
Complaint Counsel
Legal Division
Office of Compliance
U.S. CONSUMER PRODUCT SAFETY COMMISSION
Bethesda, Maryland 20814

Sadye E. Dunn

Sadye E. Dunn, Secretary
Consumer Product Safety Commissiosn

Date: August 31, 1998

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446	:	**CPSC Docket No. 98-2**
	:	
and	:	**Withdrawal Of Appearance of**
	:	**Thomas P. Hogan, Jr.**
Central Sprinkler Co., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446,	:	
	:	
Respondents.	:	
	:	

WITHDRAWAL OF APPEARANCE OF THOMAS P. HOGAN, JR. ON BEHALF OF CENTRAL SPRINKLER CORPORATION AND CENTRAL SPRINKLER COMPANY

Pursuant to 16 C.F.R. §§ 1025.63, the following attorney hereby withdraws his appearance on behalf of respondents Central Sprinkler Corporation and Central Sprinkler Company in the above-referenced matter, effective July 16, 1998.

Thomas P. Hogan, Jr.
Morgan, Lewis & Bockius LLP
2000 One Logan Square
Philadelphia, PA 19103
(215) 963-5253

Respectfully submitted,

Thomas P. Hogan, Jr.

DATED: 8/31, 1998

CERTIFICATE OF SERVICE

I, Emily J. Lawrence, hereby certify that I have served the attached document, the Withdrawal Of Appearance Of Thomas P. Hogan, Jr., upon all parties and participants of record in these proceedings by First Class mail, postage prepaid, a copy to each on September 4, 1998, and additionally by telefax on the same date to the Presiding Officer, Ms. Orlove, and Ms. Dunn.

Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.
U. S. Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, MD 20814

The Honorable William B. Moran
U.S. Environmental Protection Agency
Office of Administrative Law Judges
401 M. Street, S.W.
Mail Code 1900 L
Washington, D.C. 20460

Ms. Sadye E. Dunn, Secretary
U. S. Consumer Product Safety Commission
Office of the Secretary
4330 East West Highway, Building 4340
Bethesda, MD 20814

Eric Stone, Esq.
Director
Division of Administrative Litigation
U. S. Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

Alan H. Schoem, Esq.
Assistant Executive Director
Office of Compliance
U. S. Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

Emily J. Lawrence

Emily J. Lawrence

For: Respondents Central Sprinkler Corporation and Central Sprinkler Company

2000 One Logan Square
Philadelphia, PA 19103-6993
215-963-5000
Fax: 215-963-5299

Morgan, Lewis
& Bockius LLP
COUNSELORS AT LAW

125 years
1873 1998

CPSC/OFFICE OF
THE SECRETARY
1998 SEP 18 P 3:00

J. Gordon Cooney, Jr.
215-963-4806

September 15, 1998

VIA TELEFAX AND CERTIFIED U.S. MAIL

FOR *In Camera* REVIEW

Ms. Sadye E. Dunn
Secretary
United States Consumer Product Safety Commission
Office of the Secretary
4330 East West Highway, Building 4340
Bethesda, MD 20814

Re: In the Matter of Central Sprinkler (CPSC Dkt. 98-2)

Dear Ms. Dunn:

Enclosed for filing *in camera* in the above-referenced matter is an original and three copies of the Joint Status Report And Motion For Additional Extension Of Temporary Stay.

A copy has been served today by telefax on all parties listed on the Certificate of Service, and additionally by facsimile on Presiding Officer William B. Moran.

Thank you for your attention to this matter.

Respectfully,

J. Gordon Cooney, Jr.

Enc.

cc: Service List

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
	)	
CENTRAL SPRINKLER CORP.	)	
	)	CPSC DOCKET NO. 98-2
and	)	
	)	
CENTRAL SPRINKLER CO.,	)	
	)	
Respondents	)	

ORDER GRANTING ADDITIONAL TWO-WEEK EXTENSION OF TEMPORARY STAY OF PROCEEDINGS

Upon Joint Motion made by the parties to this Administrative Proceeding, it is hereby ORDERED that the cause be temporarily stayed for an additional two-week period in order to allow the parties to continue their efforts to negotiate a settlement of this action. This represents the fifth stay of this proceeding on the basis of efforts to negotiate a settlement. Extension can not be indefinitely granted. Further extensions will be disfavored. Absent settlement, this case must proceed. The parties shall file an *in camera* status report with the Court, via facsimile, by September 29, 1998.

William B. Moran
William B. Moran
Administrative Law Judge

Dated: September 16, 1998
Washington, D.C.

In the Matter of Central Sprinkler Corp. and Central Sprinkler Co., Respondents - CPSC Docket No. 98-2

CERTIFICATE OF SERVICE

I hereby certify that the foregoing **Order Granting Additional Two-Week Extension of Temporary Stay Proceedings** dated September 16, 1998, was sent in the manner indicated to the addressees listed below.

By telefacsimile and Regular Mail to: Respondents

J. Gordon Cooney, Jr., Esquire
Emily J. Lawrence, Esquire
MORGAN, LEWIS & BOCKIUS, LLP
2000 One Logan Square
Philadelphia, Pennsylvania 19103

Michael F. Healy, Esquire
MORGAN, LEWIS & BOCKIUS, LLP
1800 M Street, N.W.,
Washington, D.C. 20036

John C. Fenningham, Esquire
CORR, STEVENS & FENNINGHAM
Five Neshaminy Interplex, Suite 315
Trevose, Pennsylvania 19053

By hand delivery to: Complaint Counsel

Alan H. Schoem
Assistant Executive Director
Office of Compliance
U.S. CONSUMER PRODUCT SAFETY COMMISSION
4330 East West Highway
Bethesda, Maryland 20814

Eric Stone, Esquire
Director, Legal Division
Office of Compliance
U.S. CONSUMER PRODUCT SAFETY COMMISSION
4330 East West Highway
Bethesda, Maryland 20814

Certificate of Service, continued

In the Matter of Central Sprinkler Corp. and Central Sprinkler Co., Respondents - CPSC Docket No. 98-2

Deborah S. Orlove, Esquire
Complaint Counsel
Legal Division
Office of Compliance
U.S. CONSUMER PRODUCT SAFETY COMMISSION
4330 East West Highway
Bethesda, Maryland 20814

Eric H. Singer, Esquire
Complaint Counsel
Legal Division
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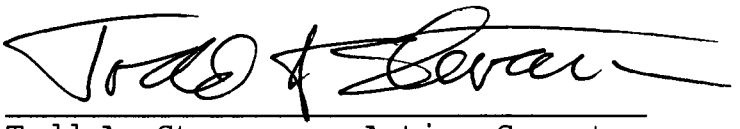
Bethesda, Maryland 20814

Howard N. Tarnoff, Esquire
Complaint Counsel
Legal Division
Office of Compliance
U.S. CONSUMER PRODUCT SAFETY COMMISSION
Bethesda, Maryland 20814



Todd A. Stevenson, Acting Secretary
Consumer Product Safety Commissiosn

Date: September 16, 1998

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF
THE ADMINISTRATIVE
LAW JUDGES

September 16, 1998

BY REGULAR MAIL AND FACSIMILE
Sadye E. Dunn, Secretary
U.S. Consumer Product Safety Commission
Office of the Secretary
4330 East West Highway, Building 4340
Bethesda, Maryland 20814

Re: In the Matter of Central Sprinkler Corp., and Central Sprinkler Co.
Docket No. CPSC 98-2

Dear Ms. Dunn:

Enclosed is my Order, which was also sent via facsimile to you this date. Please serve this Order to all parties.

Sincerely,

William B. Moran

William B. Moran
United States Administrative Law Judge

WBM:ebm
Enclosure

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
	)	
CENTRAL SPRINKLER CORP.	)	
	)	CPSC DOCKET NO. 98-2
and	)	
	)	
CENTRAL SPRINKLER CO.,	)	
	)	
Respondents	)	

ORDER GRANTING ADDITIONAL TWO-WEEK EXTENSION
OF TEMPORARY STAY OF PROCEEDINGS

Upon Joint Motion made by the parties to this Administrative Proceeding, it is hereby ORDERED that the cause be temporarily stayed for an additional two-week period in order to allow the parties to continue their efforts to negotiate a settlement of this action. This represents the fifth stay of this proceeding on the basis of efforts to negotiate a settlement. Extension can not be indefinitely granted. Further extensions will be disfavored. Absent settlement, this case must proceed. The parties shall file an *in camera* status report with the Court, via facsimile, by September 29, 1998.

William B. Moran
William B. Moran
Administrative Law Judge

Dated: September 16, 1998
Washington, D.C.

In the Matter of Central Sprinkler Corp. and Central Sprinkler Co., Respondents
CPSC Docket No. 98-2

CERTIFICATE OF SERVICE

I hereby certify that the foregoing Order, dated September 16, 1998, was sent in the following manner to the addressees below:

By Facsimile and Regular Mail to:

Deborah S. Orlove, Esquire
Eric H. Singer, Esquire
Howard N. Tarnoff, Esquire
Office of Compliance
U.S. Consumer Product Safety Commission
4330 East West Highway, Room 502
Bethesda, Maryland 20814

Alan H. Schoem
Assistant Executive Director
Office of Compliance
U.S. Consumer Product Safety Commission
4330 East West Highway
Bethesda, Maryland 20814

Eric Stone, Esquire
Director, Legal Division
U.S. Consumer Product Safety Commission
4330 East West Highway
Bethesda, Maryland 20814

J. Gordon Cooney, Jr., Esquire
Emily J. Lawrence, Esquire
Morgan, Lewis & Bockius, LLP
2000 One Logan Square
Philadelphia, Pennsylvania 19103

Michael F. Healy, Esquire
Morgan, Lewis & Bockius, LLP
1800 M Street, N.W.
Washington, D.C. 20036

John C. Fenningham, Esquire
Corr, Stevens & Fenningham
Five Neshaminy Interplex, Suite 315
Trevose, Pennsylvania 19053

_____
Sadye E. Dunn, Secretary

Dated: _____

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
	)	
CENTRAL SPRINKLER CORP.	)	
	)	CPSC DOCKET NO. 98-2
and	)	
	)	
CENTRAL SPRINKLER CO.,	)	
	)	
Respondents	)	

ORDER

The parties have filed a Joint Motion seeking a sixth extension of a stay in this matter. Based on the representations in the Motion, the stay is granted through October 2, 1998.

William B. Moran
William B. Moran
Administrative Law Judge

Dated: September 30, 1998
Washington, D.C.

In the Matter of Central Sprinkler Corp. and Central Sprinkler Co., Respondents - CPSC Docket No. 98-2

CERTIFICATE OF SERVICE

I hereby certify that the foregoing **Order Granting a Sixth Extension of Temporary Stay** dated September 30, 1998, was sent in the manner indicated to the addressees listed below.

By telefacsimile and Regular Mail to: Respondents

J. Gordon Cooney, Jr., Esquire
Emily J. Lawrence, Esquire
MORGAN, LEWIS & BOCKIUS, LLP
2000 One Logan Square
Philadelphia, Pennsylvania 19103

Michael F. Healy, Esquire
MORGAN, LEWIS & BOCKIUS, LLP
1800 M Street, N.W.,
Washington, D.C. 20036

John C. Fenningham, Esquire
CORR, STEVENS & FENNINGHAM
Five Neshaminy Interplex, Suite 315
Trevose, Pennsylvania 19053

By hand delivery to: Complaint Counsel

Alan H. Schoem
Assistant Executive Director
Office of Compliance
U.S. CONSUMER PRODUCT SAFETY COMMISSION
4330 East West Highway
Bethesda, Maryland 20814

Eric Stone, Esquire
Director, Legal Division
Office of Compliance
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4330 East West Highway
Bethesda, Maryland 20814

Certificate of Service, continued

In the Matter of Central Sprinkler Corp. and Central Sprinkler Co., Respondents - CPSC Docket No. 98-2

Deborah S. Orlove, Esquire
Complaint Counsel
Legal Division
Office of Compliance
U.S. CONSUMER PRODUCT SAFETY COMMISSION
4330 East West Highway
Bethesda, Maryland 20814

Eric H. Singer, Esquire
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4330 East West Highway
Bethesda, Maryland 20814

Howard N. Tarnoff, Esquire
Complaint Counsel
Legal Division
Office of Compliance
U.S. CONSUMER PRODUCT SAFETY COMMISSION
Bethesda, Maryland 20814

Todd A. Stevenson, Acting Secretary
Consumer Product Safety Commissiosn

Date: September 30, 1998

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF
THE ADMINISTRATIVE
LAW JUDGES

September 30, 1998

BY REGULAR MAIL AND FACSIMILE
Sadye E. Dunn, Secretary
U.S. Consumer Product Safety Commission
Office of the Secretary
4330 East West Highway, Building 4340
Bethesda, Maryland 20814

Re: In the Matter of Central Sprinkler Corp., and Central Sprinkler Co.
Docket No. CPSC 98-2

Dear Ms. Dunn:

Enclosed is my Order, which was also sent via facsimile to you this date. Please serve this Order to all parties.

Sincerely,

William B. Moran

William B. Moran
United States Administrative Law Judge

WBM:ebm
Enclosure

Printed on Recycled Paper

In the Matter of Central Sprinkler Corp. and Central Sprinkler Co., Respondents
CPSC Docket No. 98-2

CERTIFICATE OF SERVICE

I hereby certify that the foregoing Order, dated September 30, 1998, was sent in the following manner to the addressees below:

By Facsimile and Regular Mail to:

Deborah S. Orlove, Esquire
Eric H. Singer, Esquire
Howard N. Tarnoff, Esquire
Office of Compliance
U.S. Consumer Product Safety Commission
4330 East West Highway, Room 502
Bethesda, Maryland 20814

Alan H. Schoem
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1800 M Street, N.W.
Washington, D.C. 20036

John C. Fenningham, Esquire
Corr, Stevens & Fenningham
Five Neshaminy Interplex, Suite 315
Trevose, Pennsylvania 19053

_____
Sadye E. Dunn, Secretary

Dated:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF ADMINISTRATIVE LAW JUDGES

FROM: Elaine Malcolm
(202) 564-6256 (Direct Line)
(202) 565-0044 (Facsimile)

FOR: Judge MORAN

DATE: 9/30/98 PAGES: 4

TO: Sadye Dunn

FACSIMILE NO.: 301 504 0127 TELEPHONE NO.: _____

TO: _____

FACSIMILE NO.: _____ TELEPHONE NO.: _____

TO: _____

FACSIMILE NO.: _____ TELEPHONE NO.: _____

REMARKS: _____

MAILING ADDRESS:
401 M STREET, S.W., MAIL CODE: 1900L
WASHINGTON, D.C. 20460
DELIVERY ADDRESS:
1099 14TH STREET, N.W., SUITE 350
WASHINGTON, D.C. 20005

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
	)	
CENTRAL SPRINKLER CORP.	)	
	)	CPSC DOCKET NO. 98-2
and	)	
	)	
CENTRAL SPRINKLER CO.,	)	
	)	
Respondents	)	

ORDER TRANSMITTING CONSENT AGREEMENT AND PROPOSED ORDER TO THE UNITED STATES CONSUMER PRODUCT SAFETY COMMISSION

WHEREAS the parties to the above-captioned administrative action have submitted a Joint Motion to Transmit Consent Agreement and Proposed Order to the Consumer Product Safety Commission, and

WHEREAS the Presiding Officer before whom the administrative action is pending has reviewed the Consent Agreement and Proposed Order, and recommends that the Commission accept same:

IT IS HEREBY ORDERED THAT the proposed Consent Agreement and Proposed Order are transmitted *in camera* to the Consumer Product Safety Commission.

William B. Moran
William B. Moran
United States Administrative Law Judge

Dated: October 5, 1998
Washington, D.C.

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
	)	
CENTRAL SPRINKLER CORP.	)	
	)	CPSC DOCKET NO. 98-2
and	)	
	)	
CENTRAL SPRINKLER CO.,	)	
	)	
Respondents	)	

ORDER TRANSMITTING CONSENT AGREEMENT AND PROPOSED ORDER TO THE UNITED STATES CONSUMER PRODUCT SAFETY COMMISSION

WHEREAS the parties to the above-captioned administrative action have submitted a Joint Motion to Transmit Consent Agreement and Proposed Order to the Consumer Product Safety Commission, and

WHEREAS the Presiding Officer before whom the administrative action is pending has reviewed the Consent Agreement and Proposed Order, and recommends that the Commission accept same:

IT IS HEREBY ORDERED THAT the proposed Consent Agreement and Proposed Order are transmitted *in camera* to the Consumer Product Safety Commission.

William B. Moran
William B. Moran
United States Administrative Law Judge

Dated: October 5, 1998
Washington, D.C.

In the Matter of Central Sprinkler Corp. and Central Sprinkler Co., Respondents - CPSC Docket No. 98-2

CERTIFICATE OF SERVICE

I hereby certify that the foregoing **Order Transmitting Consent Agreement and Proposed Order to the United States Consumer Product Safety Commission** dated October 5, 1998, was sent in the manner indicated to the addressees listed below.

By telefacsimile and Regular Mail to: Respondents

J. Gordon Cooney, Jr., Esquire
Emily J. Lawrence, Esquire
MORGAN, LEWIS & BOCKIUS, LLP
2000 One Logan Square
Philadelphia, Pennsylvania 19103

Michael F. Healy, Esquire
MORGAN, LEWIS & BOCKIUS, LLP
1800 M Street, N.W.
Washington, D.C. 20036

John C. Fenningham, Esquire
CORR, STEVENS & FENNINGHAM
Five Neshaminy Interplex, Suite 315
Trevose, Pennsylvania 19053

By hand delivery to: Complaint Counsel

Alan H. Schoem
Assistant Executive Director
Office of Compliance
U.S. CONSUMER PRODUCT SAFETY COMMISSION
4330 East West Highway
Bethesda, Maryland 20814

Eric Stone, Esquire
Director, Legal Division
Office of Compliance
U.S. CONSUMER PRODUCT SAFETY COMMISSION
4330 East West Highway
Bethesda, Maryland 20814

Certificate of Service, continued

In the Matter of Central Sprinkler Corp. and Central Sprinkler Co., Respondents - CPSC Docket No. 98-2

Deborah S. Orlove, Esquire
Complaint Counsel
Legal Division
Office of Compliance
U.S. CONSUMER PRODUCT SAFETY COMMISSION
4330 East West Highway
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Howard N. Tarnoff, Esquire
Complaint Counsel
Legal Division
Office of Compliance
U.S. CONSUMER PRODUCT SAFETY COMMISSION
Bethesda, Maryland 20814

Sadye E. Dunn

Sadye E. Dunn, Secretary
Consumer Product Safety Commissiosn

Date: October 5, 1998

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of CENTRAL SPRINKLER CORP., and CENTRAL SPRINKLER CO., Respondents	CPSC DOCKET NO. 98-2

ORDER

UPON CONSIDERATION of the Administrative Complaint against Respondents Central Sprinkler Corp. and Central Sprinkler Co. (collectively, "Central") issued on or about March 3, 1998, and the Consent Agreement between the parties;

UPON CONSIDERATION of Central's concession that "Omega" fire sprinklers are "consumer products" under the CPSA, 15 U.S.C. § 2052;

UPON CONSIDERATION of Central's decision not to contest the allegations in the Complaint that "Omega" fire sprinklers contain a defect which creates a "substantial product hazard;" and

Pursuant to Sections 15(c) and (d) of the CPSA, 15 U.S.C. § 2064(c) and (d), IT IS HEREBY ORDERED THAT:

1. The Consent Agreement between Central Sprinkler Corp. and Central Sprinkler Co. (collectively, "Central") and the Commission staff is accepted and incorporated by reference herein, and Central shall comply with all of its obligations thereunder.

2. All allegations of the Administrative Complaint are resolved by this Consent Agreement and Order. Based on the Consent Agreement, including Central's admissions and agreement not to contest certain allegations of the Administrative Complaint for settlement purposes, the Commission finds that the Consent Agreement and this Order are necessary to protect the public from the hazard the Commission believes is presented by Omega sprinklers.

3. To remedy the alleged substantial product hazard created by Omega sprinklers, Central shall remove from service and replace all Omega sprinklers with replacement glass bulb sprinklers containing a Belleville Washer-Type Seal ("Replacement Sprinklers"), pursuant to, and in accordance with, the terms of Paragraphs 4 through 21 below and all of its obligations under the Consent Agreement incorporated by reference herein.

4. Central shall immediately cease and desist manufacturing, selling, distributing, marketing, exporting, importing, and/or attempting to distribute or sell any Omega sprinkler, whether by itself or through its subsidiaries, affiliates, Central-owned distribution centers, or any other persons or entities over whom Central has control, whether in the United States or any other foreign state, country, or territory.

5. Central shall provide notice to the public, its customers, and Omega owners, of the alleged hazard posed by Omega sprinklers, and the remedy to which Omega owners are entitled, which notice shall include the elements set forth in Appendix A of this Order. All notices, including all script(s) for operators of the toll-free numbers set forth in Appendix A, must be approved by the Commission staff prior to dissemination.

6. Central shall provide Replacement Sprinklers to all owners of Omega sprinklers, at no cost to the Omega owners, according to the provisions set forth in Appendix C of this

Order. A listing of the Replacement Sprinkler(s) for each Omega is set forth in Appendix B of this Order.

7. Central shall provide replacement escutcheons, extensions, and any and all other fittings, fixtures and/or appurtenances necessary for proper replacement of Omegas with the Replacement Sprinklers ("Replacement Parts") at no cost to the Omega owners.

8. Beginning in November, 1998, and for 48 months thereafter, Central shall make best efforts to manufacture and distribute to Omega owners at least 100,000 Replacement Sprinklers, and the accompanying Replacement Parts, per month for as long as the demand for Replacement Sprinklers equals or exceeds 100,000 per month.

9. If Central receives requests for Replacement Sprinklers and Replacement Parts at a rate that exceeds its monthly capacity to manufacture and ship the Replacement Sprinklers and Replacement Parts, Central shall devise a plan for sprinkler and parts distribution to ensure priority replacement of sprinklers in buildings where members of the public are particularly vulnerable. Central's plan for sprinkler distribution shall be submitted to the Commission staff for approval prior to implementation. In the event the staff disagrees with Central's plan for sprinkler distribution, Central shall implement the plan as amended or devised by the staff.

10. In addition to providing Replacement Sprinklers and Replacement Parts as stated in Paragraphs 6 through 9 herein, Central shall pay, into a Trust for the benefit of Omega owners, a monetary contribution toward the labor costs of replacing their Omega sprinklers in accordance with the procedures set forth in Appendix C of this Order. The monetary contribution is for the purpose of assisting Omega owners in paying the costs associated with

removing and replacing their existing Omegas, and thus encouraging Omega owners to participate in the remediation program provided herein, in order to remedy the hazard the Commission believes is presented by the Omegas, and protect the public health and safety.

11. In order to obtain Replacement Sprinklers and Replacement Parts, and the monetary contribution provided for in Paragraph 10 herein, Omega owners must follow the procedures required by Appendix C of this Order.

12. Recognizing that suitable Replacement Sprinklers are not currently available for all Omega sprinkler models, Central shall pay $5.00 per Omega sprinkler to any owner of Omega sprinklers who does not want or cannot use Central's Replacement Sprinklers, provided such owner gives Central reasonable proof of removal and replacement of Omegas. Central shall also pay to all such Omega owners a monetary contribution toward the costs of removing and replacing their Omega sprinklers in accordance with the procedures set forth in Appendix C of this Order. This payment is for the purpose of assisting Omega owners in paying the costs associated with removing and replacing their existing Omegas, and thus encouraging Omega owners to remove and replace their existing Omega sprinklers, in order to remedy the hazard the Commission believes is presented by the Omegas, and protect the public health and safety.

13. For those Omega owners who, after May 1, 1996, but prior to the effective date of this Order, 1) already replaced or contracted to replace their Omegas with non-Omega sprinklers and 2) who received in value from Central less than what they would have received under Paragraph 12 of this Order, Central shall pay such owners the difference between what they have already paid and the amount they would have paid under Paragraph 12 of this

Order. This payment shall be made for the purpose of encouraging owners of products that present or may present a substantial product hazard to take immediate action to remove and, where appropriate, replace that product. This payment assists in the fulfillment of the Commission's mandate to protect the public health and safety from the risks associated with products that present a substantial product hazard.

14. If Central fails to make timely contributions to the Trust as required by Appendix C hereto, Central shall be liable for additional contributions to the Trust, separate from any penalty it may incur pursuant to Paragraph 17 of the Consent Agreement. Such additional contribution(s) shall include the following:

a. Interest at the percentage rate established by the Department of the Treasury pursuant to 31 U.S.C. § 3717, for any period after the due date;

b. A handling charge of $10,000 at the end of each 30 day late period; and

c. A 7% (seven percent) per annum penalty charge if the deposit is not made within 30 days of the due date.

These additional contributions are intended to encourage Respondents to fulfill their obligations to remedy the hazard the Commission believes is presented by Omega sprinklers, and protect the public health and safety.

15. Central shall devise procedures to ensure the destruction of the Omega sprinklers. Central shall destroy all finished goods inventory and returned Omegas, from whatever source, and will not use any component parts of any returned or finished goods Omega for the manufacture or sale of any other product. Central must provide to the staff a monthly accounting of all returned and destroyed sprinklers for the first three months after the

effective date of this Order, and a quarterly accounting of all returned and destroyed sprinklers thereafter, for four years. Such reports shall be provided in a format approved by the Commission staff.

16. Central shall not, without first both notifying and consulting with the staff, manufacture for sale, offer for sale, distribute in commerce, export, or import into the United States any automatic sprinkler containing all of the following elements: (a) a body or body portion housing a dynamic valve plug (whether or not utilizing an elastomeric seal) that controls the release of water or other extinguishing agent; (b) a retaining groove within the body of the sprinkler housing locking ball bearings; (c) a plunger; and (d) a cylindrical chimney (whether or not utilizing external heat collecting fins) housing a fusible element, bearing disk, and part or all of the plunger. Central shall notify the Commission staff at least 90 calendar days before it begins manufacturing, offering, distributing, exporting, or importing any such sprinkler(s). Central shall provide the staff prompt access to all design, testing, and listing documents pertaining to any and all such sprinklers.

17. Beginning December 1, 1998, and by 5:00 p.m. on the first business day of every month thereafter, Central must provide to the staff a monthly status report, in a form acceptable to the staff, of the progress of the remediation program for the Omegas.

18. Central must immediately notify the staff of the Consumer Product Safety Commission in writing if:

a. Factory Mutual Research Corporation (FMRC) or Underwriters Laboratories Inc. (UL) does not approve or list, withdraws or discontinues its approval or

listing, no longer approves or lists, or modifies its approval or listing of any of the Replacement Sprinklers at any time, for any reason whatsoever;

b. the Replacement Sprinklers fail any test conducted by FMRC or UL and indicated in Appendix E of this Order; or

c. Central obtains information with respect to Replacement Sprinklers that is reportable under Section 15(b) of the CPSA.

19. Central shall provide to the staff a copy of all filings it makes with the Securities and Exchange Commission (SEC) within five business days of making such filings. Central shall also notify the staff in writing of any changes in corporate officers and directors within five business days of such changes.

20. Central shall allow the Commission and/or staff to inspect any and all records that are not subject to the attorney-client privilege or attorney work-product doctrine, regarding the Replacement Sprinklers and Parts, remediation program, any class action lawsuits regarding Omega sprinklers, and any claims or lawsuits against its insurers or other third parties relating to Omega sprinklers, and to inspect all manufacturing, design and/or receiving facilities regarding Replacement Sprinklers at any time during normal business hours, upon reasonable notice.

21. This Order, and all of the obligations it imposes on Central, shall terminate in its entirety upon the final distribution of all funds required to be placed in the Trust pursuant to

Appendix C of this Order, unless Central has not completely fulfilled its obligations under the Consent Agreement and Order.

BY ORDER OF THE CONSUMER PRODUCT SAFETY COMMISSION

Sadye E. Dunn

Sadye Dunn, Secretary

Dated: October 13, 1998

In the Matter of Central Sprinkler Corp. and Central Sprinkler Co., Respondents - CPSC Docket No. 98-2

CERTIFICATE OF SERVICE

I hereby certify that the foregoing **Order** dated October 13, 1998, was sent in the manner indicated to the addressees listed below.

By telefacsimile and Regular Mail to: Respondents

J. Gordon Cooney, Jr., Esquire
Emily J. Lawrence, Esquire
MORGAN, LEWIS & BOCKIUS, LLP
2000 One Logan Square
Philadelphia, Pennsylvania 19103

Michael F. Healy, Esquire
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Five Neshaminy Interplex, Suite 315
Trevose, Pennsylvania 19053

By hand delivery to: Complaint Counsel

Alan H. Schoem
Assistant Executive Director
Office of Compliance
U.S. CONSUMER PRODUCT SAFETY COMMISSION
4330 East West Highway
Bethesda, Maryland 20814

Eric Stone, Esquire
Director, Legal Division
Office of Compliance
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Certificate of Service, continued

In the Matter of Central Sprinkler Corp. and Central Sprinkler Co., Respondents - CPSC Docket No. 98-2

Deborah S. Orlove, Esquire
Complaint Counsel
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U.S. CONSUMER PRODUCT SAFETY COMMISSION
Bethesda, Maryland 20814

Sadye E. Dunn

Sadye E. Dunn, Secretary
Consumer Product Safety Commissiosn

Date: October 13, 1998

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFFICE OF
THE SECRETARY

1998 OCT -2 P 5:10

In the Matter of	
CENTRAL SPRINKLER CORP.,	
and	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	
Respondents	

CONSENT AGREEMENT

This Consent Agreement is made by and between the staff of the Consumer Product Safety Commission and Respondents, Central Sprinkler Corp. and Central Sprinkler Co., to settle the above-captioned administrative action. The parties agree as follows:

Parties

1. The "staff" is the staff of the United States Consumer Product Safety Commission ("CPSC" or "the Commission"), an independent regulatory agency of the United States, established by Congress pursuant to Section 4 of the Consumer Product Safety Act ("CPSA"), 15 U.S.C. § 2053.

2. Respondents Central Sprinkler Corporation and Central Sprinkler Company (hereinafter collectively "Central") are corporations organized and existing under the laws of

Accepted and Approved:

CPSC Office of Compliance

consent8.cle 10/01/98 5:00 p.m.

Accepted and Approved:

Respondents Central Sprinkler Co.
and Central Sprinkler Corp.

the Commonwealth of Pennsylvania, with their principal place of business at 451 North Cannon Ave., Lansdale, PA 19446.

Subject Matter

3. From 1982 to July, 1998, Central manufactured and sold and/or distributed between 9 and 10 million "Omega" brand automatic fire sprinklers. On March 3, 1998, the staff of the Consumer Product Safety Commission filed an Administrative Complaint ("Complaint") against Central, seeking recall and replacement of Central's Omega fire sprinklers pursuant to 15 U.S.C. § 2064. The Complaint alleges that Central's Omega sprinklers are defective and will not function in certain fire situations, creating a substantial risk of bodily injury and/or death.

4. To date, the staff has received reports that from 1990 to the present, Omega sprinklers did not function in 20 fires.

5. Central has filed an answer to the Complaint in which it avers, *inter alia*, that its Omega sprinklers are not defective within the meaning of 15 U.S.C. § 2064.

6. The staff also contends that Central obtained information which reasonably supported the conclusion that Omega sprinklers contained a defect or defects that could create a substantial risk of injury to the public but failed to report such information in a timely manner pursuant to 15 U.S.C. § 2064(b). Central denies any wrongdoing under 15 U.S.C. § 2064(b).

Agreement of the Parties

Accepted and Approved:

CPSC Office of Compliance

consent8.cle 10/01/98 5:00 p.m.

Accepted and Approved:

Respondents Central Sprinkler Co. and Central Sprinkler Corp.

7. It is the express purpose of the parties in entering into this Agreement to protect the public safety by carrying out the recall and replacement of Omega sprinklers.

8. The parties intend for this Consent Agreement and the attached Order (hereinafter "Order" or "the Order"), which is hereby incorporated by reference, to resolve all allegations and requests for relief set forth in the Administrative Complaint in this proceeding and to bar the initiation or referral by the CPSC of any administrative, civil, or criminal claims within the CPSC's jurisdiction arising from the conduct of Central, its officers, directors and/or employees regarding Omega sprinklers. This resolution shall not apply to any actions arising from non-compliance with or disputes pertaining to this Agreement or the Order.

9. For purposes of this settlement only, Central admits that "Omega" fire sprinklers are "consumer products" under Section 3 of the CPSA, 15 U.S.C. § 2052, subject to the jurisdiction of the Consumer Product Safety Commission.

10. For purposes of this settlement only, Central agrees not to contest the allegations in the Complaint that "Omega" fire sprinklers contain a "defect which creates a substantial product hazard," as those terms are defined in Section 15(a) of the CPSA, 15 U.S.C. § 2064(a). Central has agreed not to contest these allegations in order to avoid the expense, inconvenience and risks associated with further litigation, and the parties recognize that this resolution and this Consent Agreement may not be used or introduced as evidence of defect or hazard against Central in other litigation not involving the Commission or its staff. Entry of the Order will neither impair nor assist the bringing of any other action.

Accepted and Approved:

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Respondents Central Sprinkler Co. and Central Sprinkler Corp.

11. As part of the amounts referenced in 1.a and 1.b of Appendix C of the Order, Central shall deposit, without any adjudication or admission of fact or law, $1.3 million into the Trust established in Appendix C of the Order, in settlement of the staff's contention that Central failed to report to the Commission problems with the Omega pursuant to 15 U.S.C. § 2064(b). Central has agreed to do so solely to avoid the inconvenience and burden of litigation of this issue.

12. Upon acceptance by the Consumer Product Safety Commission of this Consent Agreement, and entry of the Order, Central knowingly, voluntarily and completely waives and relinquishes any past, present and/or future right or rights in this matter: (1) to an administrative or judicial hearing and to all further procedural steps, including findings of fact, conclusions of law and/or further determination of whether Omega sprinklers contain a defect which creates a substantial product hazard within the meaning of Section 15 of the CPSA; (2) to seek judicial review or otherwise contest the validity of this Consent Agreement and/or Order as issued and entered; and (3) to seek judicial review of this or any past orders, findings and/or determinations of the Commission or the Presiding Officer in this matter, except as set forth in the provisions regarding review in Paragraph 28 of this Agreement.

13. Central agrees to fulfill all requirements of the Order.

14. Central agrees to immediately cease and desist manufacturing, selling, distributing, marketing, exporting, importing, and/or attempting to distribute or sell any

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Omega sprinkler, whether by itself or through its subsidiaries, affiliates, Central-owned distribution centers, or any other persons or entities over whom Central has control, whether in the United States or any other foreign state, country, or territory.

15. Central shall request that Underwriters Laboratories, Inc. withdraw its listing of approval for all Omega sprinklers.

16. Central shall provide the staff with thirty days written notice of any transfer of property rights it holds in the following U.S. Patents: 4,465,141; 4,491,182; 4,508,175; 4,553,602; 5,094,298; 4,619,327; 3,734,191, 3,802,510; 3,877,527, 3,911,940; 3,991,829, and 4,359,098.

17. A violation of this Consent Agreement or the Order is a prohibited act within the meaning of Section 19 of the CPSA, 15 U.S.C. § 2068.

18. The Commission or Central may disclose terms of this Consent Agreement and Order to the public.

19. This Consent Agreement shall take effect upon its final acceptance by the Consumer Product Safety Commission.

20. This Consent Agreement and Order shall be binding upon the parties hereto and their successors, assigns, and receivers. If, prior to the termination of this Consent Agreement and Order, Central merges with any other corporation or sells, assigns, or otherwise transfers substantially all of its assets, Central shall provide reasonable prior notice to the surviving corporation or, in the case of an asset sale, assignment, or transfer, the

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purchaser, transferee, or assignee of substantially all of Central's assets, of this Consent Agreement and Order, and of its binding effect upon said surviving corporation, purchaser, assignee, or transferee. The existence of this Consent Agreement and Order and their binding effect shall be noted in any agreement between Central and such surviving corporation, purchaser, transferee, or assignee. It shall be a condition of any such merger, sale, assignment, or transfer that the surviving corporation or, in the case of an asset sale, the purchaser, assignee, or transferee, execute a document agreeing to be bound by the provisions of this Consent Agreement and Order, and to submit to the jurisdiction of the Commission for purposes of enforcement of this Consent Agreement and Order. In the event of any merger or sale, transfer, or assignment of substantially all of Central's assets, notice shall be provided to the staff no later than 15 days prior to any such merger or asset sale, transfer, or assignment.

21. This Consent Agreement and Order have been negotiated by the parties. Central is not relying on the advice of the staff, nor anyone associated with the staff, as to legal, tax, or other consequences of any kind arising out of this Consent Agreement and Order, and Central specifically assumes the risk of all such legal, tax and other consequences.

22. For all purposes, this Consent Agreement and Order shall constitute an enforceable judgment obtained in an action or proceeding by a governmental unit to enforce its police or regulatory power. Central acknowledges and agrees that this Agreement and Order are pursuant to the Commission's police or regulatory power to remedy the risk

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created by and protect the public from a substantial product hazard which the Commission believes is presented by Omega sprinklers, and that the Agreement and Order are not subject to an automatic stay if Central becomes the subject of a bankruptcy proceeding.

23. If all of the Replacement Sprinklers are not listed or approved by Underwriters' Laboratories Inc. ("UL") and all of the exclusively non-residential Replacement Sprinklers are not listed or approved by Factory Mutual Research Corporation ("FMRC") by November 1, 1998, or if the listing or approval of any of the Replacement Sprinklers by UL or FMRC is withdrawn, discontinued or modified at any time, for any reason whatsoever, the Commission, at its sole discretion and upon reasonable notice to Central, may void, suspend, or rescind all or any part of this Consent Agreement and Order.

24. The Commission, at its sole discretion and upon reasonable notice to Central, may void, suspend, or rescind all or any part of this Consent Agreement and Order if Central has made material misrepresentations regarding its current financial condition, manufacturing and shipping costs for Replacement Sprinklers and Replacement Parts, the number of Omega sprinklers remaining to be remediated (approximately 8.4 million), and/or the projected costs of administering the recall and replacement program in this Agreement and Order, and the staff has relied on those misrepresentations in entering into this Agreement. Appendix D of the Order lists those documents containing representations deemed material by the parties.

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25. Beginning 3 months after the effective date of the Commission's Order, and for every 3 months thereafter until the expiration or final determination of the Claims as defined in Paragraph 1.c of Appendix C of the Order, Central shall provide to the staff a full report on the progress and status of the Claims as defined in Paragraph 1.c of Appendix C of the Order, and the progress and status of the remediation program set forth in this Agreement and Order, including but not limited to the payments made to the Trust as defined in Appendix C of the Order, and the expenses paid and/or incurred for notice and administration of the remediation program set forth in this Agreement and Order. Central shall provide, with these reports, the daily timesheets, with descriptions of all work performed, of each Central employee involved in administration of the remediation program, for the time period since the last report date. At any time, upon reasonable written notice, the Commission may require Central to submit to an independent or Commission review and/or audit of the remediation program set forth in this Consent Agreement and Order, and/or any Claims as defined in Paragraph 1.c of Appendix C. Central shall provide the staff with a copy of every audit report of its financial condition within 5 business days of the date the report is prepared.

26. If, after the effective date hereof, any provision of this Consent Agreement and Order is held to be illegal, invalid, or unenforceable under present or future laws effective during the terms of this Consent Agreement and Order, such provision shall be fully severable. The rest of the Agreement and Order shall remain in full effect, unless the

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Commission determines that severing the provision materially impacts the remediation program set forth in this Agreement and Order.

27. Central acknowledges that this Consent Agreement and Order have been negotiated between unrelated, sophisticated and knowledgeable parties acting in their own self-interest and represented by counsel, and the provisions of this Consent Agreement and Order shall not be interpreted or construed against any person or entity because that person or entity or any of its attorneys or representatives drafted or participated in drafting this Consent Agreement.

28. The provisions of this Consent Agreement and Order shall be interpreted in a reasonable manner to effect its purpose to remedy the alleged hazard that Omegas pose. In the event of a dispute between the parties arising under this Consent Agreement and Order, the parties agree to submit the issue for determination by the Commission. Except as stated to the contrary in Paragraphs 7 through 10 of Appendix C of the Order, Central shall have the right to seek judicial review of the Commission decision, such review to be based upon the record of any such Commission proceeding and according to law.

29. The existence of a dispute shall not excuse, toll, or suspend any obligation or deadline imposed upon Central under this Consent Agreement and Order.

30. This Consent Agreement and Order shall not be waived, changed, amended, modified, or otherwise altered, except in writing executed by the party or parties against

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whom such amendment, modification, alteration, or waiver is sought to be enforced, and approved by the Commission.

Dated: October 1, 1998

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CEO, Central Sprinkler Corp. and Central Sprinkler Co.

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Appendix A

Central Sprinkler Omega Notification Plan

Central's Efforts to Generate Editorial Coverage of Program - ongoing efforts by Buchanan and Associates

Local Print Advertising (Newspapers)

- Proposed notice is set out in Exhibit 1
- Eighty-seven 3-column x 7.5" ads will appear in 79 newspapers in each of the 68 targeted counties (Exhibit 2). The newspaper coverage will include the Arizona Republic, Los Angeles Times, (2 x), San Francisco Chronicle, Denver Post, Washington Post, Atlanta Journal, Chicago Tribune (2x), New York Times, Philadelphia Inquirer (2x), and Dallas Morning News, as well as other papers noted in Exhibit 3. The notices will appear in the front section of the national news by November 1, 1998.
- Repeat notice - Central to place at least one ad in one local/regionalized paper in each of the 68 targeted counties on or around May 1, 1999. Such notice to only include information about the recall. This notice must be approved by CPSC staff.

Trade Publication Advertising

Paid Ads Using Exhibit 1 to be purchased for the following publications for the next available issue within 8 business days of CPSC press announcement

- *Buildings Magazine*
- *Building Operating Management*

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- *Commercial Property News*
- *National Real Estate Investor*
- *Journal of Property Management*
- *Facilities Design and Management*
- *Fire Protection Contractor (FPC)*
- *Sprinkler Age*
- *NFPA Journal*

National Print Advertising

(Using Exhibit 1 and purchased for publication within 8 business days of CPSC press announcement)

- 2/5th page ad in *Parade Magazine*
- Digest size ad in *USA Weekend*
- Full-page ad in *Reader's Digest*
- Full page ad in seven local editions of *TV Guide*

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Direct Notice Communications

- First class letter with appropriate outer signal words as attached hereto including the following documents in the following order: letter to consumers (Exhibit 4), Proof of Claim, Waiver and Release of Claims, Request for Exclusion, Verification Forms, product identification information, and long form class action notice. This notice will be mailed to the identified consumers set forth below within 8 business days of CPSC announcement (where applicable).
    - All individuals who filed claims against Central Sprinkler for Omega Series Sprinklers.
    - All individuals who called the toll free Central Sprinkler Omega information line regarding Omega Series Sprinklers.
    - All individuals who call the 1-800 automated telephone number or write requesting the Class Notice or Recall as a result of seeing the published notice.
- Within 30 days of CPSC press announcement, subject to availability of mailing lists, mailing of first class letter, with appropriate outer signal words substantially in the form set out in the attached letter to AHJs (Exhibit 4) including Proof of Claim, Waiver and Release of Claims Form, Request for Exclusion, Verification Forms, product identification information, and long term class notice to:
    - Authorities having jurisdiction in counties with sprinkler laws, regulations or ordinances.
- Within 30 days of CPSC press announcement, subject to availability of mailing lists, mailing of first class letter, with appropriate outer signal words, in the form substantially set out in consumer letter and Proof of Claim, Waiver and Release of Claims, Verification Forms and product identification information to:
    - Organizations identified through purchased mailing lists for:

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Hospitals
Nursing and Convalescent Homes
Hotels & Motels
School Districts
Colleges & Universities
Approximately 14,334 U.S. members of the Building Owners and Managers Association (BOMA).

- Within 30 days of CPSC press announcement, subject to availability of mailing lists, mailing of first class letter, with appropriate outer signal words, substantially in the form set out in the attached letter to AHJs, with product identification information to:

  Insurance-Homeowners
  Insurance-Property & Casualty
  Authorities Having Jurisdiction known to Central Sprinkler in counties without sprinkler laws, regulations or ordinances
  Distributors, Contractors, and End-users known to Central Sprinkler
  Member of American Fire Sprinkler Association, National Fire Sprinkler Association, and Home Inspectors Associations

- Within 30 days of CPSC press announcement, subject to availability of mailing lists, mailing of first class letter, with appropriate outer signal words, substantially in the form set out in the attached letter to AHJs, including Proof of Claim, Waiver and Release of Claims and Verification Forms, long form class notice and product identification information to the executive directors of:

  National Association of Homebuilders
  Home Fire Sprinkler Coalition
  Fire Marshals Association of North America
  Fire Sprinkler Education Foundation, Inc.
  International Association of Fire Chiefs
  National Fire Protection Association
  Operation Life Safety

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Consumer Federation of America
Consumer Information Center
Consumer Union of United States
National Consumer League

- Written letter by first class mail to members of the American Waterworks Association in 68 targeted counties to provide notice of the corrective action either as part of water bills or consumer newsletters. CPSC to approve language for letter.

Computer Posting

- A **public service announcement** will be posted on appropriate legal, consumer, fire safety and related bulletin boards on Usenet News groups (Exhibit 5) and major online services (i.e., America Online, etc.) directed to professionals and consumers. In addition to any other contact information, the online PSA will include a link to the Central Omega program website.

- The notices of Recall and Settlement, Proof of Claim, Verification and Waiver and Release of Claims forms will be posted on the Omega website to provide access to the notice and other pertinent information. The website will be listed with major search engines.

- In addition, **hyperlinks** may be established with other websites, including CPSC's, related to fire safety, legal and construction-related issues to allow access to the class action and recall notice.

Telephone Support

1-800 REQUEST-LINE

All print advertising will direct the reader to call a 1-800 telephone number, to write to an address or to go to the website in order to receive the Notice of recall and settlement and related forms.

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A 1-800 896-5685 interactive telephone number will be utilized. A pre-recorded message will welcome callers to the line. Callers will be directed through a series of steps that will allow the system to capture their names, mailing addresses and phone numbers.

Names and addresses will be downloaded and transcribed within 48 hours. Consumers will be mailed class action notice/recall package within 8 business days of consumer call until November 15, 1998 and thereafter within 5 business days.

1-800 OMEGA INFORMATION LINE

The Notice of recall and settlement will include Central Sprinkler's toll-free Omega information line. If potential Class Members have questions after reviewing the Notice of recall and settlement, they will be able to speak with a Central customer service representative. All customer service representatives will be trained by Central Sprinkler. A question and answer document incorporating a list of commonly asked questions is being drafted in advance so that customer service representatives will be prepared with scripted answers. The script will be updated periodically to include new information and answers to added questions. Central intends to dedicate 20 customer service representatives staggered throughout the operational period for the first 6 weeks from the date of the Notice of recall and settlement. The Omega information line will operate from 7:00 a.m. until 9:00 p.m. Monday through Friday for the first six weeks. Staffing for the Omega information line thereafter will be assessed after week 6.

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EXHIBIT 1

Legal Notice Legal Notice

IMPORTANT SAFETY RECALL
AND CLASS ACTION SETTLEMENT
FOR HOME OWNERS/BUILDING OWNERS WITH OMEGA BRAND FIRE SPRINKLERS MANUFACTURED BY CENTRAL SPRINKLER CO.

Central Sprinkler Company ("Central") and the United States Consumer Product Safety Commission are announcing a settlement involving the recall and replacement of approximately 6.4 million Omega brand fire sprinklers manufactured since 1982 by Central. Plaintiffs in two suits representing a nationwide class have preliminarily settled their suits and are also announcing the availability of a remedy. Omega fire sprinklers are installed in homes, offices, hospitals, schools and other buildings around the country.

OMEGA FIRE SPRINKLERS COULD LIKELY FAIL IN A FIRE, WHICH COULD RESULT IN SEVERE INJURY OR DEATH.

IDENTIFYING SPRINKLERS

Numerous models of the Omega fire sprinklers are involved. On most models, consumers will be able to see one to three flat round metal disks stacked one above the other with a small space between each disk. However, because it may be difficult to determine whether Omegas are installed, consumers are encouraged to call the toll free number below for product identification or contact their architect, builder, sprinkler contractor, plumber, homeowners' association or property manager to determine if Omegas are installed in their residence or facility.

Building owners and consumers are urged to take immediate action and call the Omega information line to learn more about the recall, how to identify Omega sprinklers, obtain a Proof of Claim form, and obtain further information about the settlement, including how to participate in the settlement and how the settlement may affect their legal rights.

SPRINKLER REPLACEMENTS

For consumers to get replacement sprinklers and any reimbursement towards installation costs, they must submit the Proof of Claim and Release Forms to Central postmarked by August 1, 1999. Consumers submitting Proof of Claim and Release Forms postmarked after August 1, 1999 but before November 1, 2001 still qualify to receive replacement sprinklers (though not reimbursement).

Until free replacement sprinklers are provided, consumers need to protect themselves against fire, have working smoke detectors and have adequate escape plans.

CLASS ACTION

If you are an owner or operator of a building that is or was equipped with Omega fire sprinklers, your legal rights may be affected by the proposed class action settlement which, if approved by the court, will result in the release of certain claims.

Complete information about your rights as a class member, the settlement approval process, how to exclude yourself from the settlement class, how to object or comment on the settlement, and how to make a claim for replacement sprinklers and costs, including important dates and deadlines, is available in the Full Notice of Settlement.

FOR FURTHER INFORMATION AND A COPY OF THE RECALL AND FULL NOTICE OF CLASS ACTION SETTLEMENT,

CALL: **1-800-896-5685**

OR WRITE: **PO BOX 1555; FAIRMONT, MN 55021-1555**

OR VISIT: **http://www.xxxxxx.com/xxxx**

PLEASE DO NOT CONTACT THE COURT. DATED: March XX, 1999 COMMISSIONER BRUCE E. MITCHELL

The lawsuit and settlement are under consideration in Hart v. Central Sprinkler Corp. No. BCL 71727 (Cal. Super Ct.). It is pending before Commissioner Bruce E. Mitchell in the Los Angeles County Superior Court.

EXHIBIT 2

FROM MORGAN LEWIS & BOCKIUS (FRI) 10. 2'98 12:24/ST. 12:17/NO. 4860635523 P 1

CENTRAL SPRINKER NOTICE PLAN
NEWSPAPERS ADVERTISING IN 68 TARGETED COUNTIES

STATE	CITY	NEWSPAPER	CIRCULATION	INSERTIONS
AZ	Phoenix	Arizona Republic, Gazette	581,337	1
CA	Los Angeles	Times	1,400,397	2
CA	San Francisco	Chronicle, Examiner	639,719	1
CA	San Diego	Union-Tribune	452,980	1
CA	Orange County	Register	416,071	1
CA	Sacramento	Bee	350,345	1
CA	San Jose	Mercury News	347,275	1
CA	Los Angeles / Torrance	Daily Breeze	218,427	1
CA	Los Angeles	Daily News	218,427	1
CA	Oakland	Alameda-Oakland Metro Group	194,240	1
CA	Fremont-Newark	Argus	-	1
CA	Haywood	Review	-	1
CA	Pleasanton	Tri-Valley Herald	-	1
CA	San Mateo	County Times	-	1
CA	Fresno	Bee	188,793	1
CA	Riverside	Press-Enterprise	173,533	1
CA	Los Angeles	Press-Telegram	128,106	1
CA	Walnut Creek	Contra Costa Times Combo	106,140	1
CA	Antioch	Ledger/Dispatch	-	1
CA	Pleasanton	Valley Times	-	1
CA	Richmond	West County Times	-	1
CA	Ventura County	Star	103,069	1
CA	Santa Rosa	Press Democrat	102,745	1
CA	San Bernardino County	Sun	94,288	1
CA	Ontario-Inland Valley	Bulletin	83,388	1
CA	Stockton	Record	62,144	1
CA	Santa Barbara	News-Press	51,421	1
CA	Palm Springs	The Desert Sun	50,725	1
CA	Marin County	Independent Journal	42,772	1
CA	Redding	Record Searchlight	39,667	1

FROM MORGAN LEWIS & BOCKIUS (FRI) 10. 2'98 12.26/ST. 12:17/NO. 4860636523 P 12

STATE	CITY	NEWSPAPER	CIRCULATION	INSERTIONS
CA	Monterey	County Herald	39,238	2
CA	San Luis Obispo	Telegram - Tribune	33,722	1
CA	Santa Cruz	County Sentinel	29,829	1
CA	Salinas	Californian	21,096	2
CA	Vallejo	Times-Herald	20,477	1
CA	Napa	Napa Valley Register	19,639	1
CO	Denver	Post	456,237	1
CO	Denver	Rocky Mountain News	422,601	1
CO	Fort Collins	Coloradoan	35,165	1
DC	Washington	Post	1,129,519	1
DE	Wilmington	News Journal	150,287	1
FL	Orlando	Sentinel	388,722	1
FL	Tampa	Tribune	350,539	1
FL	West Palm Beach	Post	224,211	1
FL	Fort Myers	News-Press	103,387	1
FL	Naples	News	62,163	1
FL	Bradenton	Herald	49,545	1
GA	Atlanta	Journal-Constitution	701,982	1
GA	Savannah	News & Press	77,070	1
GA	Lawrenceville	Gwinnett Daily Post	12,799	1
HI	Honolulu	Advertiser & Star-Bulletin	193,318	1
IL	Chicago	Tribune	1,074,814	2
IL	Chicago	Sun-Times	486,116	2
IL	Chicago	Daily Herald	153,081	2
IL	Chicago	Southtown	85,167	2
MD	Baltimore	Sun	471,637	1
MD	Annapolis	Capital	83,507	1
NJ	Newton	New Jersey Herald	35,714	1
NY	New York City	Times	1,644,128	1
NY	White Plains	Gannett Suburban Newspapers	185,843	1
NY	Poughkeepsie	Journal	58,126	1
OH	Cleveland	Plain Dealer	513,045	1
OH	Columbus	Dispatch	383,829	1
OH	Delaware	Gazette	8,038	1

(FRI) 10. 2'98 12:27/ST. 12:17/NO. 4860636523 P 13
FROM MORGAN LEWIS & BOCKIUS

STATE	CITY	NEWSPAPER	CIRCULATION	INSERTIONS
PA	Philadelphia	Inquirer	901,891	2
PA	Pittsburgh	Post Gazette	424,431	1
PA	Philadelphia	Greater Philadelphia Newspapers	173,421	1
PA	York	Dispatch Record News	92,682	1
PA	Wilkes-Barre	Times Leader	67,763	1
PA	Chester	Delaware County Times	50,127	1
PA	West Chester	Local News	32,920	1
PA	Wilkes-Barre	Citizens' Voice	29,476	1
TX	Dallas	Morning News	800,306	1
UT	Salt Lake City	Tribune & Deseret News	230,259	1
VA	Virginia Beach	Virginian-Pilot	235,480	1
WA	Seattle	Times/Post-Intelligencer	502,134	1
WA	Bellevue	Eastside Journal	48,264	1
WA	Port Angeles	Peninsula News	27,464	1
WI	Madison	Capital Times	161,562	1
TOTALS		79 Newspapers	19,488,570	87

EXHIBIT 3

Central Sprinkler
Reach and Frequency by County

State	County	Reach	Freq.
WA	Clallam	99.9%	2.7
CA	Shasta	99.7%	2.4
GA	Gwinnett	99.7%	2.3
CA	Marin	99.3%	3.0
CO	Adams	99.3%	3.0
FL	Seminole	99.2%	2.3
WI	Dane	99.2%	2.1
CA	Sonoma	99.1%	2.5
FL	Hillsbourgh	99.1%	2.1
CA	Fresno	99.1%	2.1
PA	Montgomery	98.9%	3.0
CA	Yolo	98.9%	1.9
TX	Dallas	98.8%	2.1
CA	Orange	98.7%	2.9
MD	Baltimore	98.4%	2.1
CO	Larimer	98.3%	2.6
WA	King	98.3%	2.2
PA	York	98.3%	2.1
CA	Sacramento	98.3%	2.1
FL	Orange	98.2%	2.0
HI	Honolulu	98.0%	2.0
CA	Ventura	97.9%	2.6
AZ	Maricopa	97.4%	2.0
CA	Riverside	97.3%	2.6
MD	Howard	97.3%	2.2
MD	Montgomery	97.2%	1.9
CA	Napa	97.1%	2.6
VA	Fairfax	97.1%	1.9
UT	Salt Lake	96.9%	2.0
MD	Prince George's	96.9%	2.0
GA	Cobb	96.8%	2.1
IL	Du Page	96.7%	3.1
OH	Delaware	96.7%	1.7
PA	Bucks	96.5%	2.8
FL	Manatee	96.2%	2.3
GA	Chatham	96.2%	1.9
CA	Contra Costra	96.1%	2.4
VA	Virginia Beach	95.9%	1.9
CA	Santa Clara	95.8%	1.9
PA	Delaware	95.8%	2.7
CO	Boulder	95.2%	2.4
PA	Chester	95.1%	2.8
FL	Lee	94.8%	1.7
CA	San Luis Obispo	94.7%	2.2
MD	Anne Arundel	94.6%	2.4

Central Sprinkler
Reach and Frequency by County

State	County	Reach	Freq.
DE	New Castle	94.5%	1.9
CA	San Diego	94.4%	2.0
CA	San Mateo	94.1%	2.0
FL	Palm Beach	94.1%	1.9
CA	San Francisco	93.9%	1.8
IL	Lake	93.4%	2.9
FL	Collier	93.3%	1.7
NY	Dutchess	93.3%	1.6
NJ	Sussex	93.0%	2.4
CA	Santa Barbara	93.0%	2.3
CA	San Joaquin*	92.9%	2.2
CA	Santa Cruz*	92.4%	2.4
PA	Allegheny	92.1%	1.8
CA	Alameda*	91.9%	2.4
CA	San Bernardino*	91.4%	2.8
NY	Westchester*	91.0%	2.0
CA	Solano*	90.7%	2.4
PA	Luzerne	90.6%	2.2
CA	Los Angeles*	90.3%	2.4
OH	Cuyahoga*	90.1%	1.3
CA	Monterey*	89.9%	2.5
PA	Philadelphia*	89.7%	2.3
IL	Cook*	89.6%	2.7

* Includes Reach from TV Guide Local Edition

EXHIBIT 4

(Final Versions of Consumer Letter and AHJ Letter to be Provided by CPSC)

IMPORTANT SAFETY INFORMATION
RECALL OF CENTRAL SPRINKLER'S OMEGA BRAND FIRE SPRINKLERS

To Consumer/Homeowner:

The Consumer Product Safety Commission (CPSC) and Central Sprinkler recently announced the recall of **all** Omega fire sprinklers. According to the CPSC, these sprinklers are defective and could likely fail in a fire, which could result in bodily injury or death.

Please read the entire attached packet of information carefully. It is very important for you to determine if Omega sprinklers are installed in your home or building. The notice contains product information regarding the recall with the CPSC, as well as the preliminary settlement Central has reached with several private class action lawsuits. Please refer to the product information sheets which explain how to identify Omega sprinklers. Because sprinklers can be difficult to identify, we urge you to check with your architect, builder, sprinkler contractor, plumber, homeowners' association or property manager.

This recall is available to **all** owners of Omega fire sprinklers. To participate in the recall you **must** complete the enclosed Proof of Claim Form and Waiver and Release of Claims Form as soon as possible and return them to Central Sprinkler at the address indicated in the Proof of Claim Form. Central Sprinkler will mail you a free replacement sprinkler for every Omega sprinkler owned.

In order to receive replacement sprinklers and to qualify for reimbursement toward installation costs, you **must** complete the Proof of Claim Form and the accompanying Waiver and Release of Claim Form and return them to Central Sprinkler, **postmarked by August 1, 1999**. Although it is important to provide complete information, please submit your Proof of Claim Form **postmarked by August 1, 1999**, even if you can not provide complete responses to all the questions. In order to receive reimbursement toward installation costs, you **must** complete and return the Verification Form **within 365 days after you receive your replacement sprinklers**. Those owners filing a Proof of Claim and Waiver and of Release of Claims Forms postmarked after August 1, 1999 but before November 1, 2001, still qualify to receive replacement sprinklers (though not reimbursement). The recall terms may also provide benefits to those who have <u>already</u> replaced Omegas between May 1, 1996 and the effective date of the Commission's Order.

Please read all of this information carefully, as it explains your legal rights and obligations. If you have any questions about how to complete the forms or how to identify an Omega sprinkler, please call the Omega Hotline at 1-800-896-5685.

Do not delay! Take action today. Until you receive your free replacement sprinklers, you should have a well-defined and

rehearsed escape plan, an alternate plan and working smoke detectors on every floor of your home, especially near bedrooms.

IMPORTANT SAFETY INFORMATION
RECALL OF CENTRAL SPRINKLER'S OMEGA BRAND FIRE SPRINKLERS

October x, 1998

Dear Authority Having Jurisdiction:

I am writing to share with you urgent news regarding Omega fire sprinklers that may well be installed in your area. If you are not already, you must become aware of and familiarize yourself with this situation, the **new** steps being taken to correct it, and the vital role you play by your action in protecting consumer safety.

In cooperation with the United States Consumer Product Safety Commission (CPSC), Central Sprinkler is recalling approximately 8.4 million Omega series sprinklers now in service. According to the CPSC, these sprinklers are defective, and could likely fail in a fire.

The recall is comprehensive and fundamentally different from our prior remediation and notice efforts over the past three years. We are recalling all Omega sprinklers in service, including Omegas containing an EPDM o-ring made before June, 1996 and Omegas that contain a silicone o-ring made after June 1996. The recall encompasses Omegas from all dates of manufacture that are installed in all piping systems -- not simply steel, but polybutelene, CPVC, and copper, including those Omegas made after 1991. The recall involves no removal and testing of Omega field samples, upon which remediation was previously conditioned. The recall is not site-specific. It is total. As part of the recall, Central will provide to all Omega owners -- free of charge -- an approved Quick Response GB sprinkler as a replacement. The company has also established a special Trust to help building owners and homeowners defray the costs associated with replacing the sprinklers. The recall terms may also provide benefits to those who have already replaced Omegas between May 1, 1996 and the effective date of the Commission's Order.

The first order of business is to help identify locations containing Omega sprinklers and to help owners and residents of sprinklered properties determine whether they have Omegas. The attached Notice includes product identification to help you and property and homeowners in your area determine whether they have Omega sprinklers on their premises, and if they do, which model they have. As you may know, on all models of Omega sprinklers, you will see a heat collector assembly, comprised of one to three flat metal disks or fins and inside of which sit a plunger and fusible link. On some Omega models, the word "Central" or the letters "CSC" may be visible on the deflector shield.

ahj

Building and homeowners who have Omegas installed in their buildings should call 1-800-896-5685 as soon as possible to request a Proof of Claim Form and Waiver and Release of Claims Form, which must be completed in order to receive free replacement sprinklers. In order to receive any reimbursement for replacement costs, owners must submit a completed Proof of Claim Form and a Waiver and Release of Claims Form to Central Sprinkler by August 1, 1999. Details on completing the forms are included in the enclosed Notice packet. Please feel free to distribute copies of this letter to owners of Omegas in your jurisdiction. Those owners filing a Proof of Claim and Waiver and Release of Claims Form postmarked after August 1, 1999 but before November 1, 2001, still qualify to receive replacement sprinklers (though not reimbursement).

We are utilizing advertising, direct mail notices and news stories to inform consumers about the recall. However, in identifying buildings and residences that contain Omegas there is no substitute for personal intervention from fire protection leaders such as yourself. Along with the CPSC, we encourage you to help us spread the word about this recall to protect the public health and safety.

Please keep these two phone numbers handy when you and your constituents need further assistance:

- Call the Omega Information Line - 1-800-896-5685 to learn more about how to identify an Omega sprinkler and to obtain a Proof of Claim Form. This is the first number consumers should call to initiate the replacement effort.

- If you have any questions about the recall and replacement effort that are not answered by the Omega Information or the Notice packet, you may call Central Sprinkler's Omega Hotline at 1-800-xxx-xxxx.

On behalf of all of us who are committed to fire prevention and protection, we thank for your support in this effort.

ahj

IMPORTANT SAFETY INFORMATION
RECALL OF CENTRAL SPRINKLER'S OMEGA BRAND FIRE SPRINKLERS

October x, 1998

Dear Authority Having Jurisdiction:

I am writing to share with you urgent news regarding Omega fire sprinklers that may well be installed in your area. If you are not already, you must become aware of and familiarize yourself with this situation, the **new** steps being taken to correct it, and the vital role you play by your action in protecting consumer safety.

In cooperation with the United States Consumer Product Safety Commission (CPSC), Central Sprinkler is recalling approximately 8.4 million Omega series sprinklers now in service. According to the CPSC, these sprinklers are defective, and could likely fail in a fire.

The recall is comprehensive and fundamentally different from our prior remediation and notice efforts over the past three years. We are recalling all Omega sprinklers in service, including Omegas containing an EPDM o-ring made before June, 1996 and Omegas that contain a silicone o-ring made after June 1996. The recall encompasses Omegas from all dates of manufacture that are installed in all piping systems -- not simply steel, but polybutelene, CPVC, and copper, including those Omegas made after 1991. The recall involves no removal and testing of Omega field samples, upon which remediation was previously conditioned. The recall is not site-specific. It is total. As part of the recall, Central will provide to all Omega owners -- free of charge -- an approved Quick Response GB sprinkler as a replacement. The company has also established a special Trust to help building owners and homeowners defray the costs associated with replacing the sprinklers. The recall terms may also provide benefits to those who have already replaced Omegas between May 1, 1996 and the effective date of the Commission's Order.

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ahj

Building and homeowners who have Omegas installed in their buildings should call 1-800-896-5685 as soon as possible to request a Proof of Claim Form and Waiver and Release of Claims Form, which must be completed in order to receive free replacement sprinklers. In order to receive any reimbursement for replacement costs, owners must submit a completed Proof of Claim Form and a Waiver and Release of Claims Form to Central Sprinkler by August 1, 1999. Please feel free to distribute copies of this letter to owners of Omegas in your jurisdiction. Those owners filing a Proof of Claim and Waiver and Release of Claims Form postmarked after August 1, 1999 but before November 1, 2001, still qualify to receive replacement sprinklers (though not reimbursement).

We are utilizing advertising, direct mail notices and news stories to inform consumers about the recall. However, in identifying buildings and residences that contain Omegas there is no substitute for personal intervention from fire protection leaders such as yourself. Along with the CPSC, we encourage you to help us spread the word about this recall to protect the public health and safety.

Please keep these two phone numbers handy when you and your constituents need further assistance:

- Call the Omega Information Line - 1-800-896-5685 to learn more about how to identify an Omega sprinkler and to obtain a Proof of Claim Form. This is the first number consumers should call to initiate the replacement effort.

- If you have any questions about the recall and replacement effort that are not answered by the Omega Information or the Notice packet, you may call Central Sprinkler's Omega Hotline at 1-800-xxx-xxxx.

On behalf of all of us who are committed to fire prevention and protection, we thank for your support in this effort.

ahj

EXHIBIT 5

Newsgroups for Central Sprinkler Class Notice

acc.sbell.usa-today.law
acc.sbell.usa-today.real
alt.architecture
alt.architecture.alternative
alt.architecture.int-design
alt.building.announcements
alt.building.architecture
alt.building.construction
alt.building.consulting-specialty
alt.building.contractors
alt.building.distributor-dealer
alt.building.education
alt.building.engineering
alt.building.environment
alt.building.finance
alt.building.gov-issues
alt.building.health-safety
alt.building.interior-design
alt.building.law
alt.building.manufacturing
alt.building.planning-preservation
alt.building.realestate
alt.building.research
alt.building.union-assn-society
alt.business
alt.business.home
alt.business.misc
alt.construction
alt.consumers
alt.consumers.experiences
alt.current-events
alt.current-events.usa
alt.firefighters
alt.home.repair
alt.invest.real-estate
alt.lawyers
alt.real-estate.commercial.az
alt.real-estate.commercial.ca-central
alt.real-estate.commercial.ca-north
alt.real-estate.commercial.ca-south
alt.real-estate.commercial.fl-central
alt.real-estate.commercial.fl-north
alt.real-estate.commercial.fl-south
alt.real-estate.commercial.go
alt.real-estate.commercial.md
alt.real-estate.commercial.nj
alt.real-estate.commercial.ny
alt.real-estate.commercial.oh
alt.real-estate.commercial.pa
alt.real-estate.commercial.tx-northeast
alt.real-estate.commercial.tx-northwest
alt.real-estate.commercial.tx-southeast
alt.real-estate.commercial.tx-southwest
ca.news
clari.biz
clari.biz.industry.construction
clari.biz.industry.construction.cbd.acquisition
clari.biz.industry.construction.cbd.architect+eng
clari.biz.industry.construction.maintenance
clari.biz.industry.construction.misc
clari.biz.industry.construction.supplies
clari.biz.industry.real_est+const
clari.biz.industry.real_est+const.releases
clari.living.consumer
clari.local.california.sfbay.fire
clari.news.usa.law
clari.usa.law.misc
courts.usa
courts.usa.state
misc.consumer.house
misc.consumers
misc.consumers.house
misc.consumers.house.homeowner-assn
misc.invest.real-estate
misc.legal
misc.legal.moderated
nj.housing
nj.market.housing
nyc.market.housing
phl.housing
realtynet.commercial
realtynet.east
realtynet.general
realtynet.government
realtynet.invest
realtynet.lending
realtynet.mid
realtynet.qa
realtynet.residential
realtynet.south
realtynet.west
relcom.commerce.construction
relcom.consumers
sdnet.housing
sdnet.real-estate
sdnet.real-estate.agents
seattle.forsale.housing
us.legal
usa-today.law

United States
CONSUMER PRODUCT SAFETY COMMISSION
Washington, D.C. 20207

MEMORANDUM

DATE: 10/21/98

FROM: Central Litigation Team, Legal Division
RE: Central Consent Agreement and Order, Appendix D, Missing Page 2

Please insert the attached page as Page 2 of Appendix D in any and all copies of the Central Consent Agreement & Order that you have. All copies of the Agreement & Order were missing this page.

We apologize for any inconvenience.

Sadye Dunn
Orig. + 3 copies attached

i) Central Analysis of Omega Costs, Consumer Product Safety Commission Proposal. Heads with Silicone Rings Remediated, as of April 30, 1998

j) Central Analysis of Quarterly Cash Flow- CPSC Program, Heads with Silicone Rings Remediated (Cumulative % of Heads to be Located of 40%)

k) Central Analysis of Omega Costs, CPSC Proposal, Heads with Silicone Rings Remediated, as of April 30, 1998

l) Central Analysis of Quarterly Cash Flow- CPSC Program, Heads with Silicone Rings Remediated (Cumulative % of Heads to be Located of 40%)

4. Letter dated July 15, 1998 (with attachments), from J. Gordon Cooney, Jr., Morgan, Lewis & Bockius, L.L.P., to Eric H. Stone, CPSC. Additional attachments to this letter were received by the CPSC staff from Kathleen M. Sanzo, Morgan, Lewis & Bockius, L.L.P., on July 23, 27, and July 28, 1998.
   a) Letter dated July 9, 1998, from E. Talbot Briddell, Central Sprinkler Corporation, to Michael A. Bloom and J. Gordon Cooney, Jr.
   b) Report dated March 6, 1998 prepared by Select Equity Group Research
   c) Central Consolidated Balance Sheet, May & June 1998
   d) Central Consolidated Income Statement, May & June 1998
   e) Central Consolidated Statement of Cash Flows, May & June 1998
   f) Central Profit Improvement Program, April 29, 1998

5. Package on July 28, 1998 (consisting of Central Sprinkler Corporation Revised List of Documents: Presentation to Consumer Product Safety Commission, July 28, 1998), from E. Talbot Briddell to Eric L. Stone.
   a) Central Projected Fiscal 1998 Income Statement- 8 Months Actual and 4 Months Budget (Revised) (7/28/98)
   b) Central Projected Income Statement (7/28/98)
   c) Central Projected Income Statement Ratios (7/28/98)
   d) Central Income Statement Assumptions (7/28/98)
   e) Central Projected Balance Sheet Assets (7/28/98)
   f) Central Projected Balance Sheet Liabilities and Equity (7/28/98)
   g) Central Balance Sheet Assumptions (7/28/98)

Accepted and Approved:

CPSC Office of Compliance

Accepted and Approved:

[illegible] Central Sprinkler Co. and Central Sprinkler Corp.

cenmi.cpd
10/22/98 8:00 a.m.

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of CENTRAL SPRINKLER CORP., and CENTRAL SPRINKLER CO., Respondents	CPSC DOCKET NO. 98-2

ORDER

UPON CONSIDERATION of the Administrative Complaint against Respondents Central Sprinkler Corp. and Central Sprinkler Co. (collectively, "Central") issued on or about March 3, 1998, and the Consent Agreement between the parties;

UPON CONSIDERATION of Central's concession that "Omega" fire sprinklers are "consumer products" under the CPSA, 15 U.S.C. § 2052;

UPON CONSIDERATION of Central's decision not to contest the allegations in the Complaint that "Omega" fire sprinklers contain a defect which creates a "substantial product hazard;" and

Pursuant to Sections 15(c) and (d) of the CPSA, 15 U.S.C. § 2064(c) and (d), IT IS HEREBY ORDERED THAT:

1. The Consent Agreement between Central Sprinkler Corp. and Central Sprinkler Co. (collectively, "Central") and the Commission staff is accepted and incorporated by reference herein, and Central shall comply with all of its obligations thereunder.

2. All allegations of the Administrative Complaint are resolved by this Consent Agreement and Order. Based on the Consent Agreement, including Central's admissions and agreement not to contest certain allegations of the Administrative Complaint for settlement purposes, the Commission finds that the Consent Agreement and this Order are necessary to protect the public from the hazard the Commission believes is presented by Omega sprinklers.

3. To remedy the alleged substantial product hazard created by Omega sprinklers, Central shall remove from service and replace all Omega sprinklers with replacement glass bulb sprinklers containing a Belleville Washer-Type Seal ("Replacement Sprinklers"), pursuant to, and in accordance with, the terms of Paragraphs 4 through 21 below and all of its obligations under the Consent Agreement incorporated by reference herein.

4. Central shall immediately cease and desist manufacturing, selling, distributing, marketing, exporting, importing, and/or attempting to distribute or sell any Omega sprinkler, whether by itself or through its subsidiaries, affiliates, Central-owned distribution centers, or any other persons or entities over whom Central has control, whether in the United States or any other foreign state, country, or territory.

5. Central shall provide notice to the public, its customers, and Omega owners, of the alleged hazard posed by Omega sprinklers, and the remedy to which Omega owners are entitled, which notice shall include the elements set forth in Appendix A of this Order. All notices, including all script(s) for operators of the toll-free numbers set forth in Appendix A, must be approved by the Commission staff prior to dissemination.

6. Central shall provide Replacement Sprinklers to all owners of Omega sprinklers, at no cost to the Omega owners, according to the provisions set forth in Appendix C of this

Order. A listing of the Replacement Sprinkler(s) for each Omega is set forth in Appendix B of this Order.

7. Central shall provide replacement escutcheons, extensions, and any and all other fittings, fixtures and/or appurtenances necessary for proper replacement of Omegas with the Replacement Sprinklers ("Replacement Parts") at no cost to the Omega owners.

8. Beginning in November, 1998, and for 48 months thereafter, Central shall make best efforts to manufacture and distribute to Omega owners at least 100,000 Replacement Sprinklers, and the accompanying Replacement Parts, per month for as long as the demand for Replacement Sprinklers equals or exceeds 100,000 per month.

9. If Central receives requests for Replacement Sprinklers and Replacement Parts at a rate that exceeds its monthly capacity to manufacture and ship the Replacement Sprinklers and Replacement Parts, Central shall devise a plan for sprinkler and parts distribution to ensure priority replacement of sprinklers in buildings where members of the public are particularly vulnerable. Central's plan for sprinkler distribution shall be submitted to the Commission staff for approval prior to implementation. In the event the staff disagrees with Central's plan for sprinkler distribution, Central shall implement the plan as amended or devised by the staff.

10. In addition to providing Replacement Sprinklers and Replacement Parts as stated in Paragraphs 6 through 9 herein, Central shall pay, into a Trust for the benefit of Omega owners, a monetary contribution toward the labor costs of replacing their Omega sprinklers in accordance with the procedures set forth in Appendix C of this Order. The monetary contribution is for the purpose of assisting Omega owners in paying the costs associated with

removing and replacing their existing Omegas, and thus encouraging Omega owners to participate in the remediation program provided herein, in order to remedy the hazard the Commission believes is presented by the Omegas, and protect the public health and safety.

11. In order to obtain Replacement Sprinklers and Replacement Parts, and the monetary contribution provided for in Paragraph 10 herein, Omega owners must follow the procedures required by Appendix C of this Order.

12. Recognizing that suitable Replacement Sprinklers are not currently available for all Omega sprinkler models, Central shall pay $5.00 per Omega sprinkler to any owner of Omega sprinklers who does not want or cannot use Central's Replacement Sprinklers, provided such owner gives Central reasonable proof of removal and replacement of Omegas. Central shall also pay to all such Omega owners a monetary contribution toward the costs of removing and replacing their Omega sprinklers in accordance with the procedures set forth in Appendix C of this Order. This payment is for the purpose of assisting Omega owners in paying the costs associated with removing and replacing their existing Omegas, and thus encouraging Omega owners to remove and replace their existing Omega sprinklers, in order to remedy the hazard the Commission believes is presented by the Omegas, and protect the public health and safety.

13. For those Omega owners who, after May 1, 1996, but prior to the effective date of this Order, 1) already replaced or contracted to replace their Omegas with non-Omega sprinklers and 2) who received in value from Central less than what they would have received under Paragraph 12 of this Order, Central shall pay such owners the difference between what they have already paid and the amount they would have paid under Paragraph 12 of this

Order. This payment shall be made for the purpose of encouraging owners of products that present or may present a substantial product hazard to take immediate action to remove and, where appropriate, replace that product. This payment assists in the fulfillment of the Commission's mandate to protect the public health and safety from the risks associated with products that present a substantial product hazard.

14. If Central fails to make timely contributions to the Trust as required by Appendix C hereto, Central shall be liable for additional contributions to the Trust, separate from any penalty it may incur pursuant to Paragraph 17 of the Consent Agreement. Such additional contribution(s) shall include the following:

a. Interest at the percentage rate established by the Department of the Treasury pursuant to 31 U.S.C. § 3717, for any period after the due date;

b. A handling charge of $10,000 at the end of each 30 day late period; and

c. A 7% (seven percent) per annum penalty charge if the deposit is not made within 30 days of the due date.

These additional contributions are intended to encourage Respondents to fulfill their obligations to remedy the hazard the Commission believes is presented by Omega sprinklers, and protect the public health and safety.

15. Central shall devise procedures to ensure the destruction of the Omega sprinklers. Central shall destroy all finished goods inventory and returned Omegas, from whatever source, and will not use any component parts of any returned or finished goods Omega for the manufacture or sale of any other product. Central must provide to the staff a monthly accounting of all returned and destroyed sprinklers for the first three months after the

effective date of this Order, and a quarterly accounting of all returned and destroyed sprinklers thereafter, for four years. Such reports shall be provided in a format approved by the Commission staff.

16. Central shall not, without first both notifying and consulting with the staff, manufacture for sale, offer for sale, distribute in commerce, export, or import into the United States any automatic sprinkler containing all of the following elements: (a) a body or body portion housing a dynamic valve plug (whether or not utilizing an elastomeric seal) that controls the release of water or other extinguishing agent; (b) a retaining groove within the body of the sprinkler housing locking ball bearings; (c) a plunger; and (d) a cylindrical chimney (whether or not utilizing external heat collecting fins) housing a fusible element, bearing disk, and part or all of the plunger. Central shall notify the Commission staff at least 90 calendar days before it begins manufacturing, offering, distributing, exporting, or importing any such sprinkler(s). Central shall provide the staff prompt access to all design, testing, and listing documents pertaining to any and all such sprinklers.

17. Beginning December 1, 1998, and by 5:00 p.m. on the first business day of every month thereafter, Central must provide to the staff a monthly status report, in a form acceptable to the staff, of the progress of the remediation program for the Omegas.

18. Central must immediately notify the staff of the Consumer Product Safety Commission in writing if:

a. Factory Mutual Research Corporation (FMRC) or Underwriters Laboratories Inc. (UL) does not approve or list, withdraws or discontinues its approval or

listing, no longer approves or lists, or modifies its approval or listing of any of the Replacement Sprinklers at any time, for any reason whatsoever;

b. the Replacement Sprinklers fail any test conducted by FMRC or UL and indicated in Appendix E of this Order; or

c. Central obtains information with respect to Replacement Sprinklers that is reportable under Section 15(b) of the CPSA.

19. Central shall provide to the staff a copy of all filings it makes with the Securities and Exchange Commission (SEC) within five business days of making such filings. Central shall also notify the staff in writing of any changes in corporate officers and directors within five business days of such changes.

20. Central shall allow the Commission and/or staff to inspect any and all records that are not subject to the attorney-client privilege or attorney work-product doctrine, regarding the Replacement Sprinklers and Parts, remediation program, any class action lawsuits regarding Omega sprinklers, and any claims or lawsuits against its insurers or other third parties relating to Omega sprinklers, and to inspect all manufacturing, design and/or receiving facilities regarding Replacement Sprinklers at any time during normal business hours, upon reasonable notice.

21. This Order, and all of the obligations it imposes on Central, shall terminate in its entirety upon the final distribution of all funds required to be placed in the Trust pursuant to

Appendix C of this Order, unless Central has not completely fulfilled its obligations under the Consent Agreement and Order.

BY ORDER OF THE CONSUMER PRODUCT SAFETY COMMISSION

Sadye E. Dunn

Sadye Dunn, Secretary

Dated: October 13, 1998

In the Matter of Central Sprinkler Corp. and Central Sprinkler Co., Respondents - CPSC Docket No. 98-2

CERTIFICATE OF SERVICE

I hereby certify that the foregoing **Order** dated October 13, 1998, was sent in the manner indicated to the addressees listed below.

By telefacsimile and Regular Mail to: Respondents

J. Gordon Cooney, Jr., Esquire
Emily J. Lawrence, Esquire
MORGAN, LEWIS & BOCKIUS, LLP
2000 One Logan Square
Philadelphia, Pennsylvania 19103

Michael F. Healy, Esquire
MORGAN, LEWIS & BOCKIUS, LLP
1800 M Street, N.W.
Washington, D.C. 20036

John C. Fenningham, Esquire
CORR, STEVENS & FENNINGHAM
Five Neshaminy Interplex, Suite 315
Trevose, Pennsylvania 19053

By hand delivery to: Complaint Counsel

Alan H. Schoem
Assistant Executive Director
Office of Compliance
U.S. CONSUMER PRODUCT SAFETY COMMISSION
4330 East West Highway
Bethesda, Maryland 20814

Eric Stone, Esquire
Director, Legal Division
Office of Compliance
U.S. CONSUMER PRODUCT SAFETY COMMISSION
4330 East West Highway
Bethesda, Maryland 20814

Certificate of Service, continued

In the Matter of Central Sprinkler Corp. and Central Sprinkler Co., Respondents - CPSC Docket No. 98-2

Deborah S. Orlove, Esquire
Complaint Counsel
Legal Division
Office of Compliance
U.S. CONSUMER PRODUCT SAFETY COMMISSION
4330 East West Highway
Bethesda, Maryland 20814

Eric H. Singer, Esquire
Complaint Counsel
Legal Division
Office of Compliance
U.S. CONSUMER PRODUCT SAFETY COMMISSION
4330 East West Highway
Bethesda, Maryland 20814

Howard N. Tarnoff, Esquire
Complaint Counsel
Legal Division
Office of Compliance
U.S. CONSUMER PRODUCT SAFETY COMMISSION
Bethesda, Maryland 20814

Sadye E. Dunn

Sadye E. Dunn, Secretary
Consumer Product Safety Commissiosn

Date: October 13, 1998

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFFICE OF
THE SECRETARY

1998 OCT -2 P 5:10

In the Matter of	
CENTRAL SPRINKLER CORP.,	
and	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	
Respondents	

CONSENT AGREEMENT

This Consent Agreement is made by and between the staff of the Consumer Product Safety Commission and Respondents, Central Sprinkler Corp. and Central Sprinkler Co., to settle the above-captioned administrative action. The parties agree as follows:

Parties

1. The "staff" is the staff of the United States Consumer Product Safety Commission ("CPSC" or "the Commission"), an independent regulatory agency of the United States, established by Congress pursuant to Section 4 of the Consumer Product Safety Act ("CPSA"), 15 U.S.C. § 2053.

2. Respondents Central Sprinkler Corporation and Central Sprinkler Company (hereinafter collectively "Central") are corporations organized and existing under the laws of

Accepted and Approved:

CPSC Office of Compliance

consent8.cle 10/01/98 5:00 p.m.

Accepted and Approved:

Respondents Central Sprinkler Co.
and Central Sprinkler Corp.

the Commonwealth of Pennsylvania, with their principal place of business at 451 North Cannon Ave., Lansdale, PA 19446.

Subject Matter

3. From 1982 to July, 1998, Central manufactured and sold and/or distributed between 9 and 10 million "Omega" brand automatic fire sprinklers. On March 3, 1998, the staff of the Consumer Product Safety Commission filed an Administrative Complaint ("Complaint") against Central, seeking recall and replacement of Central's Omega fire sprinklers pursuant to 15 U.S.C. § 2064. The Complaint alleges that Central's Omega sprinklers are defective and will not function in certain fire situations, creating a substantial risk of bodily injury and/or death.

4. To date, the staff has received reports that from 1990 to the present, Omega sprinklers did not function in 20 fires.

5. Central has filed an answer to the Complaint in which it avers, *inter alia*, that its Omega sprinklers are not defective within the meaning of 15 U.S.C. § 2064.

6. The staff also contends that Central obtained information which reasonably supported the conclusion that Omega sprinklers contained a defect or defects that could create a substantial risk of injury to the public but failed to report such information in a timely manner pursuant to 15 U.S.C. § 2064(b). Central denies any wrongdoing under 15 U.S.C. § 2064(b).

Agreement of the Parties

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Respondents Central Sprinkler Co. and Central Sprinkler Corp.

7. It is the express purpose of the parties in entering into this Agreement to protect the public safety by carrying out the recall and replacement of Omega sprinklers.

8. The parties intend for this Consent Agreement and the attached Order (hereinafter "Order" or "the Order"), which is hereby incorporated by reference, to resolve all allegations and requests for relief set forth in the Administrative Complaint in this proceeding and to bar the initiation or referral by the CPSC of any administrative, civil, or criminal claims within the CPSC's jurisdiction arising from the conduct of Central, its officers, directors and/or employees regarding Omega sprinklers. This resolution shall not apply to any actions arising from non-compliance with or disputes pertaining to this Agreement or the Order.

9. For purposes of this settlement only, Central admits that "Omega" fire sprinklers are "consumer products" under Section 3 of the CPSA, 15 U.S.C. § 2052, subject to the jurisdiction of the Consumer Product Safety Commission.

10. For purposes of this settlement only, Central agrees not to contest the allegations in the Complaint that "Omega" fire sprinklers contain a "defect which creates a substantial product hazard," as those terms are defined in Section 15(a) of the CPSA, 15 U.S.C. § 2064(a). Central has agreed not to contest these allegations in order to avoid the expense, inconvenience and risks associated with further litigation, and the parties recognize that this resolution and this Consent Agreement may not be used or introduced as evidence of defect or hazard against Central in other litigation not involving the Commission or its staff. Entry of the Order will neither impair nor assist the bringing of any other action.

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11. As part of the amounts referenced in 1.a and 1.b of Appendix C of the Order, Central shall deposit, without any adjudication or admission of fact or law, $1.3 million into the Trust established in Appendix C of the Order, in settlement of the staff's contention that Central failed to report to the Commission problems with the Omega pursuant to 15 U.S.C. § 2064(b). Central has agreed to do so solely to avoid the inconvenience and burden of litigation of this issue.

12. Upon acceptance by the Consumer Product Safety Commission of this Consent Agreement, and entry of the Order, Central knowingly, voluntarily and completely waives and relinquishes any past, present and/or future right or rights in this matter: (1) to an administrative or judicial hearing and to all further procedural steps, including findings of fact, conclusions of law and/or further determination of whether Omega sprinklers contain a defect which creates a substantial product hazard within the meaning of Section 15 of the CPSA; (2) to seek judicial review or otherwise contest the validity of this Consent Agreement and/or Order as issued and entered; and (3) to seek judicial review of this or any past orders, findings and/or determinations of the Commission or the Presiding Officer in this matter, except as set forth in the provisions regarding review in Paragraph 28 of this Agreement.

13. Central agrees to fulfill all requirements of the Order.

14. Central agrees to immediately cease and desist manufacturing, selling, distributing, marketing, exporting, importing, and/or attempting to distribute or sell any

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Omega sprinkler, whether by itself or through its subsidiaries, affiliates, Central-owned distribution centers, or any other persons or entities over whom Central has control, whether in the United States or any other foreign state, country, or territory.

15. Central shall request that Underwriters Laboratories, Inc. withdraw its listing of approval for all Omega sprinklers.

16. Central shall provide the staff with thirty days written notice of any transfer of property rights it holds in the following U.S. Patents: 4,465,141; 4,491,182; 4,508,175; 4,553,602; 5,094,298; 4,619,327; 3,734,191, 3,802,510; 3,877,527, 3,911,940; 3,991,829, and 4,359,098.

17. A violation of this Consent Agreement or the Order is a prohibited act within the meaning of Section 19 of the CPSA, 15 U.S.C. § 2068.

18. The Commission or Central may disclose terms of this Consent Agreement and Order to the public.

19. This Consent Agreement shall take effect upon its final acceptance by the Consumer Product Safety Commission.

20. This Consent Agreement and Order shall be binding upon the parties hereto and their successors, assigns, and receivers. If, prior to the termination of this Consent Agreement and Order, Central merges with any other corporation or sells, assigns, or otherwise transfers substantially all of its assets, Central shall provide reasonable prior notice to the surviving corporation or, in the case of an asset sale, assignment, or transfer, the

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purchaser, transferee, or assignee of substantially all of Central's assets, of this Consent Agreement and Order, and of its binding effect upon said surviving corporation, purchaser, assignee, or transferee. The existence of this Consent Agreement and Order and their binding effect shall be noted in any agreement between Central and such surviving corporation, purchaser, transferee, or assignee. It shall be a condition of any such merger, sale, assignment, or transfer that the surviving corporation or, in the case of an asset sale, the purchaser, assignee, or transferee, execute a document agreeing to be bound by the provisions of this Consent Agreement and Order, and to submit to the jurisdiction of the Commission for purposes of enforcement of this Consent Agreement and Order. In the event of any merger or sale, transfer, or assignment of substantially all of Central's assets, notice shall be provided to the staff no later than 15 days prior to any such merger or asset sale, transfer, or assignment.

21. This Consent Agreement and Order have been negotiated by the parties. Central is not relying on the advice of the staff, nor anyone associated with the staff, as to legal, tax, or other consequences of any kind arising out of this Consent Agreement and Order, and Central specifically assumes the risk of all such legal, tax and other consequences.

22. For all purposes, this Consent Agreement and Order shall constitute an enforceable judgment obtained in an action or proceeding by a governmental unit to enforce its police or regulatory power. Central acknowledges and agrees that this Agreement and Order are pursuant to the Commission's police or regulatory power to remedy the risk

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created by and protect the public from a substantial product hazard which the Commission believes is presented by Omega sprinklers, and that the Agreement and Order are not subject to an automatic stay if Central becomes the subject of a bankruptcy proceeding.

23. If all of the Replacement Sprinklers are not listed or approved by Underwriters' Laboratories Inc. ("UL") and all of the exclusively non-residential Replacement Sprinklers are not listed or approved by Factory Mutual Research Corporation ("FMRC") by November 1, 1998, or if the listing or approval of any of the Replacement Sprinklers by UL or FMRC is withdrawn, discontinued or modified at any time, for any reason whatsoever, the Commission, at its sole discretion and upon reasonable notice to Central, may void, suspend, or rescind all or any part of this Consent Agreement and Order.

24. The Commission, at its sole discretion and upon reasonable notice to Central, may void, suspend, or rescind all or any part of this Consent Agreement and Order if Central has made material misrepresentations regarding its current financial condition, manufacturing and shipping costs for Replacement Sprinklers and Replacement Parts, the number of Omega sprinklers remaining to be remediated (approximately 8.4 million), and/or the projected costs of administering the recall and replacement program in this Agreement and Order, and the staff has relied on those misrepresentations in entering into this Agreement. Appendix D of the Order lists those documents containing representations deemed material by the parties.

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25. Beginning 3 months after the effective date of the Commission's Order, and for every 3 months thereafter until the expiration or final determination of the Claims as defined in Paragraph 1.c of Appendix C of the Order, Central shall provide to the staff a full report on the progress and status of the Claims as defined in Paragraph 1.c of Appendix C of the Order, and the progress and status of the remediation program set forth in this Agreement and Order, including but not limited to the payments made to the Trust as defined in Appendix C of the Order, and the expenses paid and/or incurred for notice and administration of the remediation program set forth in this Agreement and Order. Central shall provide, with these reports, the daily timesheets, with descriptions of all work performed, of each Central employee involved in administration of the remediation program, for the time period since the last report date. At any time, upon reasonable written notice, the Commission may require Central to submit to an independent or Commission review and/or audit of the remediation program set forth in this Consent Agreement and Order, and/or any Claims as defined in Paragraph 1.c of Appendix C. Central shall provide the staff with a copy of every audit report of its financial condition within 5 business days of the date the report is prepared.

26. If, after the effective date hereof, any provision of this Consent Agreement and Order is held to be illegal, invalid, or unenforceable under present or future laws effective during the terms of this Consent Agreement and Order, such provision shall be fully severable. The rest of the Agreement and Order shall remain in full effect, unless the

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Commission determines that severing the provision materially impacts the remediation program set forth in this Agreement and Order.

27. Central acknowledges that this Consent Agreement and Order have been negotiated between unrelated, sophisticated and knowledgeable parties acting in their own self-interest and represented by counsel, and the provisions of this Consent Agreement and Order shall not be interpreted or construed against any person or entity because that person or entity or any of its attorneys or representatives drafted or participated in drafting this Consent Agreement.

28. The provisions of this Consent Agreement and Order shall be interpreted in a reasonable manner to effect its purpose to remedy the alleged hazard that Omegas pose. In the event of a dispute between the parties arising under this Consent Agreement and Order, the parties agree to submit the issue for determination by the Commission. Except as stated to the contrary in Paragraphs 7 through 10 of Appendix C of the Order, Central shall have the right to seek judicial review of the Commission decision, such review to be based upon the record of any such Commission proceeding and according to law.

29. The existence of a dispute shall not excuse, toll, or suspend any obligation or deadline imposed upon Central under this Consent Agreement and Order.

30. This Consent Agreement and Order shall not be waived, changed, amended, modified, or otherwise altered, except in writing executed by the party or parties against

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whom such amendment, modification, alteration, or waiver is sought to be enforced, and approved by the Commission.

Dated: October 1, 1998

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CEO, Central Sprinkler Corp. and Central Sprinkler Co.

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Respondents Central Sprinkler Co. and Central Sprinkler Corp.

Appendix A

Central Sprinkler Omega Notification Plan

Central's Efforts to Generate Editorial Coverage of Program - ongoing efforts by Buchanan and Associates

Local Print Advertising (Newspapers)

- Proposed notice is set out in Exhibit 1
- Eighty-seven 3-column x 7.5" ads will appear in 79 newspapers in each of the 68 targeted counties (Exhibit 2). The newspaper coverage will include the Arizona Republic, Los Angeles Times, (2 x), San Francisco Chronicle, Denver Post, Washington Post, Atlanta Journal, Chicago Tribune (2x), New York Times, Philadelphia Inquirer (2x), and Dallas Morning News, as well as other papers noted in Exhibit 3. The notices will appear in the front section of the national news by November 1, 1998.
- Repeat notice - Central to place at least one ad in one local/regionalized paper in each of the 68 targeted counties on or around May 1, 1999. Such notice to only include information about the recall. This notice must be approved by CPSC staff.

Trade Publication Advertising

Paid Ads Using Exhibit 1 to be purchased for the following publications for the next available issue within 8 business days of CPSC press announcement

- *Buildings Magazine*
- *Building Operating Management*

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- *Commercial Property News*
- *National Real Estate Investor*
- *Journal of Property Management*
- *Facilities Design and Management*
- *Fire Protection Contractor (FPC)*
- *Sprinkler Age*
- *NFPA Journal*

National Print Advertising

(Using Exhibit 1 and purchased for publication within 8 business days of CPSC press announcement)

- 2/5th page ad in *Parade Magazine*
- Digest size ad in *USA Weekend*
- Full-page ad in *Reader's Digest*
- Full page ad in seven local editions of *TV Guide*

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Direct Notice Communications

- First class letter with appropriate outer signal words as attached hereto including the following documents in the following order: letter to consumers (Exhibit 4), Proof of Claim, Waiver and Release of Claims, Request for Exclusion, Verification Forms, product identification information, and long form class action notice. This notice will be mailed to the identified consumers set forth below within 8 business days of CPSC announcement (where applicable).
    - All individuals who filed claims against Central Sprinkler for Omega Series Sprinklers.
    - All individuals who called the toll free Central Sprinkler Omega information line regarding Omega Series Sprinklers.
    - All individuals who call the 1-800 automated telephone number or write requesting the Class Notice or Recall as a result of seeing the published notice.
- Within 30 days of CPSC press announcement, subject to availability of mailing lists, mailing of first class letter, with appropriate outer signal words substantially in the form set out in the attached letter to AHJs (Exhibit 4) including Proof of Claim, Waiver and Release of Claims Form, Request for Exclusion, Verification Forms, product identification information, and long term class notice to:
    - Authorities having jurisdiction in counties with sprinkler laws, regulations or ordinances.
- Within 30 days of CPSC press announcement, subject to availability of mailing lists, mailing of first class letter, with appropriate outer signal words, in the form substantially set out in consumer letter and Proof of Claim, Waiver and Release of Claims, Verification Forms and product identification information to:
    - Organizations identified through purchased mailing lists for:

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Hospitals
Nursing and Convalescent Homes
Hotels & Motels
School Districts
Colleges & Universities
Approximately 14,334 U.S. members of the Building Owners and Managers Association (BOMA).

- Within 30 days of CPSC press announcement, subject to availability of mailing lists, mailing of first class letter, with appropriate outer signal words, substantially in the form set out in the attached letter to AHJs, with product identification information to:

  Insurance-Homeowners
  Insurance-Property & Casualty
  Authorities Having Jurisdiction known to Central Sprinkler in counties without sprinkler laws, regulations or ordinances
  Distributors, Contractors, and End-users known to Central Sprinkler
  Member of American Fire Sprinkler Association, National Fire Sprinkler Association, and Home Inspectors Associations

- Within 30 days of CPSC press announcement, subject to availability of mailing lists, mailing of first class letter, with appropriate outer signal words, substantially in the form set out in the attached letter to AHJs, including Proof of Claim, Waiver and Release of Claims and Verification Forms, long form class notice and product identification information to the executive directors of:

  National Association of Homebuilders
  Home Fire Sprinkler Coalition
  Fire Marshals Association of North America
  Fire Sprinkler Education Foundation, Inc.
  International Association of Fire Chiefs
  National Fire Protection Association
  Operation Life Safety

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Consumer Federation of America
Consumer Information Center
Consumer Union of United States
National Consumer League

- Written letter by first class mail to members of the American Waterworks Association in 68 targeted counties to provide notice of the corrective action either as part of water bills or consumer newsletters. CPSC to approve language for letter.

Computer Posting

- A **public service announcement** will be posted on appropriate legal, consumer, fire safety and related bulletin boards on Usenet News groups (Exhibit 5) and major online services (i.e., America Online, etc.) directed to professionals and consumers. In addition to any other contact information, the online PSA will include a link to the Central Omega program website.

- The notices of Recall and Settlement, Proof of Claim, Verification and Waiver and Release of Claims forms will be posted on the Omega website to provide access to the notice and other pertinent information. The website will be listed with major search engines.

- In addition, **hyperlinks** may be established with other websites, including CPSC's, related to fire safety, legal and construction-related issues to allow access to the class action and recall notice.

Telephone Support

1-800 REQUEST-LINE

All print advertising will direct the reader to call a 1-800 telephone number, to write to an address or to go to the website in order to receive the Notice of recall and settlement and related forms.

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A 1-800 896-5685 interactive telephone number will be utilized. A pre-recorded message will welcome callers to the line. Callers will be directed through a series of steps that will allow the system to capture their names, mailing addresses and phone numbers.

Names and addresses will be downloaded and transcribed within 48 hours. Consumers will be mailed class action notice/recall package within 8 business days of consumer call until November 15, 1998 and thereafter within 5 business days.

1-800 OMEGA INFORMATION LINE

The Notice of recall and settlement will include Central Sprinkler's toll-free Omega information line. If potential Class Members have questions after reviewing the Notice of recall and settlement, they will be able to speak with a Central customer service representative. All customer service representatives will be trained by Central Sprinkler. A question and answer document incorporating a list of commonly asked questions is being drafted in advance so that customer service representatives will be prepared with scripted answers. The script will be updated periodically to include new information and answers to added questions. Central intends to dedicate 20 customer service representatives staggered throughout the operational period for the first 6 weeks from the date of the Notice of recall and settlement. The Omega information line will operate from 7:00 a.m. until 9:00 p.m. Monday through Friday for the first six weeks. Staffing for the Omega information line thereafter will be assessed after week 6.

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EXHIBIT 1

Legal Notice Legal Notice

IMPORTANT SAFETY RECALL
AND CLASS ACTION SETTLEMENT
FOR HOME OWNERS/BUILDING OWNERS WITH OMEGA BRAND FIRE SPRINKLERS MANUFACTURED BY CENTRAL SPRINKLER CO.

Central Sprinkler Company ("Central") and the United States Consumer Product Safety Commission are announcing a settlement involving the recall and replacement of approximately 6.4 million Omega brand fire sprinklers manufactured since 1982 by Central. Plaintiffs in two suits representing a nationwide class have preliminarily settled their suits and are also announcing the availability of a remedy. Omega fire sprinklers are installed in homes, offices, hospitals, schools and other buildings around the country.

OMEGA FIRE SPRINKLERS COULD LIKELY FAIL IN A FIRE, WHICH COULD RESULT IN SEVERE INJURY OR DEATH.

IDENTIFYING SPRINKLERS

Numerous models of the Omega fire sprinklers are involved. On most models, consumers will be able to see one to three flat round metal disks stacked one above the other with a small space between each disk. However, because it may be difficult to determine whether Omegas are installed, consumers are encouraged to call the toll free number below for product identification or contact their architect, builder, sprinkler contractor, plumber, homeowners' association or property manager to determine if Omegas are installed in their residence or facility.

Building owners and consumers are urged to take immediate action and call the Omega information line to learn more about the recall, how to identify Omega sprinklers, obtain a Proof of Claim form, and obtain further information about the settlement, including how to participate in the settlement and how the settlement may affect their legal rights.

SPRINKLER REPLACEMENTS

For consumers to get replacement sprinklers and any reimbursement towards installation costs, they must submit the Proof of Claim and Release Forms to Central postmarked by August 1, 1999. Consumers submitting Proof of Claim and Release Forms postmarked after August 1, 1999 but before November 1, 2001 still qualify to receive replacement sprinklers (though not reimbursement).

Until free replacement sprinklers are provided, consumers need to protect themselves against fire, have working smoke detectors and have adequate escape plans.

CLASS ACTION

If you are an owner or operator of a building that is or was equipped with Omega fire sprinklers, your legal rights may be affected by the proposed class action settlement which, if approved by the court, will result in the release of certain claims.

Complete information about your rights as a class member, the settlement approval process, how to exclude yourself from the settlement class, how to object or comment on the settlement, and how to make a claim for replacement sprinklers and costs, including important dates and deadlines, is available in the Full Notice of Settlement.

FOR FURTHER INFORMATION AND A COPY OF THE RECALL AND FULL NOTICE OF CLASS ACTION SETTLEMENT,

CALL: **1-800-896-5685**

OR WRITE: **PO BOX 1555; FAIRMONT, MN 55021-1555**

OR VISIT: **http://www.xxxxxx.com/xxxx**

PLEASE DO NOT CONTACT THE COURT. DATED: March XX, 1999 COMMISSIONER BRUCE E. MITCHELL

The lawsuit and settlement are under consideration in Hart v. Central Sprinkler Corp. No. BCL 71727 (Cal. Super Ct.). It is pending before Commissioner Bruce E. Mitchell in the Los Angeles County Superior Court.

EXHIBIT 2

FROM MORGAN LEWIS & BOCKIUS (FRI) 10. 2'98 12:24/ST. 12:17/NO. 4860635523 P 1

CENTRAL SPRINKER NOTICE PLAN
NEWSPAPERS ADVERTISING IN 68 TARGETED COUNTIES

STATE	CITY	NEWSPAPER	CIRCULATION	INSERTIONS
AZ	Phoenix	Arizona Republic, Gazette	581,337	1
CA	Los Angeles	Times	1,400,397	2
CA	San Francisco	Chronicle, Examiner	639,719	1
CA	San Diego	Union-Tribune	452,980	1
CA	Orange County	Register	416,071	1
CA	Sacramento	Bee	350,345	1
CA	San Jose	Mercury News	347,275	1
CA	Los Angeles / Torrance	Daily Breeze	218,427	1
CA	Los Angeles	Daily News	218,427	1
CA	Oakland	Alameda-Oakland Metro Group	194,240	1
CA	Fremont-Newark	Argus	-	1
CA	Haywood	Review	-	1
CA	Pleasanton	Tri-Valley Herald	-	1
CA	San Mateo	County Times	-	1
CA	Fresno	Bee	188,793	1
CA	Riverside	Press-Enterprise	173,533	1
CA	Los Angeles	Press-Telegram	128,106	1
CA	Walnut Creek	Contra Costa Times Combo	106,140	1
CA	Antioch	Ledger/Dispatch	-	1
CA	Pleasanton	Valley Times	-	1
CA	Richmond	West County Times	-	1
CA	Ventura County	Star	103,069	1
CA	Santa Rosa	Press Democrat	102,745	1
CA	San Bernardino County	Sun	94,288	1
CA	Ontario-Inland Valley	Bulletin	83,388	1
CA	Stockton	Record	62,144	1
CA	Santa Barbara	News-Press	51,421	1
CA	Palm Springs	The Desert Sun	50,725	1
CA	Marin County	Independent Journal	42,772	1
CA	Redding	Record Searchlight	39,667	1

FROM MORGAN LEWIS & BOCKIUS (FRI) 10. 2'98 12.26/ST. 12:17/NO. 4860636523 P 12

STATE	CITY	NEWSPAPER	CIRCULATION	INSERTIONS
CA	Monterey	County Herald	39,238	2
CA	San Luis Obispo	Telegram - Tribune	33,722	1
CA	Santa Cruz	County Sentinel	29,829	1
CA	Salinas	Californian	21,096	2
CA	Vallejo	Times-Herald	20,477	1
CA	Napa	Napa Valley Register	19,639	1
CO	Denver	Post	456,237	1
CO	Denver	Rocky Mountain News	422,601	1
CO	Fort Collins	Coloradoan	35,165	1
DC	Washington	Post	1,129,519	1
DE	Wilmington	News Journal	150,287	1
FL	Orlando	Sentinel	388,722	1
FL	Tampa	Tribune	350,539	1
FL	West Palm Beach	Post	224,211	1
FL	Fort Myers	News-Press	103,387	1
FL	Naples	News	62,163	1
FL	Bradenton	Herald	49,545	1
GA	Atlanta	Journal-Constitution	701,982	1
GA	Savannah	News & Press	77,070	1
GA	Lawrenceville	Gwinnett Daily Post	12,799	1
HI	Honolulu	Advertiser & Star-Bulletin	193,318	1
IL	Chicago	Tribune	1,074,814	2
IL	Chicago	Sun-Times	486,116	2
IL	Chicago	Daily Herald	153,081	2
IL	Chicago	Southtown	85,167	2
MD	Baltimore	Sun	471,637	1
MD	Annapolis	Capital	83,507	1
NJ	Newton	New Jersey Herald	35,714	1
NY	New York City	Times	1,644,128	1
NY	White Plains	Gannett Suburban Newspapers	185,843	1
NY	Poughkeepsie	Journal	58,126	1
OH	Cleveland	Plain Dealer	513,045	1
OH	Columbus	Dispatch	383,829	1
OH	Delaware	Gazette	8,038	1

(FRI) 10. 2'98 12:27/ST. 12:17/NO. 4860636523 P 13
FROM MORGAN LEWIS & BOCKIUS

STATE	CITY	NEWSPAPER	CIRCULATION	INSERTIONS
PA	Philadelphia	Inquirer	901,891	2
PA	Pittsburgh	Post Gazette	424,431	1
PA	Philadelphia	Greater Philadelphia Newspapers	173,421	1
PA	York	Dispatch Record News	92,682	1
PA	Wilkes-Barre	Times Leader	67,763	1
PA	Chester	Delaware County Times	50,127	1
PA	West Chester	Local News	32,920	1
PA	Wilkes-Barre	Citizens' Voice	29,476	1
TX	Dallas	Morning News	800,306	1
UT	Salt Lake City	Tribune & Deseret News	230,259	1
VA	Virginia Beach	Virginian-Pilot	235,480	1
WA	Seattle	Times/Post-Intelligencer	502,134	1
WA	Bellevue	Eastside Journal	48,264	1
WA	Port Angeles	Peninsula News	27,464	1
WI	Madison	Capital Times	161,562	1
TOTALS		79 Newspapers	19,488,570	87

EXHIBIT 3

Central Sprinkler
Reach and Frequency by County

State	County	Reach	Freq.
WA	Clallam	99.9%	2.7
CA	Shasta	99.7%	2.4
GA	Gwinnett	99.7%	2.3
CA	Marin	99.3%	3.0
CO	Adams	99.3%	3.0
FL	Seminole	99.2%	2.3
WI	Dane	99.2%	2.1
CA	Sonoma	99.1%	2.5
FL	Hillsbourgh	99.1%	2.1
CA	Fresno	99.1%	2.1
PA	Montgomery	98.9%	3.0
CA	Yolo	98.9%	1.9
TX	Dallas	98.8%	2.1
CA	Orange	98.7%	2.9
MD	Baltimore	98.4%	2.1
CO	Larimer	98.3%	2.6
WA	King	98.3%	2.2
PA	York	98.3%	2.1
CA	Sacramento	98.3%	2.1
FL	Orange	98.2%	2.0
HI	Honolulu	98.0%	2.0
CA	Ventura	97.9%	2.6
AZ	Maricopa	97.4%	2.0
CA	Riverside	97.3%	2.6
MD	Howard	97.3%	2.2
MD	Montgomery	97.2%	1.9
CA	Napa	97.1%	2.6
VA	Fairfax	97.1%	1.9
UT	Salt Lake	96.9%	2.0
MD	Prince George's	96.9%	2.0
GA	Cobb	96.8%	2.1
IL	Du Page	96.7%	3.1
OH	Delaware	96.7%	1.7
PA	Bucks	96.5%	2.8
FL	Manatee	96.2%	2.3
GA	Chatham	96.2%	1.9
CA	Contra Costra	96.1%	2.4
VA	Virginia Beach	95.9%	1.9
CA	Santa Clara	95.8%	1.9
PA	Delaware	95.8%	2.7
CO	Boulder	95.2%	2.4
PA	Chester	95.1%	2.8
FL	Lee	94.8%	1.7
CA	San Luis Obispo	94.7%	2.2
MD	Anne Arundel	94.6%	2.4

Central Sprinkler
Reach and Frequency by County

State	County	Reach	Freq.
DE	New Castle	94.5%	1.9
CA	San Diego	94.4%	2.0
CA	San Mateo	94.1%	2.0
FL	Palm Beach	94.1%	1.9
CA	San Francisco	93.9%	1.8
IL	Lake	93.4%	2.9
FL	Collier	93.3%	1.7
NY	Dutchess	93.3%	1.6
NJ	Sussex	93.0%	2.4
CA	Santa Barbara	93.0%	2.3
CA	San Joaquin*	92.9%	2.2
CA	Santa Cruz*	92.4%	2.4
PA	Allegheny	92.1%	1.8
CA	Alameda*	91.9%	2.4
CA	San Bernardino*	91.4%	2.8
NY	Westchester*	91.0%	2.0
CA	Solano*	90.7%	2.4
PA	Luzerne	90.6%	2.2
CA	Los Angeles*	90.3%	2.4
OH	Cuyahoga*	90.1%	1.3
CA	Monterey*	89.9%	2.5
PA	Philadelphia*	89.7%	2.3
IL	Cook*	89.6%	2.7

* Includes Reach from TV Guide Local Edition

EXHIBIT 4

(Final Versions of Consumer Letter and AHJ Letter to be Provided by CPSC)

IMPORTANT SAFETY INFORMATION
RECALL OF CENTRAL SPRINKLER'S OMEGA BRAND FIRE SPRINKLERS

To Consumer/Homeowner:

The Consumer Product Safety Commission (CPSC) and Central Sprinkler recently announced the recall of **all** Omega fire sprinklers. According to the CPSC, these sprinklers are defective and could likely fail in a fire, which could result in bodily injury or death.

Please read the entire attached packet of information carefully. It is very important for you to determine if Omega sprinklers are installed in your home or building. The notice contains product information regarding the recall with the CPSC, as well as the preliminary settlement Central has reached with several private class action lawsuits. Please refer to the product information sheets which explain how to identify Omega sprinklers. Because sprinklers can be difficult to identify, we urge you to check with your architect, builder, sprinkler contractor, plumber, homeowners' association or property manager.

This recall is available to **all** owners of Omega fire sprinklers. To participate in the recall you **must** complete the enclosed Proof of Claim Form and Waiver and Release of Claims Form as soon as possible and return them to Central Sprinkler at the address indicated in the Proof of Claim Form. Central Sprinkler will mail you a free replacement sprinkler for every Omega sprinkler owned.

In order to receive replacement sprinklers and to qualify for reimbursement toward installation costs, you **must** complete the Proof of Claim Form and the accompanying Waiver and Release of Claim Form and return them to Central Sprinkler, **postmarked by August 1, 1999**. Although it is important to provide complete information, please submit your Proof of Claim Form **postmarked by August 1, 1999**, even if you can not provide complete responses to all the questions. In order to receive reimbursement toward installation costs, you **must** complete and return the Verification Form **within 365 days after you receive your replacement sprinklers**. Those owners filing a Proof of Claim and Waiver and of Release of Claims Forms postmarked after August 1, 1999 but before November 1, 2001, still qualify to receive replacement sprinklers (though not reimbursement). The recall terms may also provide benefits to those who have <u>already</u> replaced Omegas between May 1, 1996 and the effective date of the Commission's Order.

Please read all of this information carefully, as it explains your legal rights and obligations. If you have any questions about how to complete the forms or how to identify an Omega sprinkler, please call the Omega Hotline at 1-800-896-5685.

Do not delay! Take action today. Until you receive your free replacement sprinklers, you should have a well-defined and

rehearsed escape plan, an alternate plan and working smoke detectors on every floor of your home, especially near bedrooms.

IMPORTANT SAFETY INFORMATION
RECALL OF CENTRAL SPRINKLER'S OMEGA BRAND FIRE SPRINKLERS

October x, 1998

Dear Authority Having Jurisdiction:

I am writing to share with you urgent news regarding Omega fire sprinklers that may well be installed in your area. If you are not already, you must become aware of and familiarize yourself with this situation, the **new** steps being taken to correct it, and the vital role you play by your action in protecting consumer safety.

In cooperation with the United States Consumer Product Safety Commission (CPSC), Central Sprinkler is recalling approximately 8.4 million Omega series sprinklers now in service. According to the CPSC, these sprinklers are defective, and could likely fail in a fire.

The recall is comprehensive and fundamentally different from our prior remediation and notice efforts over the past three years. We are recalling all Omega sprinklers in service, including Omegas containing an EPDM o-ring made before June, 1996 and Omegas that contain a silicone o-ring made after June 1996. The recall encompasses Omegas from all dates of manufacture that are installed in all piping systems -- not simply steel, but polybutelene, CPVC, and copper, including those Omegas made after 1991. The recall involves no removal and testing of Omega field samples, upon which remediation was previously conditioned. The recall is not site-specific. It is total. As part of the recall, Central will provide to all Omega owners -- free of charge -- an approved Quick Response GB sprinkler as a replacement. The company has also established a special Trust to help building owners and homeowners defray the costs associated with replacing the sprinklers. The recall terms may also provide benefits to those who have already replaced Omegas between May 1, 1996 and the effective date of the Commission's Order.

The first order of business is to help identify locations containing Omega sprinklers and to help owners and residents of sprinklered properties determine whether they have Omegas. The attached Notice includes product identification to help you and property and homeowners in your area determine whether they have Omega sprinklers on their premises, and if they do, which model they have. As you may know, on all models of Omega sprinklers, you will see a heat collector assembly, comprised of one to three flat metal disks or fins and inside of which sit a plunger and fusible link. On some Omega models, the word "Central" or the letters "CSC" may be visible on the deflector shield.

ahj

Building and homeowners who have Omegas installed in their buildings should call 1-800-896-5685 as soon as possible to request a Proof of Claim Form and Waiver and Release of Claims Form, which must be completed in order to receive free replacement sprinklers. In order to receive any reimbursement for replacement costs, owners must submit a completed Proof of Claim Form and a Waiver and Release of Claims Form to Central Sprinkler by August 1, 1999. Details on completing the forms are included in the enclosed Notice packet. Please feel free to distribute copies of this letter to owners of Omegas in your jurisdiction. Those owners filing a Proof of Claim and Waiver and Release of Claims Form postmarked after August 1, 1999 but before November 1, 2001, still qualify to receive replacement sprinklers (though not reimbursement).

We are utilizing advertising, direct mail notices and news stories to inform consumers about the recall. However, in identifying buildings and residences that contain Omegas there is no substitute for personal intervention from fire protection leaders such as yourself. Along with the CPSC, we encourage you to help us spread the word about this recall to protect the public health and safety.

Please keep these two phone numbers handy when you and your constituents need further assistance:

- Call the Omega Information Line - 1-800-896-5685 to learn more about how to identify an Omega sprinkler and to obtain a Proof of Claim Form. This is the first number consumers should call to initiate the replacement effort.

- If you have any questions about the recall and replacement effort that are not answered by the Omega Information or the Notice packet, you may call Central Sprinkler's Omega Hotline at 1-800-xxx-xxxx.

On behalf of all of us who are committed to fire prevention and protection, we thank for your support in this effort.

ahj

IMPORTANT SAFETY INFORMATION
RECALL OF CENTRAL SPRINKLER'S OMEGA BRAND FIRE SPRINKLERS

October x, 1998

Dear Authority Having Jurisdiction:

I am writing to share with you urgent news regarding Omega fire sprinklers that may well be installed in your area. If you are not already, you must become aware of and familiarize yourself with this situation, the **new** steps being taken to correct it, and the vital role you play by your action in protecting consumer safety.

In cooperation with the United States Consumer Product Safety Commission (CPSC), Central Sprinkler is recalling approximately 8.4 million Omega series sprinklers now in service. According to the CPSC, these sprinklers are defective, and could likely fail in a fire.

The recall is comprehensive and fundamentally different from our prior remediation and notice efforts over the past three years. We are recalling all Omega sprinklers in service, including Omegas containing an EPDM o-ring made before June, 1996 and Omegas that contain a silicone o-ring made after June 1996. The recall encompasses Omegas from all dates of manufacture that are installed in all piping systems -- not simply steel, but polybutelene, CPVC, and copper, including those Omegas made after 1991. The recall involves no removal and testing of Omega field samples, upon which remediation was previously conditioned. The recall is not site-specific. It is total. As part of the recall, Central will provide to all Omega owners -- free of charge -- an approved Quick Response GB sprinkler as a replacement. The company has also established a special Trust to help building owners and homeowners defray the costs associated with replacing the sprinklers. The recall terms may also provide benefits to those who have already replaced Omegas between May 1, 1996 and the effective date of the Commission's Order.

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ahj

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We are utilizing advertising, direct mail notices and news stories to inform consumers about the recall. However, in identifying buildings and residences that contain Omegas there is no substitute for personal intervention from fire protection leaders such as yourself. Along with the CPSC, we encourage you to help us spread the word about this recall to protect the public health and safety.

Please keep these two phone numbers handy when you and your constituents need further assistance:

- Call the Omega Information Line - 1-800-896-5685 to learn more about how to identify an Omega sprinkler and to obtain a Proof of Claim Form. This is the first number consumers should call to initiate the replacement effort.

- If you have any questions about the recall and replacement effort that are not answered by the Omega Information or the Notice packet, you may call Central Sprinkler's Omega Hotline at 1-800-xxx-xxxx.

On behalf of all of us who are committed to fire prevention and protection, we thank for your support in this effort.

ahj

EXHIBIT 5

Newsgroups for Central Sprinkler Class Notice

acc.sbell.usa-today.law
acc.sbell.usa-today.real
alt.architecture
alt.architecture.alternative
alt.architecture.int-design
alt.building.announcements
alt.building.architecture
alt.building.construction
alt.building.consulting-specialty
alt.building.contractors
alt.building.distributor-dealer
alt.building.education
alt.building.engineering
alt.building.environment
alt.building.finance
alt.building.gov-issues
alt.building.health-safety
alt.building.interior-design
alt.building.law
alt.building.manufacturing
alt.building.planning-preservation
alt.building.realestate
alt.building.research
alt.building.union-assn-society
alt.business
alt.business.home
alt.business.misc
alt.construction
alt.consumers
alt.consumers.experiences
alt.current-events
alt.current-events.usa
alt.firefighters
alt.home.repair
alt.invest.real-estate
alt.lawyers
alt.real-estate.commercial.az
alt.real-estate.commercial.ca-central
alt.real-estate.commercial.ca-north
alt.real-estate.commercial.ca-south
alt.real-estate.commercial.fl-central
alt.real-estate.commercial.fl-north
alt.real-estate.commercial.fl-south
alt.real-estate.commercial.go
alt.real-estate.commercial.md
alt.real-estate.commercial.nj
alt.real-estate.commercial.ny
alt.real-estate.commercial.oh
alt.real-estate.commercial.pa
alt.real-estate.commercial.tx-northeast
alt.real-estate.commercial.tx-northwest
alt.real-estate.commercial.tx-southeast
alt.real-estate.commercial.tx-southwest
ca.news
clari.biz
clari.biz.industry.construction
clari.biz.industry.construction.cbd.acquisition
clari.biz.industry.construction.cbd.architect+eng
clari.biz.industry.construction.maintenance
clari.biz.industry.construction.misc
clari.biz.industry.construction.supplies
clari.biz.industry.real_est+const
clari.biz.industry.real_est+const.releases
clari.living.consumer
clari.local.california.sfbay.fire
clari.news.usa.law
clari.usa.law.misc
courts.usa
courts.usa.state
misc.consumer.house
misc.consumers
misc.consumers.house
misc.consumers.house.homeowner-assn
misc.invest.real-estate
misc.legal
misc.legal.moderated
nj.housing
nj.market.housing
nyc.market.housing
phl.housing
realtynet.commercial
realtynet.east
realtynet.general
realtynet.government
realtynet.invest
realtynet.lending
realtynet.mid
realtynet.qa
realtynet.residential
realtynet.south
realtynet.west
relcom.commerce.construction
relcom.consumers
sdnet.housing
sdnet.real-estate
sdnet.real-estate.agents
seattle.forsale.housing
us.legal
usa-today.law

United States
CONSUMER PRODUCT SAFETY COMMISSION
Washington, D.C. 20207

MEMORANDUM

DATE: 10/21/98

FROM: Central Litigation Team, Legal Division
RE: Central Consent Agreement and Order, Appendix D, Missing Page 2

Please insert the attached page as Page 2 of Appendix D in any and all copies of the Central Consent Agreement & Order that you have. All copies of the Agreement & Order were missing this page.

We apologize for any inconvenience.

Sadye Dunn
Orig. + 3 copies attached

i) Central Analysis of Omega Costs, Consumer Product Safety Commission Proposal. Heads with Silicone Rings Remediated, as of April 30, 1998

j) Central Analysis of Quarterly Cash Flow- CPSC Program, Heads with Silicone Rings Remediated (Cumulative % of Heads to be Located of 40%)

k) Central Analysis of Omega Costs, CPSC Proposal, Heads with Silicone Rings Remediated, as of April 30, 1998

l) Central Analysis of Quarterly Cash Flow- CPSC Program, Heads with Silicone Rings Remediated (Cumulative % of Heads to be Located of 40%)

4. Letter dated July 15, 1998 (with attachments), from J. Gordon Cooney, Jr., Morgan, Lewis & Bockius, L.L.P., to Eric H. Stone, CPSC. Additional attachments to this letter were received by the CPSC staff from Kathleen M. Sanzo, Morgan, Lewis & Bockius, L.L.P., on July 23, 27, and July 28, 1998.
   a) Letter dated July 9, 1998, from E. Talbot Briddell, Central Sprinkler Corporation, to Michael A. Bloom and J. Gordon Cooney, Jr.
   b) Report dated March 6, 1998 prepared by Select Equity Group Research
   c) Central Consolidated Balance Sheet, May & June 1998
   d) Central Consolidated Income Statement, May & June 1998
   e) Central Consolidated Statement of Cash Flows, May & June 1998
   f) Central Profit Improvement Program, April 29, 1998

5. Package on July 28, 1998 (consisting of Central Sprinkler Corporation Revised List of Documents: Presentation to Consumer Product Safety Commission, July 28, 1998), from E. Talbot Briddell to Eric L. Stone.
   a) Central Projected Fiscal 1998 Income Statement- 8 Months Actual and 4 Months Budget (Revised) (7/28/98)
   b) Central Projected Income Statement (7/28/98)
   c) Central Projected Income Statement Ratios (7/28/98)
   d) Central Income Statement Assumptions (7/28/98)
   e) Central Projected Balance Sheet Assets (7/28/98)
   f) Central Projected Balance Sheet Liabilities and Equity (7/28/98)
   g) Central Balance Sheet Assumptions (7/28/98)

Accepted and Approved:

CPSC Office of Compliance

Accepted and Approved:

[illegible] Central Sprinkler Co. and Central Sprinkler Corp.

cenmi.cpd
10/22/98 8:00 a.m.

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

ORIGINAL

In the Matter of **CENTRAL SPRINKLER CORP.** **451 North Cannon Avenue** **Lansdale, PA 19446** **and** **CENTRAL SPRINKLER CO.** **451 North Cannon Avenue** **Lansdale, PA 19446** **Respondents.**	**CPSC Docket No. 98-2** **Subpoena of a Non-Party:** **Michael Regola**

TO: Michael Regola
Senior Materials Engineer
ITT Cannon
666 E. Dyer Rd.
Santa Anna, California 92705

SUBPOENA

The staff of the Consumer Product Safety Commission ("staff") is conducting administrative litigation seeking an order determining that "Omega" series fire sprinklers manufactured by Central Sprinkler Corporation contain a defect which creates a substantial product hazard. 15 U.S.C. § 2064. The staff believes that you, as a former employee of Parco, Inc., possess information or have knowledge that may assist in the determination.

Therefore, the Commission authorizes issuance of this Subpoena to carry out its specific regulatory functions under Sections 5 and 27(b)(1), (3) & (4) of the Consumer Product Safety Act, 15 U.S.C. §§ 2054 and 2076(b)(1), (3) & (4), and 16 C.F.R. Part 1025. The Subpoena requires that you produce documents and appear for deposition.

I. GENERAL INSTRUCTIONS

The Commission's rules for adjudications govern this Subpoena. 16 C.F.R. Part 1025. Title 16 of the Code of Federal Regulations, section 1025.38, sets forth procedures for motions to quash or modify the terms of this Subpoena.

This Subpoena shall be answered by you.

The public disclosure of any information provided to the Commission under Subpoena shall be governed by the Freedom of Information Act, 5 U.S.C. § 552 and the Commission's regulations under that Act, 16 C.F.R. Part 1015. If you wish to request confidential treatment for any information provided, you should submit a request for such treatment with your responsive documents.

Questions about this Subpoena should be directed to Eric H. Singer, Trial Attorney, Consumer Product Safety Commission, Legal Division, 4330 East-West Highway, Bethesda 20814, (301) 504-0626, Ext. 1376.

II. DEFINITIONS

For purposes of this Subpoena, the following definitions apply:

a. The term "Parco" refers to Parco, Incorporated, presently doing business at 2150 South Parco Avenue, Ontario, California 91761, and any agent, subsidiary, affiliate, or division doing business under the Parco name, or any Parco franchisee.

b. The term "Central" refers to Central Sprinkler Corporation, presently residing at 451 N. Cannon Avenue, Lansdale, Pennsylvania 19446, and any agent, subsidiary, affiliate, or division doing business under the Central name or any other name.

c. The term "Omega" or "Omega sprinkler" includes, but is not limited to, the following sub-types or models of automatic fire sprinkler, all manufactured by Central: AC; C-1, C-1A, C-1A Pro, C-1A PRO ID; R-1, R-1A, R-1M, EC-20, EC-20A; EC-20 AID; Model M Upright, Model M Pendent, Model M Sidewall, HEC-12, HEC-12 ID; HEC-12 PRO; HEC-12A, HEC-12 RES; HEC-20; HEC-20 ID; Flow Control Pendent Flush, and Flow Control Pendent.

d. The term "record" or "records" means the original and any non-identical copy of any written, graphic, photographic, audio, or visual materials, however produced or reproduced, of any kind or description, whether sent or received or neither, including, but not limited to: papers, books, letters, telefacsimiles, photographs, motion pictures, video tapes, audio recordings, correspondence, drawings, sketches, schematics, manuals, blueprints, work papers, intra- and interoffice communications, transcripts, minutes, reports, and recordings of telephone or other conversations, or of interviews, conferences, or meetings, affidavits,

statements, summaries, opinions, court pleadings, reports, indices, studies, analyses, evaluations, contracts, licenses, agreements, questionnaires, answers to questionnaires, statistical records, desk calendar, appointment books, diaries, telephone logs, lists, tabulations, charts, graphs, data sheets, computer tapes, disks, cards, printouts or programs, microfilms, all other records kept by electronic, photographic, or mechanical means, and things similar to any of the foregoing, regardless of their author or origin, however denominated.

e. "Relating to" shall mean consisting of, referring to, describing, discussing, constituting, evidencing, containing, mentioning, concerning, pertaining to, citing, summarizing, analyzing, or bearing any logical or factual connection with the matter discussed.

III. SUBPOENA AD TESTIFICANDUM AND DUCES TECUM

You are ordered to appear at the Commission's headquarters at 4330 East West Highway, Bethesda, MD 20814 to testify with respect to the matters referred to above on the 14th day of August 1998 at 9:30 a.m. and continuing thereafter until your testimony is concluded.

You are also directed to produce, prior to testifying at the deposition above and by August 6, 1998, copies of all records in your possession, custody, or control relating to:

1) any and all tests, analyses, evaluations, or recommendations by Parco employees, former employees, agents, or contractors relating to elastomers,

lubricants, or elastomer design applications that were, or are, being carried out at the request of, in cooperation with, or for the benefit of Central; and

2) any and all records (including corrrespondence) relating to Central, to Central products (including, but not limited to, the Omega), or to elastomers as used, evaluated, or considered for use in actual or proposed Central products.

BY ORDER OF THE COMMISSION

Sadye E. Dunn

SADYE E. DUNN
Secretary
Consumer Products Safety Commission

DATE: August 4, 1998

Sadye E. Dunn

SADYE E. DUNN

DATE: August 4, 1998

SENDER:

- Complete item 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☒ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Michael Regola
Senior Materials Engineer
ITT Cannon
666 E. Dyer Road
Santa Anna, CA 92705

4a. Article Number
P 320 452 169

4b. Service Type

- ☐ Registered
- ☒ Certified
- ☐ Express Mail
- ☐ Insured
- ☐ Return Receipt for Merchandise
- ☐ COD

7. Date of Delivery
8/7

5. Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*
X Lisa Rodriguez

PS Form **3811**, December 1994 102595-97-B-0179 Domestic Return Receipt

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

UNITED STATES POSTAL SERVICE

First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

• Print your name, address, and ZIP Code in this box •

U.S. Consumer Product Safety Commission
Compliance Legal Division
4330 East West Highway, Room 613
Bethesda, MD 20814

Attn: Eric Singer

35

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

OFFICE OF THE SECRETARY
FREEDOM OF INFORMATION

TRIPLICATE

1998 JUL 23 A 10:53

In the Matter of	
CENTRAL SPRINKLER CORP.	
and	**CPSC Docket No. 98-2**
CENTRAL SPRINKLER CO.	
Respondents.	

APPLICATION BY COMPLAINT COUNSEL FOR THE ISSUANCE OF SUBPOENA ON A NON-PARTY: MICHAEL REGOLA

Pursuant to 16 C.F.R. § 1025.38, Complaint Counsel respectfully requests that the Presiding Officer forward, and that the Commission issue, the attached subpoena. Mr. Regola is a former employee of Parco, Inc., previously issued a subpoena in this matter. Parco manufactures and distributes a component part of the Omega sprinkler, the o-ring. Complaint Counsel knows Mr. Regola worked with Respondents with regard to the study and selection of o-ring material for the Omega.

Respectfully submitted,

Eric H. Singer, Esq.
Deborah S. Orlove, Esq.
Howard N. Tarnoff, Esq.
Complaint Counsel
U.S. Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814
301-504-0626

DATED: July 23, 1998

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

TRIPLICATE

In the Matter of **CENTRAL SPRINKLER CORP.** **451 North Cannon Avenue** **Lansdale, PA 19446** **and** **CENTRAL SPRINKLER CO.** **451 North Cannon Avenue** **Lansdale, PA 19446** **Respondents.**	**CPSC Docket No. 98-2** **Subpoena of a Non-Party:** **Michael Regola**

TO: Michael Regola
Senior Materials Engineer
ITT Cannon
666 E. Dyer Rd.
Santa Anna, California 92705

SUBPOENA

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Therefore, the Commission authorizes issuance of this Subpoena to carry out its specific regulatory functions under Sections 5 and 27(b)(1), (3) & (4) of the Consumer Product Safety Act, 15 U.S.C. §§ 2054 and 2076(b)(1), (3) & (4), and 16 C.F.R. Part 1025. The Subpoena requires that you produce documents and appear for deposition.

I. GENERAL INSTRUCTIONS

The Commission's rules for adjudications govern this Subpoena. 16 C.F.R. Part 1025. Title 16 of the Code of Federal Regulations, section 1025.38, sets forth procedures for motions to quash or modify the terms of this Subpoena.

This Subpoena shall be answered by you.

The public disclosure of any information provided to the Commission under Subpoena shall be governed by the Freedom of Information Act, 5 U.S.C. § 552 and the Commission's regulations under that Act, 16 C.F.R. Part 1015. If you wish to request confidential treatment for any information provided, you should submit a request for such treatment with your responsive documents.

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b. The term "Central" refers to Central Sprinkler Corporation, presently residing at 451 N. Cannon Avenue, Lansdale, Pennsylvania 19446, and any agent, subsidiary, affiliate, or division doing business under the Central name or any other name.

c. The term "Omega" or "Omega sprinkler" includes, but is not limited to, the following sub-types or models of automatic fire sprinkler, all manufactured by Central: AC; C-1, C-1A, C-1A Pro, C-1A PRO ID; R-1, R-1A, R-1M, EC-20, EC-20A; EC-20 AID; Model M Upright, Model M Pendent, Model M Sidewall, HEC-12, HEC-12 ID; HEC-12 PRO; HEC-12A, HEC-12 RES; HEC-20; HEC-20 ID; Flow Control Pendent Flush, and Flow Control Pendent.

d. The term "record" or "records" means the original and any non-identical copy of any written, graphic, photographic, audio, or visual materials, however produced or reproduced, of any kind or description, whether sent or received or neither, including, but not limited to: papers, books, letters, telefacsimiles, photographs, motion pictures, video tapes, audio recordings, correspondence, drawings, sketches, schematics, manuals, blueprints, work papers, intra- and interoffice communications, transcripts, minutes, reports, and recordings of telephone or other conversations, or of interviews, conferences, or meetings, affidavits,

statements, summaries, opinions, court pleadings, reports, indices, studies, analyses, evaluations, contracts, licenses, agreements, questionnaires, answers to questionnaires, statistical records, desk calendar, appointment books, diaries, telephone logs, lists, tabulations, charts, graphs, data sheets, computer tapes, disks, cards, printouts or programs, microfilms, all other records kept by electronic, photographic, or mechanical means, and things similar to any of the foregoing, regardless of their author or origin, however denominated.

e. "Relating to" shall mean consisting of, referring to, describing, discussing, constituting, evidencing, containing, mentioning, concerning, pertaining to, citing, summarizing, analyzing, or bearing any logical or factual connection with the matter discussed.

III. SUBPOENA AD TESTIFICANDUM AND DUCES TECUM

You are ordered to appear at the Commission's headquarters at 4330 East West Highway, Bethesda, MD 20814 to testify with respect to the matters referred to above on the 14th day of August 1998 at 9:30 a.m. and continuing thereafter until your testimony is concluded.

You are also directed to produce, prior to testifying at the deposition above and by August 6, 1998, copies of all records in your possession, custody, or control relating to:

1) any and all tests, analyses, evaluations, or recommendations by Parco employees, former employees, agents, or contractors relating to elastomers,

lubricants, or elastomer design applications that were, or are, being carried out at the request of, in cooperation with, or for the benefit of Central; and

2) any and all records (including corrrespondence) relating to Central, to Central products (including, but not limited to, the Omega), or to elastomers as used, evaluated, or considered for use in actual or proposed Central products.

BY ORDER OF THE COMMISSION

Sadye E. Dunn

SADYE E. DUNN
Secretary
Consumer Products Safety Commission

DATE: August 4, 1998

Sadye E. Dunn

SADYE E. DUNN

DATE: August 4, 1998

ORIGINAL

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	
CENTRAL SPRINKLER CORP. 451 North Cannon Avenue Lansdale, PA 19446	CPSC Docket No. 98-2
and	Subpoena of a Non-Party: Parco, Inc.
CENTRAL SPRINKLER CO. 451 North Cannon Avenue Lansdale, PA 19446	
Respondents.	

TO: Louis W. Burgener
President & Chief Executive Officer
Parco, Inc
2150 South Parco Avenue
Ontario, CA 91761

SUBPOENA

The staff of the Consumer Product Safety Commission ("staff") is conducting administrative litigation seeking an order determining that "Omega" series fire sprinklers manufactured by Central Sprinkler Corporation contain a defect which creates a substantial product hazard. 15 U.S.C. § 2064. The staff believes that Parco, Inc. and its officers, employees, and agents possess or control information that may assist in the determination. Therefore, the Commission authorizes issuance of this Subpoena to carry out its specific regulatory functions under Sections 5 and 27(b)(1), (3) & (4) of the Consumer Product

Safety Act, 15 U.S.C. §§ 2054 and 2076(b)(1), (3) & (4), and 16 C.F.R. Part 1025. The Subpoena requires that you testify at a deposition and produce documents and tangible things.

I. GENERAL INSTRUCTIONS

The Commission's rules for adjudications govern this Subpoena. 16 C.F.R. Parts 1025. Section 1025.38 sets forth procedures for motions to quash or modify the terms of this Subpoena.

This Subpoena shall be answered by the organization and individual named above, or such other responsible individual who has the same or greater knowledge of and control over the information being sought. He or she must respond to this Subpoena within 5 calendar days.

The public disclosure of any information provided to the Commission under Subpoena shall be governed by the Freedom of Information Act, 5 U.S.C. § 552 and the Commission's regulations under that Act, 16 C.F.R. Part 1015. If you wish to request confidential treatment for any information provided, you should submit a request for such treatment in accordance with 16 C.F.R. §§ 1015.18 and 1118.3(e).

Questions about this Subpoena should be directed to Eric H. Singer, Trial Attorney, Consumer Product Safety Commission, Legal Division, 4330 East-West Highway, Bethesda 20814, (301) 504-0626, Ext. 1376.

II. DEFINITIONS

For purposes of this Subpoena, the following definitions apply:

a. The term "Parco" refers to Parco, Incorporated, presently doing business at 2150 South Parco Avenue, Ontario, California 91761, and any agent, subsidiary, affiliate, or division doing business under the Parco name, or any Parco franchisee.

b. The term "Central" refers to Central Sprinkler Corporation, presently residing at 451 N. Cannon Avenue, Lansdale, Pennsylvania 19446, and any agent, subsidiary, affiliate, or division doing business under the Central name or any other name.

c. The term "Omega" or "Omega sprinkler" includes, but is not limited to, the following sub-types or models of automatic fire sprinkler, all manufactured by Central: AC; C-1, C-1A, C-1A Pro, C-1A PRO ID; R-1, R-1A, R-1M, EC-20, EC-20A; EC-20 AID; Model M Upright, Model M Pendent, Model M Sidewall, HEC-12, HEC-12 ID; HEC-12 PRO; HEC-12A, HEC-12 RES; HEC-20; HEC-20 ID; and Flow Control.

d. The term "record" or "records" means the original and any non-identical copy of any written, graphic, photographic, audio, or visual materials, however produced or reproduced, of any kind or description, whether sent or received or neither, including, but not limited to: papers, books, letters, telefacsimiles, photographs, motion pictures, video tapes, audio

recordings, correspondence, drawings, sketches, schematics, manuals, blueprints, work papers, intra- and interoffice communications, transcripts, minutes, reports, and recordings of telephone or other conversations, or of interviews, conferences, or meetings, affidavits, statements, summaries, opinions, court pleadings, reports, indices, studies, analyses, evaluations, contracts, licenses, agreements, questionnaires, answers to questionnaires, statistical records, desk calendar, appointment books, diaries, telephone logs, lists, tabulations, charts, graphs, data sheets, computer tapes, disks, cards, printouts or programs, microfilms, all other records kept by electronic, photographic, or mechanical means, and things similar to any of the foregoing, regardless of their author or origin, however denominated.

e. "Relating to" shall mean consisting of, referring to, describing, discussing, constituting, evidencing, containing, mentioning, concerning, pertaining to, citing, summarizing, analyzing, or bearing any logical or factual connection with the matter discussed.

III. SUBPOENA AD TESTIFICANDUM AND DUCES TECUM

You are ordered to appear at the Commission's headquarters at 4330 East West Highway, Bethesda, MD 20814 to testify with respect to the matters referred to above on the 13th day of August 1998 at 9:30 a.m. and continuing thereafter until your testimony is concluded.

You are also directed to produce, prior to testifying at the deposition above and by August 3, 1998, copies of all records relating to:

1) Parco's o-ring compound numbers 5601-70, 1235-60, 1235-70, and 1235-80, including the following:
   a. the precise ingredient polymers, reinforcing agents, curing or vulcanizing agents, plasticizers, accelerators, retarders, anti-oxidants, anti-ozonants, or anti-rads to build the sealing material for such o-rings;
   b. all fluid service guide information, indicating percentage volume change;
   c. all recommended and non-recommended media;
   d. any and all material test data sheets, including data on age resistance and storage conditions, physical and mechanical properties, thermal properties, and chemical properties;
   e. any and all recommended lubricants; and
   f. any and all assembly and design procedures or recommendations for dynamic applications.
2) any and all tests, analyses, evaluations, or recommendations by Parco employees, former employees, agents, or contractors relating to elastomers (including but limited to those compounds mentioned in 1), above), and lubricants that were, or are, being carried out at the request of, in cooperation with, or

for the benefit of Central.

3) any and all correspondence or written or electronically stored documents of any kind in your possession or control relating to Central, to Central products (including, but not limited to, the Omega), or to elastomers as used, evaluated, or considered for use in actual or proposed Central products.

You are further directed to produce, prior to testifying at the deposition above and by August 3, 1998, samples of each of the four o-rings referred to in 1), above.

BY ORDER OF THE COMMISSION

Sadye E. Dunn

SADYE E. DUNN
Secretary
Consumer Products Safety Commission

DATE: July 22, 1998

Sadye E. Dunn

SADYE E. DUNN

DATE: July 22, 1998

CPSC/OFC OF THE SECRETARY
COMMUNICATION
1998 JUL 13 P 12:46

U.S. CONSUMER PRODUCT SAFETY COMMISSION
WASHINGTON, D.C. 20207

OFFICE OF COMPLIANCE
Legal Division

Eric H. Singer
Trial Attorney
Tel: 301-504-0626 ext. 1376
Fax: 301-504-0359
e-mail: esinger@cpsc.gov

July 13, 1998

Ms. Sadye E. Dun
Secretary
United States Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

Re: In re Central Sprinkler Corp., et al. (CPSC Dkt. 98-2)

Dear Ms. Dunn:

Pursuant to 16 C.F.R. § 1025.38, enclosed for immediate forwarding to the Presiding Officer are the original, duplicate, and triplicate of both an application for a subpoena on a third party, Parco, Inc. and the subpoena itself.

Thank you for your attention to this matter.

Respectfully,

Eric H. Singer

Enclosures (6)

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION
1998 JUL 13 P 12:46

ORIGINAL

In the Matter of	)	
	)	
CENTRAL SPRINKLER CORP.	)	
	)	
and	)	**CPSC Docket No. 98-2**
	)	
CENTRAL SPRINKLER CO.	)	
	)	
Respondents.	)	
	)	

APPLICATION BY COMPLAINT COUNSEL FOR THE ISSUANCE OF SUBPOENA ON A NON-PARTY: PARCO, INC.

Comes now, Complaint Counsel, and respectfully requests that the Presiding Officer forward, and that the Commission issue, the attached subpoena for the reasons stated therein. Complaint Counsel submits this application for a subpoena on a non-party pursuant to 16 C.F.R. § 1025.38.

Respectfully submitted,

Eric H. Singer, Esq.
Deborah S. Orlove, Esq.
Howard N. Tarnoff, Esq.
Complaint Counsel
U.S. Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814
301-504-0626

DATED: July 13, 1998

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

LOUIS W. BURGENER
PRESIDENT & CEO
PARCO, INC.
2150 SOUTH PARCO AVE.
ONTARIO, CA 91761

4a. Article Number

P 320 452 247

4b. Service Type

☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

7-27-98

5. Received By: *(Print Name)*

6. Signature: *(Addressee or Agent)*

X

8. Addressee's Address *(Only if requested and fee is paid)*

PS Form **3811**, December 1994 102595-97-B-0179 Domestic Return Receipt

Thank you for using Return Receipt Service.

UNITED STATES POSTAL SERVICE

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Postage & Fees Paid
USPS
Permit No. G-10

• Print your name, address, and ZIP Code in this box •

U.S. Consumer Product Safety Commission
Compliance Legal Division
4330 East West Highway, Room 613
Bethesda, MD 20814

ATTN: ERIC SINGER

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

SECRETARY
FREEDOM OF INFORMATION

1998 JUL 13 P 12:46

TRIPLICATE

In the Matter of	)	
CENTRAL SPRINKLER CORP.	)	
and	)	**CPSC Docket No. 98-2**
CENTRAL SPRINKLER CO.	)	
Respondents.	)	

APPLICATION BY COMPLAINT COUNSEL FOR THE ISSUANCE OF SUBPOENA ON A NON-PARTY: PARCO, INC.

Comes now, Complaint Counsel, and respectfully requests that the Presiding Officer forward, and that the Commission issue, the attached subpoena for the reasons stated therein. Complaint Counsel submits this application for a subpoena on a non-party pursuant to 16 C.F.R. § 1025.38.

Respectfully submitted,

Eric H. Singer, Esq.
Deborah S. Orlove, Esq.
Howard N. Tarnoff, Esq.
Complaint Counsel
U.S. Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814
301-504-0626

DATED: July 13, 1998

TRIPLICATE

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of CENTRAL SPRINKLER CORP. 451 North Cannon Avenue Lansdale, PA 19446 and CENTRAL SPRINKLER CO. 451 North Cannon Avenue Lansdale, PA 19446 Respondents.	CPSC Docket No. 98-2 Subpoena of a Non-Party: Parco, Inc.

TO: Louis W. Burgener
President & Chief Executive Officer
Parco, Inc
2150 South Parco Avenue
Ontario, CA 91761

SUBPOENA

The staff of the Consumer Product Safety Commission ("staff") is conducting administrative litigation seeking an order determining that "Omega" series fire sprinklers manufactured by Central Sprinkler Corporation contain a defect which creates a substantial product hazard. 15 U.S.C. § 2064. The staff believes that Parco, Inc. and its officers, employees, and agents possess or control information that may assist in the determination. Therefore, the Commission authorizes issuance of this Subpoena to carry out its specific regulatory functions under Sections 5 and 27(b)(1), (3) & (4) of the Consumer Product

Safety Act, 15 U.S.C. §§ 2054 and 2076(b)(1), (3) & (4), and 16 C.F.R. Part 1025. The Subpoena requires that you testify at a deposition and produce documents and tangible things.

I. GENERAL INSTRUCTIONS

The Commission's rules for adjudications govern this Subpoena. 16 C.F.R. Parts 1025. Section 1025.38 sets forth procedures for motions to quash or modify the terms of this Subpoena.

This Subpoena shall be answered by the organization and individual named above, or such other responsible individual who has the same or greater knowledge of and control over the information being sought. He or she must respond to this Subpoena within 5 calendar days.

The public disclosure of any information provided to the Commission under Subpoena shall be governed by the Freedom of Information Act, 5 U.S.C. § 552 and the Commission's regulations under that Act, 16 C.F.R. Part 1015. If you wish to request confidential treatment for any information provided, you should submit a request for such treatment in accordance with 16 C.F.R. §§ 1015.18 and 1118.3(e).

Questions about this Subpoena should be directed to Eric H. Singer, Trial Attorney, Consumer Product Safety Commission, Legal Division, 4330 East-West Highway, Bethesda 20814, (301) 504-0626, Ext. 1376.

II. DEFINITIONS

For purposes of this Subpoena, the following definitions apply:

a. The term "Parco" refers to Parco, Incorporated, presently doing business at 2150 South Parco Avenue, Ontario, California 91761, and any agent, subsidiary, affiliate, or division doing business under the Parco name, or any Parco franchisee.

b. The term "Central" refers to Central Sprinkler Corporation, presently residing at 451 N. Cannon Avenue, Lansdale, Pennsylvania 19446, and any agent, subsidiary, affiliate, or division doing business under the Central name or any other name.

c. The term "Omega" or "Omega sprinkler" includes, but is not limited to, the following sub-types or models of automatic fire sprinkler, all manufactured by Central: AC; C-1, C-1A, C-1A Pro, C-1A PRO ID; R-1, R-1A, R-1M, EC-20, EC-20A; EC-20 AID; Model M Upright, Model M Pendent, Model M Sidewall, HEC-12, HEC-12 ID; HEC-12 PRO; HEC-12A, HEC-12 RES; HEC-20; HEC-20 ID; and Flow Control.

d. The term "record" or "records" means the original and any non-identical copy of any written, graphic, photographic, audio, or visual materials, however produced or reproduced, of any kind or description, whether sent or received or neither, including, but not limited to: papers, books, letters, telefacsimiles, photographs, motion pictures, video tapes, audio

recordings, correspondence, drawings, sketches, schematics, manuals, blueprints, work papers, intra- and interoffice communications, transcripts, minutes, reports, and recordings of telephone or other conversations, or of interviews, conferences, or meetings, affidavits, statements, summaries, opinions, court pleadings, reports, indices, studies, analyses, evaluations, contracts, licenses, agreements, questionnaires, answers to questionnaires, statistical records, desk calendar, appointment books, diaries, telephone logs, lists, tabulations, charts, graphs, data sheets, computer tapes, disks, cards, printouts or programs, microfilms, all other records kept by electronic, photographic, or mechanical means, and things similar to any of the foregoing, regardless of their author or origin, however denominated.

e. "Relating to" shall mean consisting of, referring to, describing, discussing, constituting, evidencing, containing, mentioning, concerning, pertaining to, citing, summarizing, analyzing, or bearing any logical or factual connection with the matter discussed.

III. SUBPOENA AD TESTIFICANDUM AND DUCES TECUM

You are ordered to appear at the Commission's headquarters at 4330 East West Highway, Bethesda, MD 20814 to testify with respect to the matters referred to above on the 13th day of August 1998 at 9:30 a.m. and continuing thereafter until your testimony is concluded.

You are also directed to produce, prior to testifying at the deposition above and by August 3, 1998, copies of all records relating to:

1) Parco's o-ring compound numbers 5601-70, 1235-60, 1235-70, and 1235-80, including the following:
   a. the precise ingredient polymers, reinforcing agents, curing or vulcanizing agents, plasticizers, accelerators, retarders, anti-oxidants, anti-ozonants, or anti-rads to build the sealing material for such o-rings;
   b. all fluid service guide information, indicating percentage volume change;
   c. all recommended and non-recommended media;
   d. any and all material test data sheets, including data on age resistance and storage conditions, physical and mechanical properties, thermal properties, and chemical properties;
   e. any and all recommended lubricants; and
   f. any and all assembly and design procedures or recommendations for dynamic applications.
2) any and all tests, analyses, evaluations, or recommendations by Parco employees, former employees, agents, or contractors relating to elastomers (including but limited to those compounds mentioned in 1), above), and lubricants that were, or are, being carried out at the request of, in cooperation with, or

for the benefit of Central.

3) any and all correspondence or written or electronically stored documents of any kind in your possession or control relating to Central, to Central products (including, but not limited to, the Omega), or to elastomers as used, evaluated, or considered for use in actual or proposed Central products.

You are further directed to produce, prior to testifying at the deposition above and by August 3, 1998, samples of each of the four o-rings referred to in 1), above.

BY ORDER OF THE COMMISSION

Sadye E. Dunn

SADYE E. DUNN
Secretary
Consumer Products Safety Commission

DATE: July 22, 1998

Sadye E. Dunn

SADYE E. DUNN

DATE: July 22, 1998

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

ORIGINAL

In the Matter of **CENTRAL SPRINKLER CORP.** **451 North Cannon Avenue** **Lansdale, PA 19446** **and** **CENTRAL SPRINKLER CO.** **451 North Cannon Avenue** **Lansdale, PA 19446** **Respondents.**	**CPSC Docket No. 98-2** **Subpoena of a Non-Party:** **Dr. Ronald Campbell**

TO: Dr. Ronald Campbell
Vice President, Research & Development
Wynn's Precision, Inc.
104 Hartmann Drive
Lebanon, TN 37087

SUBPOENA

The staff of the Consumer Product Safety Commission ("staff") is conducting administrative litigation seeking an order determining that "Omega" series fire sprinklers manufactured by Central Sprinkler Corporation contain a defect which creates a substantial product hazard. 15 U.S.C. § 2064. The staff believes that you, as a former senior executive at Parco, Inc, and in your current position with Wynn's Precision, Inc., possess information or

have knowledge that may assist in the determination. Therefore, the Commission authorizes issuance of this Subpoena to carry out its specific regulatory functions under Sections 5 and 27(b)(1), (3) & (4) of the Consumer Product Safety Act, 15 U.S.C. §§ 2054 and 2076(b)(1), (3) & (4), and 16 C.F.R. Part 1025. The Subpoena requires that you produce documents and tangible things and appear for deposition.

I. GENERAL INSTRUCTIONS

The Commission's rules for adjudications govern this Subpoena. 16 C.F.R. Part 1025. Title 16 of the Code of Federal Regulations, section 1025.38, sets forth procedures for motions to quash or modify the terms of this Subpoena.

This Subpoena shall be answered by the organization and individual named above, or such other responsible individual who has the same or greater knowledge of and control over the information being sought.

The public disclosure of any information provided to the Commission under Subpoena shall be governed by the Freedom of Information Act, 5 U.S.C. § 552 and the Commission's regulations under that Act, 16 C.F.R. Part 1015. If you wish to request confidential treatment for any information provided, you should submit a request for such treatment with your responsive documents.

Questions about this Subpoena should be directed to Eric H. Singer, Trial Attorney, Consumer Product Safety Commission, Legal Division, 4330 East-West Highway, Bethesda 20814, (301) 504-0626, Ext. 1376.

II. DEFINITIONS

For purposes of this Subpoena, the following definitions apply:

a. The term "Parco" refers to Parco, Incorporated, presently doing business at 2150 South Parco Avenue, Ontario, California 91761, and any agent, subsidiary, affiliate, or division doing business under the Parco name, or any Parco franchisee.

b. The term "Wynn's" refers to Wynn's - Precision, Inc. presently residing at 104 Hartmann Drive, Lebanon, TN 37087, and any agent, subsidiary, affiliate, facility, or division doing business under the "Wynn's" or "Precision" or "Wynn's Precision" name.

c. The term "Central" refers to Central Sprinkler Corporation, presently residing at 451 N. Cannon Avenue, Lansdale, Pennsylvania 19446, and any agent, subsidiary, affiliate, or division doing business under the Central name or any other name.

d. The term "Omega" or "Omega sprinkler" includes, but is not limited to, the following sub-types or models of automatic fire sprinkler, all manufactured by Central: AC; C-1, C-1A, C-1A Pro, C-1A PRO ID; R-1, R-1A, R-1M, EC-20, EC-20A; EC-20 AID; Model M Upright, Model M Pendent, Model M Sidewall, HEC-12, HEC-12 ID; HEC-12 PRO; HEC-12A, HEC-12 RES; HEC-20; HEC-20 ID; Flow Control Pendent Flush, and Flow Control Pendent.

e. The term "record" or "records" means the original and any non-identical copy of any written, graphic, photographic, audio, or visual materials, however produced or reproduced, of any kind or description, whether sent or received or neither, including, but not limited to: papers, books, letters, telefacsimiles, photographs, motion pictures, video tapes,

audio recordings, correspondence, drawings, sketches, schematics, manuals, blueprints, work papers, intra- and interoffice communications, transcripts, minutes, reports, and recordings of telephone or other conversations, or of interviews, conferences, or meetings, affidavits, statements, summaries, opinions, court pleadings, reports, indices, studies, analyses, evaluations, contracts, licenses, agreements, questionnaires, answers to questionnaires, statistical records, desk calendar, appointment books, diaries, telephone logs, lists, tabulations, charts, graphs, data sheets, computer tapes, disks, cards, printouts or programs, microfilms, all other records kept by electronic, photographic, or mechanical means, and things similar to any of the foregoing, regardless of their author or origin, however denominated.

f. "Relating to" shall mean consisting of, referring to, describing, discussing, constituting, evidencing, containing, mentioning, concerning, pertaining to, citing, summarizing, analyzing, or bearing any logical or factual connection with the matter discussed.

III. SUBPOENA AD TESTIFICANDUM AND DUCES TECUM

You are ordered to appear at the Commission's headquarters at 4330 East West Highway, Bethesda, MD 20814 to testify with respect to the matters referred to above on the 13th day of August 1998 at 9:30 a.m. and continuing thereafter until your testimony is concluded.

You are also directed to produce, prior to testifying at the deposition above and by August 5, 1998, copies of all records in Wynn's or your personal possession, custody, or control relating to:

1) Wynn's o-ring compound number 3407 (70 durometer), including the following:

   a. the precise ingredient polymers, reinforcing agents, curing or vulcanizing agents, plasticizers, accelerators, retarders, anti-oxidants, anti-ozonants, or anti-rads to build the sealing material for such o-rings;

   b. all fluid service guide information, indicating percentage volume change;

   c. all recommended and non-recommended media;

   d. any and all material test data sheets, including data on age resistance and storage conditions, physical and mechanical properties, thermal properties, and chemical properties;

   e. any and all recommended lubricants; and

   f. any and all assembly and design procedures or recommendations for dynamic applications.

2) any and all tests, analyses, evaluations, or recommendations by Wynn's or Parco employees, former employees, agents, or contractors relating to elastomers, lubricants, or elastomer design applications that were, or are, being carried out at the request of, in cooperation with, or for the benefit of Central; and

3) any and all records (including correspondence) relating to Central, to Central products (including, but not limited to, the Omega), or to elastomers as used, evaluated, or considered for use in actual or proposed Central products.

You are further directed to produce, prior to testifying at the deposition above and by August 5, 1998, samples of Wynn's o-ring compound 3407 (70 durometer, sizes -011 and -009).

BY ORDER OF THE COMMISSION

Sadye E. Dunn

SADYE E. DUNN
Secretary
Consumer Products Safety Commission

DATE: August 4, 1998

Sadye E. Dunn

SADYE E. DUNN

DATE: August 4, 1998

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☑ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Dr. Ronald Campbell
Vice President, Research & Development
Wynn's Precision, Inc.
104 Hartmann Drive
Lebanon, TN 37087

4a. Article Number P 320 452 168

4b. Service Type

- ☐ Registered
- ☑ Certified
- ☐ Express Mail
- ☐ Insured
- ☐ Return Receipt for Merchandise
- ☐ COD

7. Date of Delivery

5. Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*

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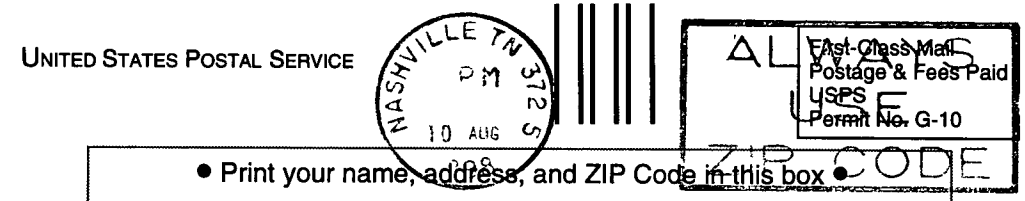

U.S. Consumer Product Safety Commission
Compliance Legal Division
4330 East West Highway, Room 613
Bethesda, MD 20814

Attn: Eric Singer

TRIPLICATE

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of CENTRAL SPRINKLER CORP. 451 North Cannon Avenue Lansdale, PA 19446 and CENTRAL SPRINKLER CO. 451 North Cannon Avenue Lansdale, PA 19446 Respondents.	CPSC Docket No. 98-2 Subpoena of a Non-Party: Dr. Ronald Campbell

TO: Dr. Ronald Campbell
Vice President, Research & Development
Wynn's Precision, Inc.
104 Hartmann Drive
Lebanon, TN 37087

SUBPOENA

The staff of the Consumer Product Safety Commission ("staff") is conducting administrative litigation seeking an order determining that "Omega" series fire sprinklers manufactured by Central Sprinkler Corporation contain a defect which creates a substantial product hazard. 15 U.S.C. § 2064. The staff believes that you, as a former senior executive at Parco, Inc, and in your current position with Wynn's Precision, Inc., possess information or

have knowledge that may assist in the determination. Therefore, the Commission authorizes issuance of this Subpoena to carry out its specific regulatory functions under Sections 5 and 27(b)(1), (3) & (4) of the Consumer Product Safety Act, 15 U.S.C. §§ 2054 and 2076(b)(1), (3) & (4), and 16 C.F.R. Part 1025. The Subpoena requires that you produce documents and tangible things and appear for deposition.

I. GENERAL INSTRUCTIONS

The Commission's rules for adjudications govern this Subpoena. 16 C.F.R. Part 1025. Title 16 of the Code of Federal Regulations, section 1025.38, sets forth procedures for motions to quash or modify the terms of this Subpoena.

This Subpoena shall be answered by the organization and individual named above, or such other responsible individual who has the same or greater knowledge of and control over the information being sought.

The public disclosure of any information provided to the Commission under Subpoena shall be governed by the Freedom of Information Act, 5 U.S.C. § 552 and the Commission's regulations under that Act, 16 C.F.R. Part 1015. If you wish to request confidential treatment for any information provided, you should submit a request for such treatment with your responsive documents.

Questions about this Subpoena should be directed to Eric H. Singer, Trial Attorney, Consumer Product Safety Commission, Legal Division, 4330 East-West Highway, Bethesda 20814, (301) 504-0626, Ext. 1376.

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a. The term "Parco" refers to Parco, Incorporated, presently doing business at 2150 South Parco Avenue, Ontario, California 91761, and any agent, subsidiary, affiliate, or division doing business under the Parco name, or any Parco franchisee.

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c. The term "Central" refers to Central Sprinkler Corporation, presently residing at 451 N. Cannon Avenue, Lansdale, Pennsylvania 19446, and any agent, subsidiary, affiliate, or division doing business under the Central name or any other name.

d. The term "Omega" or "Omega sprinkler" includes, but is not limited to, the following sub-types or models of automatic fire sprinkler, all manufactured by Central: AC; C-1, C-1A, C-1A Pro, C-1A PRO ID; R-1, R-1A, R-1M, EC-20, EC-20A; EC-20 AID; Model M Upright, Model M Pendent, Model M Sidewall, HEC-12, HEC-12 ID; HEC-12 PRO; HEC-12A, HEC-12 RES; HEC-20; HEC-20 ID; Flow Control Pendent Flush, and Flow Control Pendent.

e. The term "record" or "records" means the original and any non-identical copy of any written, graphic, photographic, audio, or visual materials, however produced or reproduced, of any kind or description, whether sent or received or neither, including, but not limited to: papers, books, letters, telefacsimiles, photographs, motion pictures, video tapes,

audio recordings, correspondence, drawings, sketches, schematics, manuals, blueprints, work papers, intra- and interoffice communications, transcripts, minutes, reports, and recordings of telephone or other conversations, or of interviews, conferences, or meetings, affidavits, statements, summaries, opinions, court pleadings, reports, indices, studies, analyses, evaluations, contracts, licenses, agreements, questionnaires, answers to questionnaires, statistical records, desk calendar, appointment books, diaries, telephone logs, lists, tabulations, charts, graphs, data sheets, computer tapes, disks, cards, printouts or programs, microfilms, all other records kept by electronic, photographic, or mechanical means, and things similar to any of the foregoing, regardless of their author or origin, however denominated.

f. "Relating to" shall mean consisting of, referring to, describing, discussing, constituting, evidencing, containing, mentioning, concerning, pertaining to, citing, summarizing, analyzing, or bearing any logical or factual connection with the matter discussed.

III. SUBPOENA AD TESTIFICANDUM AND DUCES TECUM

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1) Wynn's o-ring compound number 3407 (70 durometer), including the following:

   a. the precise ingredient polymers, reinforcing agents, curing or vulcanizing agents, plasticizers, accelerators, retarders, anti-oxidants, anti-ozonants, or anti-rads to build the sealing material for such o-rings;

   b. all fluid service guide information, indicating percentage volume change;

   c. all recommended and non-recommended media;

   d. any and all material test data sheets, including data on age resistance and storage conditions, physical and mechanical properties, thermal properties, and chemical properties;

   e. any and all recommended lubricants; and

   f. any and all assembly and design procedures or recommendations for dynamic applications.

2) any and all tests, analyses, evaluations, or recommendations by Wynn's or Parco employees, former employees, agents, or contractors relating to elastomers, lubricants, or elastomer design applications that were, or are, being carried out at the request of, in cooperation with, or for the benefit of Central; and

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BY ORDER OF THE COMMISSION

Sadye E. Dunn

SADYE E. DUNN
Secretary
Consumer Products Safety Commission

DATE: August 4, 1998

Sadye E. Dunn

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DATE: August 4, 1998

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

ORIGINAL

In the Matter of **CENTRAL SPRINKLER CORP.** **451 North Cannon Avenue** **Lansdale, PA 19446** **and** **CENTRAL SPRINKLER CO.** **451 North Cannon Avenue** **Lansdale, PA 19446** **Respondents.**	**CPSC Docket No. 98-2** **Subpoena of a Non-Party:** **Dr. Ronald Campbell**

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Secretary
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Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☑ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Dr. Ronald Campbell
Vice President, Research & Development
Wynn's Precision, Inc.
104 Hartmann Drive
Lebanon, TN 37087

4a. Article Number P 320 452 168

4b. Service Type

- ☐ Registered
- ☑ Certified
- ☐ Express Mail
- ☐ Insured
- ☐ Return Receipt for Merchandise
- ☐ COD

7. Date of Delivery

5. Received By: *(Print Name)*

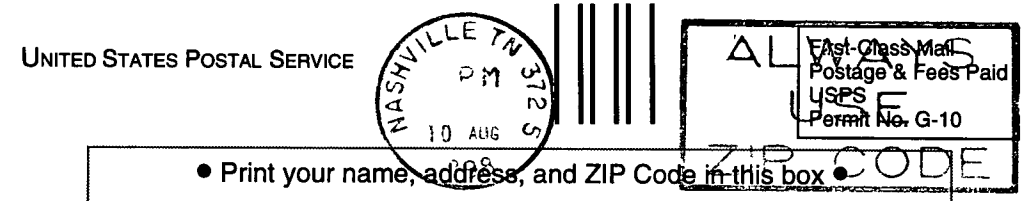
8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*

X

PS Form 3811, December 1994 102595-97-B-0179 Domestic Return Receipt

Thank you for using Return Receipt Service.



U.S. Consumer Product Safety Commission
Compliance Legal Division
4330 East West Highway, Room 613
Bethesda, MD 20814

Attn: Eric Singer

TRIPLICATE

UNITED STATES OF AMERICA
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CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION
1998 JUN 18 A 10:55

U.S. CONSUMER PRODUCT SAFETY COMMISSION
WASHINGTON, D.C. 20207

OFFICE OF COMPLIANCE
Legal Division

Eric H. Singer
Trial Attorney
Tel: 301-504-0626 ext. 1376
Fax: 301-504-0359
e-mail: esinger@cpsc.gov

June 18, 1998

Ms. Sadye E. Dun
Secretary
United States Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

Re: In re Central Sprinkler Corp., et al. (CPSC Dkt. 98-2)

Dear Ms. Dunn:

Pursuant to 16 C.F.R. Part 1025, enclosed for filing are the original and three copies of the "Motion to Compel Answers to Interrogatories" of Complaint Counsel for the CPSC and exhibits thereto.

Thank you for your attention to this matter.

Respectfully,

Eric H. Singer

Enclosures

cc: J. Gordon Cooney, Jr., Esq.
John C. Fenningham, Esq.
Michael F. Healy, Esq.
The Honorable William B. Moran

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETARY
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In the Matter of	)	
CENTRAL SPRINKLER CORP.	)	
and	)	**CPSC Docket No. 98-2**
CENTRAL SPRINKLER CO.	)	
Respondents.	)	

COMPLAINT COUNSEL'S MOTION TO COMPEL ANSWERS TO INTERROGATORIES

Pursuant to 16 C.F.R. § 1025.36, Complaint Counsel respectfully requests that the Administrative Law Judge order Respondents to answer Complaint Counsel's First Set of Interrogatories and provide documents responsive to Complaint Counsel's First Request for Production of Documents.

I. FACTUAL BACKGROUND

On April 29, 1998, Complaint Counsel served Respondents with its First Set of Interrogatories ("First Set") and its First Requests for Production of Documents and Things ("First Requests") in the above-captioned matter. See Exhibits A and B, attached hereto. On

May 26, 1998, Respondents served, via regular mail, their Responses and Objections to Complaint Counsel's First Request for Production of Documents and Things, attached as Exhibit C, and their Responses and Objections to Complaint Counsel's First Set of Interrogatories, attached as Exhibit D hereto (collectively, "Responses"). Respondents also included an interim privilege log with their Responses consisting of some 709 entries, attached as Exhibit E hereto.

To all but eight of Complaint Counsel's 117 interrogatories, Respondents responded by promising to produce 400 boxes of business records subject to and without waiver of a litany of blanket objections, and Respondents insisted Complaint Counsel agree to a confidentiality agreement (since rejected by the Administrative Law Judge) before they would make these business records available at their lawyers' offices. See Exhibit D, Responses Nos. 1, 2, 4, 23, 32, 51, 116, and 117. In several of the same responses in which Respondents invoked (or did not invoke) the "business records option," Respondents provided partial, albeit either evasive or editorialized, narrative answers. Id., e.g., Response Nos. 5, 10, 23, 27-29, 32, 34, 47, and 52. In 88 "answers" in which Respondents directed the staff to business records, Respondents referred to broad categories of business records in which the answers could allegedly be found, such as customer service department files, return authorizations, project proposals, diagnostic reports, bills of materials, work instructions, engineering change notices, project proposals, correction action reports, quality control manuals, vendor certifications, testing documents, and material review board minutes. Id., Response Nos. 3, 5, 6, 8, 9, 13-19, 21, 22, 25, 26, 30, 31, 34-40, 46-50, 53, 54, 57-61, 63, 64, 66-108, and 111-115. However, the Responses provide absolutely no index to the business records whatsoever, nor

any suggestion as to where these particular broad categories could be concealed within those records.

The Responses state that Central's responsive business records are likely to exceed 400 boxes of documents. Central's counsel claims to have already reviewed 100 of these boxes available for Complaint Counsel's inspection at Central's counsel's Washington, D.C. offices. See Exhibit C at 2; see also May 27, 1998 Letter from Kathleen Sanzo, attached as Exhibit J. Further, "Central's counsel will continue to review the remaining responsive documents, estimated to encompass 300 boxes, as quickly as possible. Central also anticipates providing Complaint Counsel with a privilege log corresponding to the documents produced on a rolling basis." See Exhibit C at 2. (emphasis added). In addition, Central's counsel notes that they possess another 1,000 boxes of documents that they believe are not responsive or relevant to the matter, and "that the time and expense of reviewing and producing these documents would be prohibitive." Id. (emphasis added).

Upon Complaint Counsel's telephonic request and "as a courtesy," on May 29, 1998, Respondents provided a copy of an abridged "index" to some 57 boxes of business records. See May 29, 1998 Letter from Gordon Cooney, Jr., attached as Exhibit I. This index merely lists which of three departments at Central the box comes from: "Operations," "Accounting," or "Customer Service." Exhibit I at 3-4. Respondents also provided an index to 44 boxes of business records they previously reviewed and produced as part of discovery in a class-action lawsuit pertaining to Central's "Omega" series sprinkler, Hart v. Central Sprinkler Corp. (Los Angeles County Sup. Ct., Case No. BC176727). This index, too, merely indicates the department at Central from which boxes came, including "Customer Service," "Quality

Control," "Engineering," and "Operations." Id. at 5. Both indexes reveal that all documents contained in the boxes have been reviewed and Bates-stamped. Central's counsel also indicated that certain "remaining boxes will be made available in the near future once they had been gathered and reviewed." Exhibit I at 1.

On June 3, 1998, Complaint Counsel informed Respondents that the Responses were inadequate, and requested that Respondents provide proper responses to discovery. See June 3, 1998 Letter from Eric Stone, attached as Exhibit H hereto. Complaint Counsel has not since received appropriate responses to interrogatories, any documents in response to those interrogatories, or an index to such documents. See June 8, 1998 Letter from Thomas Hogan, attached as Exhibit G hereto at 2-3 (indicating Respondents have no intention of providing further answers, segregating documents, or providing more detailed indexes). At the First Pre-Hearing Conference in this matter on June 16, 1998, the Administrative Law Judge ordered Respondents to provide 100 boxes of business records responsive to Complaint Counsel's First Requests for Production of Documents by June 19, along with meaningful indexes to such records by June 26. The Judge held in abeyance any other ruling on discovery pending Complaint Counsel's and Respondents' forthcoming motions to compel.

II. LEGAL ARGUMENT

A. Respondents Breached Their Duty to "Answer" Complaint Counsel's Interrogatories

As under Fed. R. Civ. P. 33(a), 16 C.F.R. § 1025.32(b) requires that "each interrogatory shall be answered separately and fully in writing. . ." (emphasis added). "An evasive or incomplete response" is no response at all. 16 C.F.R. § 1025.36. Respondents

breached their duty to comply with these provisions because they chose not to answer, or answer fully, any of Complaint Counsel's Interrogatories where they plainly could have done so. Respondents have a primary obligation to provide answers with information that they know, whether or not it is memorialized or contained in business records. Cf. DiGregorio v. First Rediscount Corp., 506 F.2d 781 (3d Cir. 1974) (responding party must make bona fide attempt to provide adequate responses); Alliance to End Repression v. Rochford, 75 F.R.D. 438 (N.D.Ill. 1976) (party must provide information that is part of personal knowledge). Respondents clearly know the answers to numerous interrogatories; however, they simply choose not to respond, and instead send Complaint Counsel on a hunting expedition for information that may or may not exist within Respondents' "400 boxes" of documents. Several examples are illustrative.

Complaint Counsel's Interrogatory No. 3, for example, asked Central to identify all officers, directors, and/or shareholders of the company since its formation. Respondents pointed Complaint Counsel to annual reports and organizational charts, when they easily could have named officers, directors, and major shareholders. Exhibit D at 2.

Interrogatory No. 5 asked Central to identify all makes and/or models of "Omega" sprinklers and asked them to indicate the dates of design, manufacture, and distribution. Respondents partially answered with model numbers, but refused to provide the dates of design, manufacture, and distribution, ostensibly on the ground that to do so would be unduly burdensome. Respondents invoked the business records option, referring Complaint Counsel to product catalogues, engineering drawings, and cut sheets that presumably are to be found within the 400 boxes of documents. Exh. D at 3. Though providing an answer may be

"burdensome," it certainly is not unduly so. Complaint Counsel believes this information is readily available to Respondents' counsel, who have been negotiating sprinkler replacements with building owners and class action attorneys for some time.

In Complaint Counsel's Interrogatory No. 6, Complaint Counsel asked to know the total number of Omega sprinklers sold or distributed that contained an EPDM o-ring, and the number of Omegas containing a silicone o-ring. Central managed to provide the number of total Omegas sold, but would not break down the number between silicone and EPDM. Respondents pointed Complaint Counsel to sales reports to find the answers. See Exhibit D at 4. It is difficult to believe that Central does not already have such information at hand, and, if not, to understand why Central could not itself consult those sales reports to provide an answer. Instead, Respondents ask Complaint Counsel to sift through an unspecified number of boxes in search of "sales documents."

In Complaint Counsel's Interrogatory No. 16, Complaint Counsel asked Central, among other things, to identify all personnel who have been involved in the design and development of the Omega, its testing, marketing, or manufacturing. Since Central's top officers have been with the corporation since the Omegas were designed, it is hard to believe that they could not identify any of these people. Central referred Complaint Counsel to annual reports and employee status reports. Exh. D at 10.

Interrogatory No. 18 asked Central to identify the manufacturer of all component parts of the Omega, as well as the tools and substances used in the manufacturing process. Once again, rather than consult its engineers or answer from the records that Central apparently

knows to contain the information, Respondents evaded their responsibility and attempted to place the burden upon Complaint Counsel to search for an answer. See Exh. D at 11-12.

Interrogatory No. 23 asked Central whether it had ever utilized any chemical or substance in the manufacture of Omegas to prevent leaking when they are later installed. Central selectively responded: "[T]o the extent that this interrogatory is referring to products such as 'Stop-Leak,' Central has not utilized such substances." Central failed to address the substance of the question, which is not limited to "Stop-Leak." See Exh. D, at 14-15. Complaint Counsel has obtained information that shows Central used "loc-tite" for this purpose both in manufacturing and installed units.

In Complaint Counsel's Interrogatory No. 27, Complaint Counsel asked Central to explain how each different make and model of Omega sprinkler operates, once exposed to its activation temperature. Respondents provided a brief, generalized explanation for "most" Omegas, but then, rather than fully answering the question or resolving the ambiguity about the term "most," invoked the business records option. See Exh. D at 18.

In Complaint Counsel's Interrogatory No. 34, Complaint Counsel asked whether Respondents were aware or had ever been notified of an Omega that allegedly did not activate in a fire. Complaint Counsel asked Respondents to answer several follow up questions if the answer was in the affirmative. See Exhibit D at 25-26. Central's answer is printed below in full:

> Central objects to this interrogatory on the grounds and to the extent that is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that

constitute trade secrets or other confidential research, development, or commercial information, and it calls for a legal conclusion.

Subject to and without waiver of the foregoing objections, Central responds as follows: Following is a list of locations regarding which Central has "been notified of an Omega that did not or allegedly did not activate in a fire." By listing the locations below, Central does not concede that any Omega sprinkler involved did not activate properly or that any non-activation was caused by a defect in the sprinkler. To the contrary, for example, certain of the locations listed below involved fires that burned from outside the structure to the inside, systems that were contaminated with prohibited substances (e.g., Stop-Leak), or systems where the water supply may have been shut off or otherwise disabled. Central has not had an opportunity to investigate fully a number of locations listed below, and Central also is in the process of investigating other fires where Omegas were or allegedly were involved. To the extent that any responsive information is discovered during such ongoing investigations, Central will provide supplemental information in response to this interrogatory.

A. Jackson Memorial Hospital, Miami, Florida
B. Marriott Hotel, Romulus, Michigan
C. Veterans Affairs Building, Lake Canandaqua, New York
D. Crossroad, Ft. Wayne, Indiana
E. Mel's Marina, Gulf Breeze, Florida
F. Kent Manor Inn, Annapolis, Maryland
G. Casa Reale Apartments, Los Angeles, California
H. Escondido Gardens, Escondido, California
I. Joshua Tree Apartments, Scottsdale, Arizona
J. Lorene Lodge, Marietta, Georgia
K. Yorba Residence, Riverside, California
L. Days Inn, Horsham, Pennsylvania
M. Montserrat School of Art, Beverly, Massachusetts
N. Boarding House, Milford, Massachusetts
O. Private Residence, Dallas, Texas
P. The Fairway at Piper Glen, Charlotte, North Carolina
Q. Lockermill Plaza, Concord, North Carolina

For the remainder of the information requested in this interrogatory, pursuant to 16 C.F.R. 1025.32(d) Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: . . . [sic] customer service department files, return authorizations, diagnostic reports.

The answer to this question -- fires in which Omegas failed to activate -- is undoubtedly available and undoubtedly already segregated, perhaps in Respondents' counsel's offices. See index of privileged documents citing numerous documents involving incidents to and from counsel for Central at Exhibit E.) As a letter from Central's counsel the day after they served their Responses indicates, Respondents are quite capable of providing more detailed narrative when, for whatever reason, the occasion suits. See Exhibit J at 1-2. Respondents should be directed to answer the interrogatories as fully as possible.

B. Respondents Have Wrongfully Asserted The Option To Produce Business Records under 16 C.F.R. § 1025.32(d)

1. The Applicable Standard under 16 C.F.R. § 1025.32

Title 16 C.F.R. § 1025.32(d) provides:

> (d) *Option to produce business records.*
>
> Where the answer to an interrogatory may be derived or ascertained from the business records of the party upon whom the interrogatory has been served, or from an examination, audit, or inspection of such business records, or from a compilation, abstract, or summary of those records, and the burden of deriving the answer is substantially the same for the party serving the interrogatory as for the party served, it is a sufficient answer to the interrogatory to specify the records from which the answer may be derived or ascertained and to afford to the party serving the interrogatory reasonable opportunity to examine, audit, or inspect such records and to make copies, compilations, abstracts, or summaries.

16 C.F.R. § 1025.32(d) (1997) (emphasis added).

This provision mirrors Fed. R. Civ. P. 33(d) (formerly Fed. R. Civ. P. 33(c)). The rule has at least three prerequisites. First, the rule presumes that the answering party faces a "burden" to begin with -- that of "compiling and extracting the requested information, above and beyond the simple task of referring to the records in order to answer interrogatories. . . .

Referring to a document in order to answer an interrogatory is not the kind of burden contemplated by the rule." Pascale v. G.D. Searle & Co., 90 F.R.D. 55, 60 (D. RI 1981) (emphasis added).

Second, "under [the rule] making pertinent business records available to an interrogating party is a sufficient response to interrogatories if, but only if, the burdens of deriving or ascertaining the answers [from the records] is substantially the same. . . " Id. at 59 (emphasis added) (quotations omitted). In other words, the rule does not apply if the burden of researching the answer is heavier for Complaint Counsel. Id.; see also Daiflon, Inc. v. Allied Chemical Corp., 534 F.2d 221, 226-27 (10th Cir.), cert. denied, 429 U.S. 886 (1976).

Third, under 16 C.F.R. § 1025.32(d), "the interrogated party must state specifically and precisely identify which documents will provide the information to be elicited." Budget Rent-a-Car of Missouri v. Hertz Corp., 55 F.R.D. 354, 357 (W.D. Mo. 1972) (emphasis added). The rule

> does not allow that party to impose on an interrogating party a mass of records as to which research is feasible only for one familiar with the records. . . . [The rule] cannot, therefore, be used as a procedural device for avoiding the duty to give information by shifting the obligation to find out whether information is ascertainable from the records which have been tendered.

Id. (citations and quotations omitted.)

Indeed, 16 C.F.R. § 1025.32(d)'s twin, the former Fed. R. Civ. P. 33(c), was amended in 1980 precisely "to make it clear that a responding party has the duty to specify . . . the records from which answers to interrogatories can be derived." Rainbow Pioneer No. 44-18-04A v. Hawaii-Nevada Investment Corp., 711 F.2d 902, 906 (9th Cir. 1983) (citing Notes of the Advisory Committee on Rules (1980 Amendment to Fed. R. Civ. P. 33(c))).

Respondents have utterly failed to meet any of the three prerequisites to 16 C.F.R. § 1025.32(d).[1]

2. Respondents Often Face No Burden Within the Meaning of 16 C.F.R. § 1025.32(d).

As the Court noted in Pascale, 90 F.R.D. at 60 (emphasis added):

> [a]nswering interrogatories often requires the interrogated party to refer to written documents, particularly where the party is a corporate entity. If a party could invoke [16 C.F.R. 1025.32(d)] in every such case, by claiming that the "burden" of "deriving" the information from the records is substantially the same for both parties, discovery would be thwarted at every turn. [Having to refer] to a document in order to answer an interrogatory is not the kind of burden contemplated by the rule (emphasis added).

In many cases, Respondents do not have a bona fide burden so as to trigger the rule, because they themselves could easily answer the questions either with or, as above, without referencing business records. As demonstrated above, they have simply chosen not to respond. Quite simply, Respondents should be ordered to provide complete answers to Complaint Counsel's interrogatories. See, e.g., Thomason v. Leiter, 52 F.R.D 290, 291 (M.D. Ala. 1971) (where answers to interrogatories require no burdensome research, business records option does not pertain).

---

[1] 16 C.F.R. § 1025.32(d) has at least one other implicit pre-requisite that Respondents may have failed to satisfy; namely, that the party invoking it must be able to state positively, not tentatively, that responsive information will be found within the business records. See Sabel v. Mead Johnson & Co., 110 F.R.D. 553, 555 (D. Mass. 1986). Complaint Counsel assumes, without waiving its right to further challenge, that Respondents repeated statements that information "may be derived by Complaint Counsel" from Respondents' business records is an assurance that they can be found. See, e.g., Exhibit D, Response No. 44. In the meantime, Complaint Counsel notes some uncertainty on the part of Central's counsel on this point. See Exhibit J at 1 (estimating that additional documents encompassing at least another 300 boxes "may be responsive"); Exhibit G at 2 (refusing to "speculate about what might be in" the business records).

3. If Respondents Do Bear a Burden, It is Far Lower Than That of Complaint Counsel, Because Respondents Have Already Screened and Reviewed Documents and Are Familiar With Them.

Even assuming, arguendo, that Respondents face a burden such as that contemplated by 16 C.F.R. § 1025.32(d), deriving Complaint Counsel's requested information from business records is not substantially equally burdensome for Complaint Counsel and Respondents, as 16 C.F.R. 1025.32(d) requires. Respondents are far less burdened, because they are overwhelmingly familiar with the documents. See T.N. Taube Corp. v. Marine Midland Mortg. Corp., 136 F.R.D. 449, 454 (W.D. NC 1991) (citing 4A Moore's Federal Practice par. 33.25) (2d ed. 1990) (often key factor in weighing relative burdens is the interrogated party's familiarity with its own documents; cost of research did not outweigh key criterion of interrogated party's familiarity). To the extent that business records are usually maintained in some indexed, retrievable form, searching for the appropriate documents without such access is extremely difficult and time consuming for Complaint Counsel. Respondents seem intent on imposing additional burdens on Complaint Counsel, rather than sharing the burden with them.

As correspondence from Respondents repeatedly illustrates, Central's counsel has already invested, and will continue to invest, considerable time and energy in reviewing the hundreds of boxes of documents they insist that Complaint Counsel sift through, whether to screen documents for privilege and confidentiality concerns or for other reasons. See Exhibit C at 2; Exhibit J at 1; Exhibit I at 1; Exhibit G at 1. Presumably, too, Central's counsel engaged in the same screening process in their discovery related to the class action suit against the Omega series sprinkler, in previous liability suits, and during the investigation

preceding this administrative proceeding. It has already reviewed the same documents it would seek to make available to Complaint Counsel. See Exhibit I at 1, 5.

Central's representatives, including Mr. Schiavone, are obviously familiar enough with the mass of business records not simply to point to them as a whole, but to indicate the broad categories within those records where answers to Complaint Counsel's interrogatories can be found. Furthermore, given the time at which alleged problems with the Omega first publicly surfaced -- January, 1996; given the date on which the CPSC staff first opened, and Central first began responding, to the staff's investigation -- Summer, 1996; and given the class action law-suit filed last year; and given that so many of Complaint Counsel's interrogatories go to Respondents' potential defenses, it seems more likely than not that Central's executives and engineers, in addition to Central's counsel, have over time reviewed those categories of documents for their substantive content and can do so more expertly and efficiently. For all these reasons, too, Central can make no bonafide claim to equal burdens. Cf. Petroleum Ins. Agcy. v. Hartford Acc. & Indem. Co., 111 F.R.D. 318, 321-22 (D. Mass. 1983) (where defendants had already analyzed other parties' answers and presumably did research into their own records to conduct analysis, they could not properly invoke business records option); Pascale, 90 F.R.D. at 61 (citing 4A Moore's Federal Practice, par. 33.20) (interrogated party has no reason not to furnish information if interrogated party has to go into the matter in any event, in order to prepare his own case); Puerto Rico Aqueduct and Sewer Authority v. Clow Corp., 108 F.R.D. 304, 309 (D. PR 1985) (citing Oppenheimer Fund, Inc. v. Sanders, 437 U.S. 340, 357 (1978)) (even assuming equal burdens, discovery rules require the responding party to derive answer itself where it could do so more efficiently).

4. Respondent's Have Abused The Business Records Option By Failing To Specify Documents Adequately

Respondents have failed to specify to Complaint Counsel which of its documents are relevant to Complaint Counsel's interrogatories, in plain contravention of 16 C.F.R. § 1025.32(d). In effect, Respondents are impermissibly directing Complaint Counsel to an "undifferentiated mass of records." T.N. Taube Corp. 136 F.R.D., at 455 (quotations and citations omitted). Central's documents are numbered in no apparent order, nor have any specific documents or boxes been identified as being responsive to any interrogatory by Complaint Counsel. Complaint Counsel also lacks the knowledge necessary to locate relevant documents within those boxes. This is all the more reason why Respondents familiarity with the records, already noted above, should count -- and should count against them -- in the balance of relative burdens. See Sabel v. Mead Johnson & Co., 110 F.R.D. 553, 556-57 (D. Mass 1986).

Complaint Counsel believes that the Administrative Law Judge's ruling at the June 16, 1998 Pre-Hearing Conference ordering Respondents to provide meaningful indexes already addresses 16 C.F.R. § 1025.32(d)'s third prong of "specificity"; namely, Complaint Counsel's right to be provided with specific indexes with respect to any "business record" answers to interrogatories, not simply requests for production of documents, inasmuch as production of business records is a legitimate option at all. The application of the Administrative Law Judge's ruling to interrogatories would be fully consistent with legal authority. See, e.g., T.N. Taube Corp. 136 F.R.D., at 455-56 (disallowing business records production where defendant failed to specify which of its documents were relevant and responsive to interrogatories); Sabel v. Mead Johnson & Co., 110 F.R.D. 553, 556 (defendant drug company's invocation of

business records option in response to plaintiff's interrogatories stricken where it was more familiar with the 154,000 documents to which it provided only an inadequate index.) Rainbow-Pioneer #44-18-04A, 711 F.2d at 906 (rejecting answering parties recitations, similar to Central's, that "answers could be found 'in partnership books of accounts, banking accounts, records, computer printouts, ledgers and other documents . . .'").

C. Respondents' Objections Are Impermissible Because They Are Overly General and Unsupported

Central has objected collectively to all of Complaint Counsel's document requests and interrogatories. See Exh. C at 3-5; Exh. D at 1. To every interrogatory, Central raises virtually the same litany of objections. It fails to treat each interrogatory as a separate entity upon its own merits. Central's objections to Complaint Counsel's interrogatory about Central's "helper spring" is representative:

> Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel, and/or equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: Omegas fitted with "helper springs" will activate at the appropriate hydraulically calculated operating pressure specific to the particular installed system in each building.

Exh. D, at 33-34.

This objection is "cut and pasted," with some variation, throughout Central's Responses, and sometimes includes an additional objection of irrelevance, as well. See, e.g., Exh. D at 2, 5, 9, 10, 42, and 46. These objections simply cannot stand. Roesberg v. Johns-Mansville Corp., 85 F.R.D. 292 (E.D. Pa. 1980) (Respondent must show specifically how each interrogatory was overly burdensome or irrelevant by submitting affidavits or offering other detailed evidence); United States v. 58.16 Acres of Land, 66 F.R.D. 570 (E.D. Ill. 1975) (same). Respondents have explicated none of their objections; they have simply asserted them. Furthermore, many of the asserted bases for withholding information do not even appear to apply to the interrogatories in which they were raised.

III. CONCLUSION

Respondents' Responses to Complaint Counsel's First Set of Interrogatories are obstructive and unacceptable. Respondents have abused the business records option, and avoided any meaningful Responses. Complaint Counsel therefore respectfully requests that Respondents be compelled to provide proper responses to Complaint Counsel immediately.

Respectfully submitted,

Complaint Counsel
U.S. Consumer Product Safety Commission

Eric H. Singer
Deborah S. Orlove
Howard N. Tarnoff
4330 East West Highway, Rm. 613
Bethesda, MD 20814
301-504-0626

DATE: June 18, 1998

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
	)	
CENTRAL SPRINKLER CORP.	)	
	)	
	)	
and	)	**CPSC Docket No. 98-2**
	)	
CENTRAL SPRINKLER CO.	)	
	)	
	)	
Respondents.	)	
	)	

ORDER

AND NOW, this ____ day of _____, 1998, it hereby ORDERED that Complaint Counsel's Motion to Compel Answers to Interrogatories is GRANTED.

Pursuant to 16 C.F.R. § 1025.36, Respondents are hereby ordered to provide full and complete narrative responses to Interrogatories Nos. 1-117, inclusive, and provide specific indexes for any documents that may be permitted to be produced under 16 C.F.R. § 1025.32(d) in lieu of narrative responses by June 26, 1998

_____
William B. Moran
United States Administrative Law Judge

Dated: _____
Washington, D.C.

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, **COMPLAINT COUNSEL'S MOTION TO COMPEL ANSWERS TO INTERROGATORIES**, was filed with the Secretary of the Commission and sent to all parties of record in these proceedings by first-class U.S. mail, postage prepaid, on June 17, 1998.

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Office of the Administrative Law Judges
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Dated: 6/18/98

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

OFFICE OF THE SECRETARY
FREEDOM OF INFORMATION
1998 JUN 18 A 10:55

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents	)	

FIRST SET OF INTERROGATORIES TO RESPONDENTS
CENTRAL SPRINKLER CORP. AND CENTRAL SPRINKLER CO.

Complaint Counsel hereby propounds its First Set of Interrogatories upon Respondents Central Sprinkler Corp. and Central Sprinkler Co.

PLEASE TAKE NOTICE that pursuant to 16 C.F.R. § 1025.32, Respondents must respond to these Interrogatories within 30 days after service of same.

PLEASE TAKE FURTHER NOTICE that pursuant to 16 C.F.R. § 1025.31, Respondents are under a continuing duty to supplement their responses to the staff's discovery requests to include information later obtained, regardless of whether the response to the discovery request was complete when made.

DEFINITIONS

Throughout the following Interrogatories and Definitions, unless the context otherwise requires, the singular includes the plural, the masculine includes the feminine, and neuter, or vice versa.

As used herein, the terms below are defined as follows:

"Activate" in the context of Omega sprinklers means full opening (as opposed to partial opening) of the sprinkler -- i.e., full release of the plunger housing -- upon exposure to the Omega's triggering temperature.

"Adhesion" and "Adhered," in the context of a sprinkler "o" ring, refers to adhesion or adhered to the plunger housing and/or main housing of the sprinkler.

"Cause" means to bring about, effect, make happen, contribute to, induce, produce, and/or compel.

"Claim" refers to all lawsuits, governmental actions or orders, disputes, demands for payment, indemnification or reimbursement, complaints, and/or potential lawsuits that contain allegations against you and/or your agents and/or employees.

"Communication" means any transfer of information, ideas, opinions or thought by any means at any time or place under any circumstances, including any transfer of data from one location to another by electrical, electronic or similar means.

"Distribute" means to deliver, sell, give, allot, or otherwise provide, and includes the giving away of free samples and promotional items.

"Document" or "Record" shall have the broadest meanings permissible, and shall include the original and any non-identical copy of any written, graphic, photographic, audio,

electronic or visual material, however produced or reproduced, of any kind or description, whether sent or received or neither, including, but not limited to: papers, books, letters, facsimiles, photographs, motion pictures, video tapes, audio recordings, correspondence, drawings, sketches, schematics, manuals, blueprints, work papers, intra- and interoffice communications, memoranda, notes, transcripts, minutes, reports, recordings of telephone or other conversations, or of interviews, conferences, or meetings, affidavits, statements, summaries, opinions, court pleadings, reports, indices, studies, analyses, evaluations, contracts, licenses, agreements, questionnaires, answers to questionnaires, statistical records, desk calendars, appointment books, diaries, telephone logs, lists, tabulations, charts, graphs, data sheets, computer tapes, disks, printouts or programs, microfilms, all other records kept by electronic, photographic, or mechanical means, and things similar to any of the foregoing, regardless of their author or origin, however denominated, no matter how produced or maintained, regardless of whether in your actual or constructive possession, custody or control, and regardless of whether or not communicated to any person other than the maker. A draft is a separate document or record within the meaning of this term.

If you claim that any document or record is privileged, specify the privilege claimed and the factual basis you contend supports the assertion of the privilege. If any document or record was, but is no longer, in your possession, custody, or control, provide the following information:

a) state the disposition of the document or record;

b) state the date such disposition was made;

c) identify the present custodian of the document or record and state his or her

address or, if the document or record no longer exists, so state;

d) identify the person who made the decision regarding the disposition of the document or record; and

e) state the reason for the disposition and describe the document or record and the contents of the document or record, including the title, the author, the position or title of the author, addressee, the position or title of the addressee, whether indicated or blind copies were made, date, subject matter, number of pages, attachments or appendices, and all persons to whom the document was distributed, shown or explained.

"Field test," for purposes of these Interrogatories, shall mean any test performed on a sprinkler while it is installed in a sprinkler system.

"Identify" or "identity" shall mean, when referring to an individual person, the person's full name, present or last known employer, present or last known address, occupation, business position, and telephone number, and the relationship or association, if any, to a Respondent in this action.

When referring to an entity, the terms "identify" or "identity" shall mean its present and any former name(s), the business address of its principal place of business, its state of incorporation, registration, or organization, the identity and address of its registered agent in each state where it is present and doing business or has a place of business, its present officers, directors, and shareholders, and its relationship, if any, to a Respondent in this action. Once a person or entity has been identified in accordance with this paragraph, only the name of that person or entity need be listed in response to subsequent discovery

requesting the identification of that person or entity.

When referring to a document or record, the terms "identify" or "identity" shall mean a description of the document or record including its date of preparation and transmission, the author, sender and recipient, the custodian of the record, and a summary of the subject matter.

When referring to an Omega or other brand sprinkler, "identify" or "identity means to provide the following information:

a) the sprinkler manufacturer

b) model name and number;

c) manufacture date;

d) activation temperature;

e) "o" ring type (if applicable)

f) all dates of UL listing;

g) the UL standards for safety under which the sprinkler is/was listed;

h) the type of piping in which the sprinkler is or was installed (if applicable);

i) the name, address and telephone number of the building in which the sprinkler was installed (if applicable); and the name, address and telephone number of the owner of that building;

"Manufacture" means to make, produce, assemble, fabricate, or work into usable form.

"Omega" means any and all models and makes (variations within a model) of Omega series or brand automatic fire sprinklers.

"Relating to" shall mean consisting of, referring to, describing, discussing, constituting, evidencing, containing, mentioning, concerning, pertaining to, citing, summarizing, analyzing,

or bearing any logical or factual connection with the matter discussed.

"UL" or "Underwriters Laboratories, Inc." means Underwriters Laboratories, Inc., 333 Pfingsten Road, Northbrook, IL 60062 and any subsidiaries, divisions, or agents of Underwriters Laboratories, Inc.

"You," "your," "yourself" means the Respondent to whom this discovery is directed, including any officer, director, representative, insurer, agent or employee thereof, and also includes any agent, person or entity acting on your behalf.

INSTRUCTIONS

1. Each Interrogatory shall be answered completely, separately, and fully.

2. The following Interrogatories are to be regarded as continuing. You are required to supplement or modify any response as additional or different information becomes known to you.

3. Each person consulted in answering any Interrogatory shall be identified in the body of the response to the particular Interrogatory.

4. If you cannot answer any Interrogatory in full after exercising due diligence, so state and answer or produce to the extent possible, specifying your inability to answer or produce the remainder, stating whatever information or knowledge you have concerning the unanswered portion or unproduced documents, and describing your efforts to secure the unknown information or unproduced documents.

5. If you assert any privilege in responding to any Interrogatory, state the type of privilege asserted and the basis for its assertion. In addition, briefly identify the document or record with respect to which the privilege is asserted. For any document or record with

respect to which a privilege is asserted, state:

a) The type of document or record (e.g., letter, memorandum, contract, etc.), the date of the document, and the subject matter of the document or record;

b) The name, address and position of the author of the document or record and of any person who assisted in its preparation;

c) The name, address and position of each addressee or recipient of the document or record, or any copies of it; and

d) The present location of the document or record and the name, address and position of the person having custody of it.

For any communication with respect to which a privilege is asserted, identify the persons or entities among whom the communication took place, the date of the communication, and the subject.

INTERROGATORIES

INTERROGATORY NO. 1

Identify the person(s) answering these Interrogatories.

INTERROGATORY NO. 2

Identify yourself.

INTERROGATORY NO. 3

Identify all officers, directors and/or shareholders of your company since its formation. For each such person, specify all positions they have held, and the dates they held each position.

INTERROGATORY NO. 4

Provide the date on which the first "Omega" sprinkler was sold or given away as a free sample or promotional item. Identify the fist "Omega" sprinkler sold or given away as a free sample.

INTERROGATORY NO. 5

Identify all makes and/or models of "Omega" sprinklers you have ever designed, manufactured, and/or distributed. For each model, indicate the date(s) it was designed, manufactured and distributed.

INTERROGATORY NO. 6

Provide the total number of Omega sprinklers that:

a) have been sold;

b) have been given away as free samples or promotional items;

c) are installed

in the United States and its territories. Of these, how many contain:

i) EPDM "o" rings;

ii) silicone "o" rings;

iii) neither EPDM or silicone "o" rings (specify whether the model has an "o" ring, and if so, the composition of the "o" ring).

INTERROGATORY NO. 7

How many Omega sprinklers:

a) have been sold;

b) have been given away as free samples or promotional items;

c) are installed

in each state and territory of the United States.

INTERROGATORY NO. 8

Provide the sales price for each Omega sold by you (or anyone on your behalf) in the United States and/or its territories.

INTERROGATORY NO. 9

For each year in which you manufactured and/or distributed Omega sprinklers, provide:

a) your gross income;

b) your net income;

c) the amount in revenues generated from product sales;

d) the amount in revenues generated from sales of Omega sprinklers.

INTERROGATORY NO. 10

How many total Omega sprinklers are installed in the United States and/or its territories in:

a) steel piping systems;

b) copper piping systems;

c) plastic piping systems;

d) polybutylene piping systems;

e) other piping systems not listed above (specify the type of piping system)?

INTERROGATORY NO. 11

How many Omega sprinklers are installed in each state and territory of the United

States in:

a) steel piping systems;

b) copper piping systems;

c) plastic piping systems;

d) polybutylene piping systems;

e) other piping systems not listed above (specify the type of piping system)?

INTERROGATORY NO. 12

How many Omega sprinklers are installed in the United States and/or its territories in:

a) private homes

b) apartment buildings

c) schools (including universities and colleges, public or private)

d) nursing homes

e) hospitals

f) detention facilities (including jails, juvenile detention facilities, etc.)

g) homeless shelters

h) facilities used for recreation (e.g., health clubs, gymnasiums, sports arenas, public pools, country clubs, etc.)

i) hotels

j) museums

k) offices (including office buildings)

l) warehouses with no public access areas

m) industrial facilities with no public access areas

INTERROGATORY NO. 13

Identify which Omega makes and/or models you are currently manufacturing and/or selling.

INTERROGATORY NO. 14

What is the current sales price for each Omega make and/or model listed in your response to Interrogatory No. 13?

INTERROGATORY NO. 15

Identify all of your employees, agents, representatives or consultants who have held a supervisory, managerial, or executive position or role in the following areas of your company at any time:

1) sales;

2) marketing;

3) product design and/or development;

4) engineering and/or technical services;

5) customer service/customer relations;

6) public and/or governmental relations;

7) product manufacturing and/or production;

8) product sales, marketing and/or distribution;

9) corporate mergers and/or acquisitions;

10) quality assurance/control;

11) any divisions, subdivisions or areas that deal or dealt with Omega automatic fire sprinklers and/or any component parts of Omega automatic fire

sprinklers.

For each employee, agent, representative or consultant, please state the position(s) and title(s) of those position(s), term(s) of employment, and salary. If the person is no longer in your employ, please indicate their reason for leaving and, if known, provide their current address and telephone number.

INTERROGATORY NO. 16

Identify all persons and/or entities who were in any way involved in:

a) design and/or development;

b) testing

c) the UL listing process and/or submission of Omega sprinkler samples and/or prototypes for same;

d) marketing;

e) sale; or

f) manufacturing of any makes and/or models

of each make and/or model Omega sprinkler.

For each such person and entity, indicate:

i) whether the person or entity is currently employed by your company;

ii) their position in your company (or, if not in your company, elsewhere) at the time of their involvement;

iii) which makes and/or models the involvement related to; and

iii) describe in detail the nature of their involvement.

INTERROGATORY NO. 17

For each make and/or model of Omega sprinkler, identify and describe (including specifications for) each component part and each chemical (including lubricants), tool and/or substance used in the Omega manufacturing process.

INTERROGATORY NO. 18

Identify the manufacturer of each component part, chemical (including lubricants, etc.), tool and/or substance identified in your response to Interrogatory No. 17.

INTERROGATORY NO. 19

Identify the person and/or entity who supplied to you each component part, chemical (including lubricants, etc.), tool and/or substance identified in your response to Interrogatory No. 17.

INTERROGATORY NO. 20

Identify all persons and/or entities who were involved in any way in the design, specifications, and/or development of each component part, chemical (including lubricants, etc.), tool and/or substance identified in your response to Interrogatory No. 17.

INTERROGATORY NO. 21

Describe in detail the procedures and specifications for the manufacture of each different make and/or model Omega sprinkler, including any changes in such procedures and/or specifications over time. Specify and describe all tools, chemicals and substances used, including when, how and in what amount they are used.

INTERROGATORY NO. 22

For each change in procedure or specification identified in your response to

Interrogatory No. 21:

a) explain the differences between the procedure or specification and its predecessor(s);

b) explain the reasons for the change;

c) identify all persons and/or entities involved in bringing about the change, and explain their role in same;

d) identify all persons and/or entities who implemented the change;

e) indicate whether any tests were done on the models before or after the change occurred. If so:

i) describe the tests and provide a detailed protocol;

ii) identify the persons and entities involved in setting up and/or conducting the tests;

iii) describe and explain the results of the tests, including all observations and conclusions;

iv) identify the persons and entities involved in evaluating the test results.

INTERROGATORY NO. 23

Have you (or anyone on your behalf) ever utilized any chemical or substance in the manufacture of Omega sprinkler(s) to prevent leaking of those sprinklers when they are later installed into a sprinkler system? If so, identify, for each such chemical or substance:

a) its name (and brand name, if applicable);

b) its chemical composition;

c) its manufacturer; and

d) the person and/or entity from whom you purchased and/or received the chemical or substance;

e) identify and describe any tests performed by you or anyone else to assess whether and/or how the substance affects the operation of Omega sprinkler(s) or any Omega component part, providing the following information:

i) describe the tests and provide a detailed protocol;

ii) identify the persons and entities involved in setting up and/or conducting the tests;

iii) describe and explain the results of the tests, including all observations and conclusions;

iv) identify the persons and entities involved in evaluating the test results.

f) indicate whether you have communicated with any persons and/or entities (including your employees, agents, and consultants) regarding any such chemical or substance. If so, provide the following information:

i) identify all such persons and/or entities;

ii) state the date of the communication;

iii) describe the content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 24

Were/are there any prototypes or precursors of any of the Omega sprinklers listed in your response to Interrogatory No. 6? If so:

a) identify and describe each prototypes or precursor, including any modifications

in composition or design;

b) indicate the date on which it was designed and/or developed;

c) identify all persons and entities who were in any way involved in designing, developing and/or reviewing the prototype or precursor;

d) identify the Omega model to which the prototype or precursor corresponds;

e) describe all tests and evaluations performed on the prototype or precursor, providing the following information:

i) the date on which the test or evaluation was conducted;

ii) the protocol for the test or evaluation;

iii) identify all persons and entities who conducted, attended, reviewed, and/or supervised the test or evaluation;

f) indicate whether the prototype or precursor was ever submitted to a testing laboratory for review, certification or listing. If so, fully describe the circumstances and outcome of the submission and testing, and identify the laboratory;

g) indicate whether you have communicated with any persons and/or entities (including your employees, agents, and consultants) regarding any such prototype or precursor. If so, provide the following information:

i) identify all such persons and/or entities;

ii) state the date of the communication;

iii) describe the content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 25

Identify and describe all measures and/or procedures taken by you or anyone on your behalf at any time before, during, and/or after each Omega sprinkler is manufactured, to ensure that each Omega sprinkler will fully and properly activate when exposed to its activation (triggering) temperature.

INTERROGATORY NO. 26

Have you ever known or been advised of any problems with, imperfections or flaws in, defects or deficiencies in or associated with any component part(s) of any Omega sprinkler, or any chemical, tool or substance used in manufacturing Omegas, including whether any component part has been or alleged to have been out of tolerance? If so, for each such problem, flaw, defect and deficiency:

a) describe in full detail the problem, imperfection, flaw, defect, deficiency or extent to which the part was out of tolerance;

b) indicate the date on which you were notified or learned of the problem, flaw, defect or deficiency;

c) indicate how you became aware or were notified of the problem, flaw, defect or deficiency;

d) describe all actions, if any, you took as a result, indicating when those actions were taken; and

e) state whether the affected component part was ever delisted, recalled, discontinued. taken off the market, or requested to be returned to the manufacturer, supplier, distributor, etc. and, if so, explain the circumstances of

same.

INTERROGATORY NO. 27

Explain in full detail the mechanism of proper operation of each different make and model of Omega sprinkler, once exposed to its activation (triggering) temperature.

INTERROGATORY NO. 28

Once the activation (triggering) temperature has been reached, indicate whether water pressure or any other source of pressure (not internal to or part of the Omega itself) is a prerequisite to or requirement for activation of any make and/or model of Omega sprinkler(s). If so:

a) identify the Omega

b) indicate, for each make and/or model of Omega, what the necessary pressure is (in psig);

c) indicate the expected or required source of that pressure;

d) explain how the pressure activates or assists the Omega's activation;

e) explain why the sprinkler will not activate without that pressure.

INTERROGATORY NO. 29

Are you aware of any non-Omega sprinklers that contain an "o" ring? If so:

a) identify the sprinkler make and/or model;

b) identify the manufacturer of the sprinkler;

c) indicate where in the sprinkler the "o" ring is located;

d) explain the mechanism of proper operation/activation of the sprinkler, including how the "o" ring is used; and

e) identify all persons and entities involved in any way in the design of each such sprinkler make and/or model;

f) indicate whether you are aware or have been notified of any instances in which a non-Omega sprinkler containing an "o" ring did not or allegedly did not activate, either in testing or in a fire, when exposed to its activation (triggering) temperature. If so, indicate when, how, and from whom you received such notification;

g) identify all tests of which you are aware that were conducted on the sprinkler to determine whether or not it operates properly, providing the following information:

i) identify the sprinkler;

i) describe the tests and provide a detailed protocol;

ii) identify the persons and entities involved in setting up and/or conducting the tests;

iii) describe and explain the results of the tests, including all observations and conclusions;

iv) identify the persons and entities involved in evaluating the test results;

h) indicate whether you have communicated with any persons and/or entities (including your employees, agents, and consultants) regarding the operation of any non-Omega sprinklers containing an "o" ring. If so, provide the following information:

i) identify all such persons and/or entities;

ii) state the date of the communication;

iii) describe the content of the communication;

iv) identify all persons and/or entities present during the communication;

INTERROGATORY NO. 30

Indicate which Omega makes and/or models, and which, if any, adaptations or devices to be used with any Omega make and/or model (such as the "helper spring"), have been tested or submitted for approval, listing and/or certification by a certifying laboratory or institution such as UL or FM? For each such Omega, for each testing and/or submission, and for each certifying laboratory or institution:

a) describe all efforts involved and steps taken in an effort to obtain approval, listing and/or certification;

b) indicate the date on which each such effort or step took place;

c) indicate the project number, if any, that each such effort or step related to or was part of;

d) identify all persons and/or entities involved in each effort or step;

e) with respect to any testing and/or examinations:

i) describe the tests and/or examinations, and provide a detailed protocol;

ii) identify the persons and entities involved in setting up and/or conducting the tests;

iii) describe and explain the results of the tests, including all observations and conclusions;

iv) identify the persons and entities involved in evaluating the test results;

f) describe all communications regarding or relating in any way to the listing and/or certification, including the following information:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication;

g) indicate whether and when listing and/or certification was granted, refused, or postponed by the certifying laboratory or institution.

INTERROGATORY NO. 31

Indicate whether approval, listing or certification was ever refused, withdrawn, discontinued or cancelled for any Omega sprinkler, sprinkler component part or allegedly assistive operating device (such as the helper spring), and/or whether any certifying laboratory or institution has ever objected to your sale and/or distribution of any Omega sprinkler. If so:

a) identify the Omega and/or Omega component part or allegedly assistive operating device;

b) explain the circumstances and date;

c) identify all persons and/or entities involved;

d) identify and describe all communications regarding or relating in any way to the refusal, withdrawal, discontinuation, cancellation, or objected to sale and/or distribution, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 32

Have you ever advertised, represented, indicated or suggested in any marketing material that Omega sprinklers that are not listed or certified by FM are listed or certified by FM? If so:

a) identify the advertisement or marketing material;

b) indicate whether and when you were notified of the false advertisement, representation, indication or suggestion. If so, indicate:

i) how and from whom you received the notification;

ii) when you received the notification;

iii) describe the contents of the notification;

iv) describe your response to the notification.

INTERROGATORY NO. 33

Have you ever advertised, indicated or suggested in any marketing material that Omega sprinklers that are not listed or certified by UL are listed or certified by UL? If so:

a) identify the advertisement or marketing material;

b) indicate whether and when you were notified of the false advertisement, representation, indication or suggestion. If so, indicate:

i) how and from whom you received the notification;

ii) when you received the notification;

iii) describe the contents of the notification;

iv) describe your response to the notification.

INTERROGATORY NO. 34

Indicate whether you are aware or have ever been notified of an Omega that did not or allegedly did not activate in a fire? If so:

a) identify the Omega;

b) indicate when, where and how the fire occurred;

c) what was the system pressure was (in psig) at the time of the fire and/or nonactivation;

d) indicate whether anyone sustained or allegedly sustained bodily injury as a result of or in association with the fire (including injuries sustained or allegedly sustained in attempting to escape the fire). If so:

i) identify the injured person;

ii) indicate how the injury was or was alleged to have been sustained;

iii) indicate whether a suit, claim, or demand was ever made against you or in which you were implicated relating to the incident or injury; provide details of same;

e) indicate whether anyone died or allegedly died as a result of or in association with the fire (including death incurred or allegedly incurred in attempting to escape the fire). If so:

i) identify the decedent;

ii) indicate how and where the death occurred;

iii) indicate whether a suit, claim, or demand was ever made against you or in which you were implicated relating to the incident or death; provide details of same;

f) indicate whether any property was or allegedly was damaged, lost or destroyed as a result of or in association with the fire (including damage sustained or allegedly sustained in attempting to remove the property from the fire, or in attempting to put out the fire). If so:

i) identify the owner of the property;

ii) indicate how the property was or allegedly was damaged;

iii) indicate the value or alleged value of the property;

iv) indicate whether a suit, claim, or demand was ever made against you or in which you were implicated relating to the incident or damage; provide details of same;

g) indicate whether the Omega was fitted with a "helper spring;"

h) indicate when and how you became aware of the fire and/or the nonactivation, including from whom you received the notification;

i) identify and describe all communications regarding or relating in any way to the fire and/or nonactivation, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

j) indicate whether you or anyone else tested and/or examined any Omega that failed to activate or allegedly failed to activate in a fire, the sprinkler system in which the Omega was installed, and/or any other sprinkler from the same site? If so:

i) identify the sprinkler;

ii) describe the tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;

iv) describe and explain the results of the tests and/or examinations, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test and/or examination results;

k) indicate whether the Omega "o" ring was examined for swelling and/or adhesion. If so:

i) indicate whether swelling and/or adhesion was present;

ii) indicate on what basis and by what criteria it was determined whether the "o" ring was swollen and/or adhered;

iii) identify all persons and/or entities involved in determining whether the "o" ring was swollen and/or adhered;

l) indicate whether the Omega and/or the system from which it came was tested

and/or examined for "stop leak" or any other leakage prevention substance. If so:

i) indicate whether "stop leak" or any other such substance was present;

ii) indicate on what basis and by what criteria it was determined whether "stop leak" or any other such substance was present;

iii) identify all persons and/or entities involved in determining whether "stop leak" or any other such substance was present;

m) indicate whether the Omega was examined for dezincification. If so:

i) indicate whether dezincification had occurred;

ii) indicate on what basis and by what criteria it was determined whether dezincification had occurred;

iii) identify all persons and/or entities involved in determining whether dezincification had occurred;

n) explain why the Omega failed to activate in the fire.

INTERROGATORY NO. 35

Indicate whether you are aware or have ever been notified of an Omega sprinkler that, when tested, did not activate or allegedly did not activate at 7 psig or below when exposed to its activation/triggering temperature? If so:

a) identify the Omega;

b) indicate when, how, and from whom you received such notification;

c) describe and explain the circumstances of the nonactivation at 7 psig, including

i) when and where the testing and nonactivation at or below 7 psig took

place;

ii) describe the tests and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting the tests;

iv) describe and explain the results of the tests, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test results.

d) indicate at what pressure, if any, the Omega activated (or if it failed to activate altogether, indicate the highest pressure to which the sprinkler was subjected);

e) describe and explain your response to the notification;

f) did you or anyone else of whom you are aware examine and/or test the Omega that failed to activate (after it failed to activate), the system in which it was installed, and/or any other sprinkler from the same site? If so:

i) identify the sprinkler;

ii) describe the tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;

iv) describe and explain the results of the tests and/or examinations, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test and/or examination results;

g) identify and describe all communications regarding or relating in any way to

the notification, the sprinkler, the testing and/or examination, and/or the nonactivation at 7 psig or below, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

h) indicate whether the Omega was equipped or fitted with a "helper spring;"

i) indicate whether the Omega "o" ring was examined for swelling and/or adhesion. If so:

i) indicate whether swelling and/or adhesion was present;

ii) indicate on what basis and by what criteria it was determined whether the "o" ring was swollen and/or adhered;

iii) identify all persons and/or entities involved in determining whether the "o" ring was swollen and/or adhered;

j) indicate whether the Omega and/or the system from which it came was tested and/or examined for "stop leak" or any other leakage prevention substance. If so:

i) indicate whether "stop leak" or any other such substance was present;

ii) indicate on what basis and by what criteria it was determined whether "stop leak" or any other such substance was present;

iii) identify all persons and/or entities involved in determining whether

"stop leak" or any other such substance was present;

k) indicate whether the Omega was examined for dezincification. If so:

i) indicate whether dezincification had occurred;

ii) indicate on what basis and by what criteria it was determined whether dezincification had occurred;

iii) identify all persons and/or entities involved in determining whether dezincification had occurred;

l) explain why each such Omega did not activate at or below 7 psig.

INTERROGATORY NO. 36

Indicate whether you are aware or have ever been notified of an Omega sprinkler that, when tested in the field, did not activate or allegedly did not activate when exposed to its activation/triggering temperature? If so:

a) identify the Omega;

b) indicate when, how, and from whom you received such notification;

c) describe and explain the circumstances of the nonactivation, including:

i) when and where the testing and nonactivation took place;

ii) describe the tests and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting the tests;

iv) describe and explain the results of the tests, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test results.

d) indicate what the pressure of the system (in which the Omega was installed) was at the time of the field test;

e) describe and explain your response to the notification;

f) did you or anyone else of whom you are aware examine and/or test the Omega that failed to activate (after it failed to activate), the system in which it was installed, and/or any other sprinkler from the same site? If so:

i) identify the sprinkler;

ii) describe the tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;

iv) describe and explain the results of the tests and/or examinations, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test and/or examination results;

g) identify and describe all communications regarding or relating in any way to the notification, the sprinkler, the testing and/or examination, and/or the nonactivation, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

h) indicate whether the Omega was equipped or fitted with a "helper spring;"

i) indicate whether the Omega "o" ring was examined for swelling and/or adhesion. If so:

  i) indicate whether swelling and/or adhesion was present;

  ii) indicate on what basis and by what criteria it was determined whether the "o" ring was swollen and/or adhered;

  iii) identify all persons and/or entities involved in determining whether the "o" ring was swollen and/or adhered;

j) indicate whether the Omega and/or the system from which it came was tested and/or examined for "stop leak" or any other leakage prevention substance. If so:

  i) indicate whether "stop leak" or any other such substance was present;

  ii) indicate on what basis and by what criteria it was determined whether "stop leak" or any other such substance was present;

  iii) identify all persons and/or entities involved in determining whether "stop leak" or any other such substance was present;

k) indicate whether the Omega was examined for dezincification. If so:

  i) indicate whether dezincification had occurred;

  ii) indicate on what basis and by what criteria it was determined whether dezincification had occurred;

  iii) identify all persons and/or entities involved in determining whether dezincification had occurred;

l) explain why each such Omega did not activate when field tested.

INTERROGATORY NO. 37

Do you contend that an Omega that is installed into a sprinkler system containing water at a pressure of at least 7 psig, that does not activate upon being exposed to its activation (triggering) temperature for long enough for its fusible like to melt, will activate if fitted with the "helper spring" (that Central has proposed for use with the Omega)? If so:

a) explain the basis for your contention;

b) describe in detail the method of operation of the "helper spring;"

c) describe in detail the specifications for the "helper spring;"

d) identify the manufacturer of the "helper spring;"

e) identify all persons and/or entities involved in the design and/or development of the "helper spring."

f) describe and any tests performed by you or anyone else to assess whether and/or how the "helper spring" affects the operation of an Omega sprinkler or any Omega component part, providing the following information:

i) describe the tests and provide a detailed protocol;

ii) identify the persons and entities involved in setting up and/or conducting the tests;

iii) describe and explain the results of the tests, including all observations and conclusions;

iv) identify the persons and entities involved in evaluating the test results.

g) indicate whether you have communicated with any persons and/or entities

(including your employees, agents, and consultants) regarding the operation and/or efficacy of the helper spring. If so, provide the following information:

i) identify all such persons and/or entities;

ii) state the date of the communication;

iii) describe the content of the communication;

iv) identify all persons and/or entities present during the communication;

h) if you allege that an Omega sprinkler fitted with a helper spring will activate at a lower system pressure than an Omega without a helper spring, please indicate:

i) how much lower the pressure required to activate the helper-spring fitted Omega is than the pressure required to activate an Omega not fitted with the helper spring; and

ii) explain the basis for your allegation;

iii) indicate what evidence supports your allegation.

INTERROGATORY NO. 38

Have you ever been aware or been notified of an Omega sprinkler or component that has cracked or broken? If so:

a) identify the Omega and, if applicable, its component part;

b) describe the circumstances of the cracking and/or breakage, including the date on which it occurred;

c) identify the person and/or entity (including your employees and/or consultants) who notified you of the cracking and/or breakage;

d) detail when and how you became aware or received notification of the cracking and/or breakage;

e) describe and explain your response to the notification;

f) indicate whether you or anyone of whom you are aware examined and/or tested the affected sprinkler, its component part (if applicable), and/or other sprinklers from that site. If so:

i) describe all such tests and/or examinations, and provide a detailed protocol;

ii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;

iii) describe and explain the results of each test and/or examination, including all observations and conclusions;

iv) identify the persons and entities involved in evaluating the test and/or examination results;

g) identify and describe all communications regarding or relating in any way to the affected sprinkler, the cracking and/or breakage, and/or tests and/or examinations relating thereto, indicating:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication;

h) explain in full detail why the cracking and/or breakage occurred.

INTERROGATORY NO. 39

Have you ever been aware or been notified of an Omega sprinkler or any sprinkler component that has exhibited corrosion? If so:

a) identify the Omega and, if applicable, its component part;

b) describe the circumstances of the corrosion, including the date on which it occurred;

c) identify the person and/or entity (including your employees and/or consultants) who notified you of the corrosion;

d) detail when and how you became aware or received notification of the corrosion;

e) describe and explain your response to the notification;

f) indicate whether you or anyone of whom you are aware examined and/or tested the affected sprinkler, its component part (if applicable), and/or other sprinklers from that site. If so:

i) describe all such tests and/or examinations, and provide a detailed protocol;

ii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;

iii) describe and explain the results of each test and/or examination, including all observations and conclusions;

iv) identify the persons and entities involved in evaluating the test or

examination results;

g) identify and describe all communications regarding or relating in any way to the affected sprinkler, the corrosion, and/or tests and/or examinations relating thereto, indicating:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication;

h) explain in full detail how and why the corrosion occurred.

INTERROGATORY NO. 40

Indicate whether you are aware or have ever been notified of an Omega sprinkler that leaked and/or weeped when tested or in a fire? If so:

a) identify the Omega;

b) indicate when, how, and from whom you received notification or became aware of the leakage and/or weeping;

c) describe and explain the circumstances of the leaking and/or weeping, including when and where the leakage and/or weeping took place. If the leakage and/or weeping took place in testing:

i) describe the tests and provide a detailed protocol;

ii) identify the persons and entities involved in setting up and/or conducting the tests;

iii) describe and explain the results of the tests, including all observations and conclusions (and including at what pressure the sprinkler leaked and/or wept);

iv) identify the persons and entities involved in evaluating the test and/or examination results.

d) indicate whether you or anyone else of whom you are aware tested and/or examined the Omega (after it leaked and/or wept), and/or any other sprinkler from the same site. If so:

i) identify the sprinkler;

ii) describe the tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;

iv) describe and explain the results of the tests and/or examinations, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test and/or examination results.

e) describe and explain your response to the notification;

f) identify and describe all communications regarding or relating in any way to the notification, the sprinkler, the testing, and/or the leakage and/or weeping, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was

directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

g) indicate whether the Omega that leaked or wept was equipped or fitted with a "helper spring;"

h) indicate whether the "o" ring of the Omega that leaked or wept was examined for swelling and/or adhesion. If so:

i) indicate whether swelling and/or adhesion was present;

ii) indicate on what basis and by what criteria it was determined whether the "o" ring was swollen and/or adhered;

iii) identify all persons and/or entities involved in determining whether the "o" ring was swollen and/or adhered;

i) explain why the Omega leaked and/or wept.

INTERROGATORY NO. 41

Indicate whether you are aware or have ever been notified of an Omega sprinkler that activated unnecessarily or prematurely (either without or before being exposed to its activation/triggering temperature) when tested or in a fire? If so:

a) identify the Omega;

b) indicate when, how, and from whom you received notification or became aware of the unnecessary or premature activation;

c) describe and explain the circumstances of the unnecessary and/or premature activation; including when and where the activation took place. If during

testing:

i) describe the tests and provide a detailed protocol;

ii) identify the persons and entities involved in setting up and/or conducting the tests;

iii) describe and explain the results of the tests, including all observations and conclusions (and including at what temperature and pressure the sprinkler activated);

iv) identify the persons and entities involved in evaluating the test results.

d) indicate whether you or anyone else of which you are aware tested and/or examined the Omega (after it activated prematurely and/or unnecessarily), and/or any other sprinkler from the same site. If so:

i) identify the sprinkler;

ii) describe the tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;

iv) describe and explain the results of the tests and/or examinations, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test and/or examination results.

e) describe and explain your response to the notification;

f) identify and describe all communications regarding or relating in any way to the notification, the sprinkler, the testing, and/or the premature and/or

unnecessary activation, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

g) indicate whether the Omega that activated prematurely and/or unnecessarily was equipped or fitted with a "helper spring;"

h) indicate whether the "o" ring of the Omega that activated prematurely and/or unnecessarily was examined for swelling and/or adhesion. If so:

i) indicate whether swelling and/or adhesion was or was not present;

ii) indicate on what basis and by what criteria it was determined whether the "o" ring was swollen and/or adhered;

ii) identify all persons and/or entities involved in determining whether the "o" ring was swollen and/or adhered;

i) explain why the Omega activated prematurely and/or unnecessarily.

INTERROGATORY NO. 42

Do you contend that dezincification may cause an Omega to:

a) leak and/or weep;

b) activate prematurely and/or unnecessarily;

c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or

d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or

e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature). If so:

i) explain the basis for your contention;

ii) identify the Omegas in which dezincification causes or may cause (a), (b), (c), and/or (d), above;

iii) identify the systems in which dezincification causes or may cause (a), (b), (c) and/or (d), above;

iv) describe the circumstances under which dezincification causes or may cause (a), (b), (c) and/or (d), above.

INTERROGATORY NO. 43

Have you or anyone of whom you are aware ever determined or alleged that an Omega with a plunger housing made of an alloy other than CDA 35330, from a plastic or copper piping system, exhibits dezincification? If so:

a) identify the Omega;

b) identify the person and/or entity that made the determination or allegation;

c) indicate the date on which the determination or allegation was made;

d) describe the methods and criteria used to determine and confirm the existence of dezincification;

e) identify the person and/or entity (including your employees or consultants) who notified you of the alleged dezincification;

f) indicate how and when you were notified of the alleged dezincification;

g) detail your response to the notification or awareness;

h) did you or anyone else of whom you are aware test and/or examine the Omega, the system in which it was installed and/or any other sprinkler from the same site? If so:

  i) identify the Omega;

  ii) describe all such tests and/or examinations, and provide a detailed protocol;

  iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;

  iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

  v) identify the persons and entities involved in evaluating the test and/or examination results;

i) identify and describe all communications regarding or relating in any way to the Omega, the alleged dezincification, the examination and/or conclusion, and any tests and/or examinations relating thereto, indicating:

  i) the date on which the communication took place;

  ii) the persons and/or entities to and from whom the communication was directed;

  iii) the nature and content of the communication;

  iv) identify all persons and/or entities present during the communication.

j) With respect to each such Omega, indicate whether you contend that the dezincification caused the Omega to:

i) leak and/or weep;

ii) prematurely and/or unnecessarily activate;

iii) fail to activate at 7 psig or below in testing (when exposed to its activation/triggering temperature;

iv) fail to activate in field testing (when exposed to its activation/triggering temperature);

v) fail to activate in a fire (when exposed to its activation/triggering temperature).

If so, explain fully the basis for your contention.

INTERROGATORY NO. 44

Have you or anyone of whom you are aware ever determined or alleged that an Omega with a plunger housing made of CDA 35330 alloy, from a plastic or copper piping system, exhibits dezincification? If so:

a) identify the Omega;

b) identify the person and/or entity that made the determination or allegation;

c) indicate the date on which the determination or allegation was made;

d) describe the methods and criteria used to determine and confirm the existence of dezincification;

e) identify the person and/or entity (including your employees or consultants) who notified you of the alleged dezincification;

f) indicate how and when you were notified of the alleged dezincification;

g) detail your response to the notification or awareness;

h) did you or anyone else of whom you are aware test and/or examine the Omega and/or any other sprinkler from the same site? If so:

i) identify the Omega;

ii) describe all such tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;

iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test and/or examination results;

i) identify and describe all communications regarding or relating in any way to the Omega, the alleged dezincification, the examination and/or conclusion, and any tests and/or examinations relating thereto, indicating:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

j) With respect to each such Omega, indicate whether you or anyone else of

whom you are aware contend that the dezincification caused the Omega to:

i) leak and/or weep;

ii) prematurely and/or unnecessarily activate;

iii) fail to activate at 7 psig or below in testing (when exposed to its activation/triggering temperature;

iv) fail to activate in field testing (when exposed to its activation/triggering temperature);

v) fail to activate in a fire (when exposed to its activation/triggering temperature).

If so, explain fully the basis for your contention or, if not your contention, identify the person and/or entity who so contended, and explain your understanding of the basis for their contention.

INTERROGATORY NO. 45

Have you or anyone of whom you are aware ever determined or alleged that an Omega from a piping system that is neither copper or plastic exhibits dezincification? If so:

a) identify the Omega;

b) identify the person and/or entity that made the determination or allegation;

c) indicate the date on which the determination or allegation was made;

d) describe the methods and criteria used to determine and confirm the existence of dezincification;

e) identify the person and/or entity (including your employees or consultants) who notified you of the alleged dezincification;

f) indicate how and when you were notified of the alleged dezincification;

g) detail your response to the notification or awareness;

h) did you or anyone else of whom you are aware test and/or examine the Omega and/or any other sprinkler from the same site? If so:

i) identify the Omega;

ii) describe all such tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;

iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test and/or examination results;

i) identify and describe all communications regarding or relating in any way to the Omega, the alleged dezincification, the examination and/or conclusion, and any tests and/or examinations relating thereto, indicating:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 46

Are you aware or have you ever been notified of an Omega sprinkler from a copper or plastic piping system that did not exhibit dezincification, and that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire? If so:

a) identify the Omega;

b) describe the circumstances under which the Omega did not activate;

c) indicate at what pressure, if any, the Omega activated (or if it failed to activate altogether, indicate the highest pressure to which the Omega was subjected);

d) identify the person and/or entity (including your employees and/or consultants) who notified you of the Omega and/or its nonactivation under the circumstances above;

e) indicate how and when you became aware or received notification of the nonactivation under the circumstances described above;

f) indicate on what basis and by what criteria it was determined whether dezincification was present;

g) detail your response to the notification or awareness;

h) indicate whether you or anyone else of whom you are aware examined and/or tested the affected sprinkler and/or other sprinklers from that site. If so:

i) identify the Omega;

ii) describe all such tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;

iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test results;

i) identify and describe all communications regarding or relating in any way to the Omega and/or its nonactivation, and/or tests and/or examinations relating thereto, indicating:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

j) explain in full detail why the Omega did not activate.

INTERROGATORY NO. 47

Do you allege that any change in the manufacturing process and/or component parts, including any tools, substances or chemicals used in the manufacturing process, renders the Omegas manufactured after a certain date unsusceptible to dezincification? If so:

a) describe the alleged change, and indicate which Omega makes and models were changed;

b) indicate the date on which the change was effected;

c) identify all persons and/or entities involved in effecting the change, describing

each such person's role in effecting the change;

d) indicate whether you or anyone else of whom you are aware has tested and/or examined an Omega manufactured after the change to determine whether it exhibits dezincification? If so:

i) identify the Omega;

ii) describe all such tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting each test or examination;

iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test and/or examination results;

e) identify and describe all communications regarding or relating in any way to the change and/or tests and/or examinations relating thereto, indicating:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 48

Do you contend that the use of stop leak or other sealant, leakage prevention substance

or pipe cement by sprinkler installers/contractors, plumbers and/or others directly involved in installation and/or maintenance of sprinkler systems may cause an Omega to:

a) leak and/or weep;

b) activate prematurely and/or unnecessarily;

c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or

d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or

e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature). If so:

i) explain the basis for your contention;

ii) identify the Omegas in which the use of stop leak or other sealant, leakage prevention substance or pipe cement causes or may cause (a), (b), (c), and/or (d), above;

iii) identify the systems in which the use of stop leak or other sealant, leakage prevention substance or pipe cement causes or may cause (a), (b), (c) and/or (d), above;

iv) identify the substances you contend are used;

v) describe the circumstances under which the use of stop leak or other sealant, leakage prevention substance or pipe cement causes or may cause (a), (b), (c) and/or (d), above.

INTERROGATORY NO. 49

Have you or anyone of whom you are aware ever determined or alleged that an Omega sprinkler was exposed to stop leak or any other sealant, leakage prevention substance or pipe cement? If so:

a) identify the Omega;

b) identify the substance to which the Omega was allegedly exposed, including the manufacturer, chemical name, brand name, and chemical composition;

c) identify the person and/or entity that made the determination or allegation;

d) indicate the date on which the determination or allegation was made;

e) describe the methods and criteria used to determine and confirm the existence of the stop leak or the other sealant, leak prevention substance or pipe cement;

f) identify the person and/or entity (including your employees or consultants) who notified you of the alleged exposure to stop leak or any other sealant, leakage prevention substance or pipe cement;

g) indicate how and when you were notified of the alleged exposure to stop leak or any other sealant, leakage prevention substance or pipe cement;

h) detail your response to the notification or awareness;

i) did you or anyone else of whom you are aware test and/or examine the Omega and/or any other sprinkler from the same site? If so:

   i) identify the Omega;

   ii) describe all such tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;

iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test and/or examination results;

j) identify and describe all communications regarding or relating in any way to the Omega, the alleged exposure to stop leak or any other sealant, leakage prevention substance or pipe cement, the examination and/or conclusion, and any tests and/or examinations relating thereto, indicating:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

k) With respect to each such Omega, indicate whether you contend that the exposure to stop leak or any other sealant, leakage prevention substance or pipe cement caused the Omega to:

i) leak and/or weep;

ii) prematurely and/or unnecessarily activate;

iii) fail to activate at 7 psig or below in testing (when exposed to its activation/triggering temperature;

iv) fail to activate in field testing (when exposed to its activation/triggering temperature);

v) fail to activate in a fire (when exposed to its activation/triggering temperature);

If so, explain fully the basis for your contention.

INTERROGATORY NO. 50

Are you aware or have you ever been notified of an Omega sprinkler that was not exposed to stop leak or any other sealant, leakage prevention substance or pipe cement, and that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire? If so:

a) identify the Omega;

b) describe the circumstances under which the Omega did not activate;

c) indicate at what pressure, if any, the Omega activated (or if it failed to activate altogether, indicate the highest pressure to which the Omega was subjected);

d) identify the person and/or entity (including your employees and/or consultants) who notified you of the Omega and/or its nonactivation under the circumstances above;

e) indicate how and when you became aware or received notification of the nonactivation under the circumstances described above;

f) indicate on what basis and by what criteria it was determined whether stop leak or any other sealant, leakage prevention substance or pipe cement was present;

g) detail your response to the notification or awareness;

h) indicate whether you or anyone else of whom you are aware examined and/or tested the affected sprinkler and/or other sprinklers from that site. If so:

i) identify the Omega;

ii) describe all such tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;

iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test results;

i) identify and describe all communications regarding or relating in any way to the Omega and/or its nonactivation, and/or tests and/or examinations relating thereto, indicating:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication;

j) explain in full detail why the Omega did not activate.

INTERROGATORY NO. 51

Do you allege that any change in the manufacturing process and/or component parts,

including any tools, substances or chemicals used in the manufacturing process, renders the Omegas manufactured after a certain date unsusceptible to the effects that you allege in your response to Interrogatory No. 48 are caused or may be caused by the use of stop leak or any other sealant, leakage prevention substance or pipe cement? If so, for each such substance (stop leak or any other sealant, leakage prevention substance or pipe cement):

a) identify the substance;

b) describe the alleged change, and identify the Omega makes and models to which the change applies;

c) indicate the date on which the change was effected;

d) identify all persons and/or entities involved in effecting the change, describing each such person's role in effecting the change;

e) indicate whether you or anyone else of whom you are aware has tested and/or examined an Omega manufactured after the change to determine whether it exhibits the effects that you allege in your response to Interrogatory No. 48 are caused or may be caused by the use of stop leak or any other sealant, leakage prevention substance or pipe cement? If so:

i) identify the Omega;

ii) describe all such tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting each test or examination;

iv) describe and explain the results of each test and/or examination,

including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test and/or examination results;

e) identify and describe all communications regarding or relating in any way to the change and/or tests and/or examinations relating thereto, indicating:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 52

Do you contend that the use of cutting oil or other substances used by sprinkler installers/contractors, plumbers and/or others directly involved in installation and/or maintenance of sprinkler systems to cut pipe may cause an Omega to:

a) leak and/or weep;

b) activate prematurely and/or unnecessarily;

c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or

d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or

e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature). If so:

i) explain the basis for your contention;

ii) identify the Omegas in which the use of cutting oils or other substances used to cut pipe causes or may cause (a), (b), (c), and/or (d), above;

iii) identify the systems in which the use of cutting oils or other substances used to cut pipe causes or may cause (a), (b), (c) and/or (d), above;

iv) identify the substances you contend are used;

v) describe the circumstances under which the use of cutting oils or other substances used to cut pipe causes or may cause (a), (b), (c) and/or (d), above.

INTERROGATORY NO. 53

Have you or anyone of whom you are aware ever determined or alleged that an Omega sprinkler was exposed to cutting oils or other substances used to cut pipe? If so:

a) identify the Omega;

b) identify the substance to which the Omega was allegedly exposed, including the manufacturer, chemical name, brand name, and chemical composition;

c) identify the person and/or entity that made the determination or allegation;

d) indicate the date on which the determination or allegation was made;

e) describe the methods and criteria used to determine and confirm the existence of the cutting oil or other substance used to cut pipe;

f) identify the person and/or entity (including your employees or consultants) who notified you of the alleged exposure to cutting oil or other substance to cut pipe;

g) indicate how and when you were notified of the alleged exposure to cutting oil or other substance to cut pipe;

h) detail your response to the notification or awareness;

i) did you or anyone else of whom you are aware test and/or examine the Omega and/or any other sprinkler from the same site? If so:

i) identify the Omega;

ii) describe all such tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;

iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test and/or examination results;

j) identify and describe all communications regarding or relating in any way to the Omega, the alleged exposure to cutting oil or other substance to cut pipe, the examination and/or conclusion, and any tests and/or examinations relating thereto, indicating:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication;

k) With respect to each such Omega, indicate whether you contend that the exposure to cutting oil or other substance to cut pipe caused the Omega to:

i) leak and/or weep;

ii) prematurely and/or unnecessarily activate;

iii) fail to activate at 7 psig or below in testing (when exposed to its activation/triggering temperature;

iv) fail to activate in field testing (when exposed to its activation/triggering temperature);

v) fail to activate in a fire (when exposed to its activation/triggering temperature).

If so, explain fully the basis for your contention.

INTERROGATORY NO. 54

Are you aware or have you ever been notified of an Omega sprinkler that was not exposed to cutting oil or other substance used to cut pipe, and that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire? If so:

a) identify the Omega;

b) describe the circumstances under which the Omega did not activate;

c) indicate at what pressure, if any, the Omega activated (or if it failed to activate altogether, indicate the highest pressure to which the Omega was subjected);

d) identify the person and/or entity (including your employees and/or consultants)

who notified you of the Omega and/or its nonactivation under the circumstances above;

e) indicate how and when you became aware or received notification of the nonactivation under the circumstances described above;

f) indicate on what basis and by what criteria it was determined whether cutting oil or other substance to cut pipe was present;

g) detail your response to the notification or awareness;

h) indicate whether you or anyone else of whom you are aware examined and/or tested the affected sprinkler and/or other sprinklers from that site. If so:

   i) identify the Omega;

   ii) describe all such tests and/or examinations, and provide a detailed protocol;

   iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;

   iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

   v) identify the persons and entities involved in evaluating the test results;

i) identify and describe all communications regarding or relating in any way to the Omega and/or its nonactivation, and/or tests and/or examinations relating thereto, indicating:

   i) the date on which the communication took place;

   ii) the persons and/or entities to and from whom the communication was

directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication;

j) explain in full detail why the Omega did not activate.

INTERROGATORY NO. 55

Do you allege that any change in the manufacturing process and/or component parts, including any tools, substances or chemicals used in the manufacturing process, renders the Omegas manufactured after a certain date unsusceptible to the effects that you allege in your response to Interrogatory No. 52 are caused or may be caused by the use of cutting oil or other substance used to cut pipe? If so, for each such substance (cutting oil or other substance used to cut pipe):

a) identify the substance;

b) describe the alleged change, and identify the Omega makes and models to which the change applies;

c) indicate the date on which the change was effected;

d) identify all persons and/or entities involved in effecting the change, describing each such person's role in effecting the change;

e) indicate whether you or anyone else of whom you are aware has tested and/or examined an Omega manufactured after the change to determine whether it exhibits the effects that you allege in your response to Interrogatory No. 52 are caused or may be caused by the use of cutting oil or other substance used to cut pipe? If so:

i) identify the Omega;

ii) describe all such tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting each test or examination;

iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test and/or examination results;

f) identify and describe all communications regarding or relating in any way to the change and/or tests and/or examinations relating thereto, indicating:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 56

Do you contend that swelling of the "o" ring in an Omega sprinkler may cause the Omega to:

a) leak and/or weep;

b) activate prematurely and/or unnecessarily;

c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its

activation/triggering temperature); and/or

d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or

e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature). If so:

i) explain the basis for your contention;

ii) identify the Omegas in which "o" ring swelling causes or may cause (a), (b), (c), and/or (d), above, indicating what type of "o" ring (EPDM, silicone, or other) is used in that Omega;

iii) identify the systems in which "o" ring swelling causes or may cause (a), (b), (c) and/or (d), above;

iv) describe the circumstances under which "o" ring swelling causes or may cause (a), (b), (c) and/or (d), above.

INTERROGATORY NO. 57

Have you or anyone of whom you are aware ever determined or alleged that an Omega containing an EPDM "o" ring, from a steel piping system, exhibits "o" ring swelling? If so:

a) identify the Omega;

b) identify the person and/or entity that made the determination or allegation;

c) indicate the date on which the determination or allegation was made;

d) describe the methods and criteria used to determine and confirm the existence of "o" ring swelling;

e) identify the person and/or entity (including your employees or consultants) who notified you of the alleged "o" ring swelling;

f) indicate how and when you were notified of the alleged "o" ring swelling;

g) detail your response to the notification or awareness;

h) did you or anyone else of whom you are aware test and/or examine the Omega and/or any other sprinkler from the same site? If so:

i) identify the Omega;

ii) describe all such tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;

iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test and/or examination results;

i) identify and describe all communications regarding or relating in any way to the Omega, the alleged "o" ring swelling, the examination and/or conclusion, and any tests and/or examinations relating thereto, indicating:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication;

j) With respect to each such Omega, indicate whether you contend that the "o" ring swelling caused the Omega to:

i) leak and/or weep;

ii) prematurely and/or unnecessarily activate;

iii) fail to activate at 7 psig or below in testing (when exposed to its activation/triggering temperature;

iv) fail to activate in field testing (when exposed to its activation/triggering temperature);

v) fail to activate in a fire (when exposed to its activation/triggering temperature).

If so, explain fully the basis for your contention.

INTERROGATORY NO. 58

Have you or anyone of whom you are aware ever determined or alleged that an Omega containing a silicone "o" ring, from a steel piping system, exhibits "o" ring swelling? If so:

a) identify the Omega;

b) identify the person and/or entity that made the determination or allegation;

c) indicate the date on which the determination or allegation was made;

d) describe the methods and criteria used to determine and confirm the existence of "o" ring swelling;

e) identify the person and/or entity (including your employees or consultants) who

notified you of the alleged "o" ring swelling;

f) indicate how and when you were notified of the alleged "o" ring swelling;

g) detail your response to the notification or awareness;

h) did you or anyone else of whom you are aware test and/or examine the Omega and/or any other sprinkler from the same site? If so:

i) identify the Omega;

ii) describe all such tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;

iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test and/or examination results;

i) identify and describe all communications regarding or relating in any way to the Omega, the alleged "o" ring swelling, the examination and/or conclusion, and any tests and/or examinations relating thereto, indicating:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication;

j) With respect to each such Omega, indicate whether you or anyone else of whom you are aware contend that the "o" ring swelling caused the Omega to:

i) leak and/or weep;

ii) prematurely and/or unnecessarily activate;

iii) fail to activate at 7 psig or below in testing (when exposed to its activation/triggering temperature;

iv) fail to activate in field testing (when exposed to its activation/triggering temperature);

v) fail to activate in a fire (when exposed to its activation/triggering temperature).

If so, explain fully the basis for your contention or, if not your contention, identify the person and/or entity who so contends, and explain your understanding of their basis for that contention.

INTERROGATORY NO. 59

Have you or anyone of whom you are aware ever determined or alleged that an Omega from a piping system that is not steel exhibits "o" ring swelling? If so:

a) identify the Omega;

b) indicate what type of "o" ring the Omega contained (EPDM, silicone, or other type of "o" ring);

c) identify the person and/or entity that made the determination or allegation;

d) indicate the date on which the determination or allegation was made;

e) describe the methods and criteria used to determine and confirm the existence

of "o" ring swelling;

f) identify the person and/or entity (including your employees or consultants) who notified you of the alleged "o" ring swelling;

g) indicate how and when you were notified of the alleged "o" ring swelling;

h) detail your response to the notification or awareness;

i) did you or anyone else of whom you are aware test and/or examine the Omega and/or any other sprinkler from the same site? If so:

  i) identify the Omega;

  ii) describe all such tests and/or examinations, and provide a detailed protocol;

  iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;

  iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

  v) identify the persons and entities involved in evaluating the test and/or examination results;

j) identify and describe all communications regarding or relating in any way to the Omega, the alleged "o" ring swelling, the examination and/or conclusion, and any tests and/or examinations relating thereto, indicating:

  i) the date on which the communication took place;

  ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 60

Are you aware or have you ever been notified of an Omega sprinkler from a steel piping system that did not exhibit "o" ring swelling, and that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire? If so:

a) identify the Omega and indicate what type of "o" ring it contained;

b) describe the circumstances under which the Omega did not activate;

c) indicate at what pressure, if any, the Omega activated (or if it failed to activate altogether, indicate the highest pressure to which the Omega was subjected);

d) identify the person and/or entity (including your employees and/or consultants) who notified you of the Omega and/or its nonactivation under the circumstances above;

e) indicate how and when you became aware or received notification of the nonactivation under the circumstances described above;

f) indicate on what basis and by what criteria it was determined whether "o" ring swelling was present;

g) detail your response to the notification or awareness;

h) indicate whether you or anyone else of whom you are aware examined and/or tested the affected sprinkler and/or other sprinklers from that site. If so:

i) identify the Omega;

ii) describe all such tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;

iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test results;

i) identify and describe all communications regarding or relating in any way to the Omega and/or its nonactivation, and/or tests and/or examinations relating thereto, indicating:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication;

j) explain in full detail why the Omega did not activate.

INTERROGATORY NO. 61

Do you allege that any change in the manufacturing process and/or component parts, including any tools, substances or chemicals used in the manufacturing process, renders the Omegas manufactured after a certain date unsusceptible to "o" ring swelling? If so:

a) describe the alleged change, and identify the Omega makes and models to which the change applies;

b) indicate the date on which the change was effected;

c) identify all persons and/or entities involved in effecting the change, describing each such person's role in effecting the change;

d) indicate whether you or anyone else of whom you are aware has tested and/or examined an Omega manufactured after the change to determine whether it exhibits "o" ring swelling; If so:

i) identify the Omega;

ii) describe all such tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting each test or examination;

iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test and/or examination results;

e) identify and describe all communications regarding or relating in any way to the change and/or tests and/or examinations relating thereto, indicating:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 62

Do you contend that adhesion of an Omega sprinkler's "o" ring to the plunger housing or main housing of the Omega may cause the Omega to:

a) leak and/or weep;

b) activate prematurely and/or unnecessarily;

c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or

d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or

e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature). If so:

i) explain the basis for your contention;

ii) identify the Omegas in which "o" ring adhesion causes or may cause (a), (b), (c), and/or (d), above;

iii) identify the systems in which "o" ring adhesion causes or may cause (a), (b), (c) and/or (d), above;

iv) identify the Omegas in which "o" ring adhesion causes or may cause (a), (b), (c) and/or (d), above;

v) describe the circumstances under which "o" ring adhesion causes or may cause (a), b), (c) and/or (d), above.

INTERROGATORY NO. 63

Have you or anyone of whom you are aware ever determined or alleged that an

Omega exhibits "o" ring adhesion? If so:

a) identify the Omega, and indicate what type of "o" ring it contained (EPDM, silicone, or other);

b) identify the person and/or entity that made the determination or allegation;

c) indicate the date on which the determination or allegation was made;

d) describe the methods and criteria used to determine and confirm the existence of "o" ring adhesion;

e) identify the person and/or entity (including your employees or consultants) who notified you of the alleged "o" ring adhesion;

f) indicate how and when you were notified of the alleged "o" ring adhesion;

g) detail your response to the notification or awareness;

h) did you or anyone else of whom you are aware test and/or examine the Omega and/or any other sprinkler from the same site? If so:

i) identify the Omega;

ii) describe all such tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;

iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test and/or examination results;

i) identify and describe all communications regarding or relating in any way to the Omega, the alleged "o" ring adhesion, the examination and/or conclusion, and any tests and/or examinations relating thereto, indicating:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication;

j) With respect to each such Omega, indicate whether you or anyone of whom you are aware contend that the "o" ring adhesion caused the Omega to:

i) leak and/or weep;

ii) prematurely and/or unnecessarily activate;

iii) fail to activate at 7 psig or below in testing (when exposed to its activation/triggering temperature;

iv) fail to activate in field testing (when exposed to its activation/triggering temperature);

v) fail to activate in a fire (when exposed to its activation/triggering temperature).

If so, explain fully the basis for your contention or, if not your contention, identify the person and/or entity who so contended, and explain your understanding of the basis for that contention.

INTERROGATORY NO. 64

Do you allege that any change in the manufacturing process and/or component parts, including any tools, substances or chemicals used in the manufacturing process, renders the Omegas manufactured after a certain date unsusceptible to "o" ring adhesion? If so:

a) describe the alleged change, and identify the Omega makes and models to which the change applies;

b) indicate the date on which the change was effected;

c) identify all persons and/or entities involved in effecting the change, describing each such person's role in effecting the change;

d) indicate whether you or anyone else of whom you are aware has tested and/or examined an Omega manufactured after the change to determine whether it exhibits "o" ring adhesion; If so:

   i) identify the Omega;

   ii) describe all such tests and/or examinations, and provide a detailed protocol;

   iii) identify the persons and entities involved in setting up and/or conducting each test or examination;

   iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

   v) identify the persons and entities involved in evaluating the test and/or examination results;

e) identify and describe all communications regarding or relating in any way to

the change and/or tests and/or examinations relating thereto, indicating:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 65

Do you contend or are you aware of any fires in which all Omegas exposed to temperatures at or in excess of their activation/triggering temperature activated? If so:

a) identify each Omega;

b) indicate when, where and how the fire occurred;

c) what was the system pressure was (in psig) at the time of the fire and/or activation;

d) indicate how long after the Omega was first exposed to its activation/triggering temperature it activated;

e) indicate whether anyone sustained or allegedly sustained bodily injury as a result of or in association with the fire (including injuries sustained or allegedly sustained in attempting to escape the fire). If so:

i) identify the injured person;

ii) indicate how the injury was or was alleged to have been sustained;

iii) indicate whether a suit, claim, or demand was ever made against you or in which you were implicated relating to the incident or injury; provide

details of same;

f) indicate whether anyone died or allegedly died as a result of or in association with the fire (including death incurred or allegedly incurred in attempting to escape the fire). If so:

i) identify the decedent;

ii) indicate how and where the death occurred;

iii) indicate whether a suit, claim, or demand was ever made against you or in which you were implicated relating to the incident or death; provide details of same;

g) indicate whether any property was or allegedly was damaged, lost or destroyed as a result of or in association with the fire (including damage sustained or allegedly sustained in attempting to remove the property from the fire, or in attempting to put out the fire). If so:

i) identify the owner of the property;

ii) indicate how the property was or allegedly was damaged;

iii) indicate the value or alleged value of the property;

iv) indicate whether a suit, claim, or demand was ever made against you or in which you were implicated relating to the incident or damage; provide details of same;

h) indicate whether the Omega was fitted with a "helper spring;"

i) indicate when and how you became aware of the fire and/or the activation, including from whom you received the notification;

j) identify and describe all communications regarding or relating in any way to the fire and/or activation, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication;

k) indicate whether you or anyone else tested and/or examined any Omega that allegedly activated in a fire, or any other sprinkler from the same site? If so:

i) identify the sprinkler;

ii) describe the tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;

iv) describe and explain the results of the tests and/or examinations, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test and/or examination results;

l) indicate whether the Omega "o" ring was examined for swelling and/or adhesion. If so:

i) indicate whether swelling and/or adhesion was present;

ii) indicate on what basis and by what criteria it was determined whether the "o" ring was swollen or adhered;

iii) identify all persons and/or entities involved in determining whether the "o" ring was swollen or adhered;

m) indicate whether the Omega and/or the system from which it came was tested and/or examined for "stop leak" or any other leakage prevention substance. If so:

i) indicate whether "stop leak" or any other such substance was present;

ii) indicate on what basis and by what criteria it was determined whether "stop leak" or any other such substance was present;

iii) identify all persons and/or entities involved in determining whether "stop leak" or any other such substance was present;

n) indicate whether the Omega was examined for dezincification. If so:

i) indicate whether dezincification had occurred;

ii) indicate on what basis and by what criteria it was determined whether dezincification had occurred;

iii) identify all persons and/or entities involved in determining whether dezincification had occurred;

INTERROGATORY NO. 66

Identify and describe all tests and/or examinations conducted by you or anyone on your behalf on Omega sprinklers. For each test:

a) identify the sprinklers tested;

b) describe the tests and provide a detailed protocol and the date on which each test was conducted;

c) identify the persons and entities involved in:

i) drafting and/or conceiving the protocol;

ii) setting up and/or conducting the tests;

d) describe and explain the results of the tests, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test results;

f) identify and describe all communications relating in any way to any such tests and/or test results, indicating:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 67

Have you or anyone of whom you are aware ever performed the "load on heat responsive element test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 68

Have you or anyone of whom you are aware ever performed the "strength of heat responsive element test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 69

Have you or anyone of whom you are aware ever performed the "leakage test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was

directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 70

Have you or anyone of whom you are aware ever performed the "hydrostatic strength test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 71

Have you or anyone of whom you are aware ever performed the "30-day leakage test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 72

Have you or anyone of whom you are aware ever performed the "water hammer test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 73

Have you or anyone of whom you are aware ever performed the "operating temperature (bath) test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the

test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 74

Have you or anyone of whom you are aware ever performed the "sensitivity tests" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 75

Have you or anyone of whom you are aware ever performed the "operation - lodgement test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was

directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 76

Have you or anyone of whom you are aware ever performed the "flow endurance test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 77

Have you or anyone of whom you are aware ever performed the "operation - cold soldering test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 78

Have you or anyone of whom you are aware ever performed the "high temperature - test for uncoated sprinklers" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 79

Have you or anyone of whom you are aware ever performed the "high temperature - test for coated sprinklers" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 80

Have you or anyone of whom you are aware ever performed the "strength of frame test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 81

Have you or anyone of whom you are aware ever performed the "impact resistance test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 82

Have you or anyone of whom you are aware ever performed the "rough usage test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 83

Have you or anyone of whom you are aware ever performed the "vibration test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 84

Have you or anyone of whom you are aware ever performed the "calibration test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 85

Have you or anyone of whom you are aware ever performed the "10 pan distribution test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 86

Have you or anyone of whom you are aware ever performed the "16 pan distribution test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to

the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 87

Have you or anyone of whom you are aware ever performed the "water distribution test - conventional (old style) sprinklers" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was

directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 88

Have you or anyone of whom you are aware ever performed the "100 pan distribution test - sidewall sprinklers" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 89

Have you or anyone of whom you are aware ever performed the "350 pound wood crib fire test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 90

Have you or anyone of whom you are aware ever performed the "10-day corrosion test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 91

Have you or anyone of whom you are aware ever performed the "30-day corrosion test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 92

Have you or anyone of whom you are aware ever performed the "90-day moist air test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to

the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 93

Have you or anyone of whom you are aware ever performed the "stress-corrosion cracking of brass sprinkler parts test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was

directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 94

Have you or anyone of whom you are aware ever performed the "stress-corrosion cracking of stainless sprinkler parts test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 95

Have you or anyone of whom you are aware ever performed the "operational tests on sprinklers incorporating gaskets or "o" ring seals" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 96

Have you or anyone of whom you are aware ever performed the "vacuum test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 97

Have you or anyone of whom you are aware ever performed the "elastomeric parts test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the

test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 98

Have you or anyone of whom you are aware ever performed the "freezing test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 99

Have you or anyone of whom you are aware ever performed the "fire test for extended coverage sprinklers intended for light hazard occupancies" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 100

Have you or anyone of whom you are aware ever performed the "wall wetting test for extended coverage sprinklers intended for light hazard occupancies" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 101

Have you or anyone of whom you are aware ever performed the "evaporation test for sprinkler coatings" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 102

Have you or anyone of whom you are aware ever performed the "cycling tests for flow control (FC) sprinklers" according to the testing protocol in UL 199 on an Omega

sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 103

Have you or anyone of whom you are aware ever performed the "piled stock fire test for flow control (FC) sprinklers" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and

the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 104

Have you or anyone of whom you are aware ever performed the "piled stock fire test for extended coverage sprinklers intended for ordinary hazard occupancies" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 105

Have you or anyone of whom you are aware ever performed the "distribution tests for extended coverage sprinklers intended for ordinary hazard occupancies" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 106

Have you or anyone of whom you are aware ever performed the "high temperature exposure test for flow control (FC) sprinklers" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 107

Have you or anyone of whom you are aware ever performed the "production leakage test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 108

Have you ever tested an Omega that, upon being exposed to its activation/triggering temperature, did not activate within 5 seconds at a pressure at or below 7 psig pressure?

If so:

a) identify the Omega;

b) explain why it failed to activate;

c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;

e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 109

Indicate whether you have attended or been present at any meetings or discussions, or issued or received any communications, in which the following were discussed:

a) failure of Omega sprinklers to activate in testing or in a fire;

b) dezincification as a cause or possible cause of Omega non-activation in testing or in a fire;

c) stop leak or other leak prevention substance as a cause or possible cause of Omega non-activation in testing or in a fire;

d) "o" ring swelling as a cause or possible cause of Omega non-activation in testing or in a fire;

e) "o" ring adhesion as a cause or possible cause of Omega non-activation in testing or in a fire;

f) excessive hydrocarbons as a cause or possible cause of Omega non-activation in testing or in a fire;

g) improper system design as a cause or possible cause of Omega non-activation in testing or in a fire;

h) UL listing or certification of any Omega sprinkler or sprinkler assistive device such as the "helper spring;"

i) FM listing or certification of any Omega sprinkler or sprinkler assistive device such as the "helper spring;"

j) NFPA 13 requirements or applicability with respect to fire sprinklers or sprinkler systems;

k) NFPA 25 requirements or applicability with respect to fire sprinklers or sprinkler systems;

l) UL 199 requirements or applicability with respect to fire sprinklers or sprinkler systems;

m) UL 1626 requirements or applicability with respect to fire sprinklers or sprinkler systems. If so, for each such meeting, discussion, and communication, provide:

i) the date on which the meeting, discussion or communication took place;

ii) the persons and/or entities to and from whom the communication was directed or, if a meeting or discussion, identify all persons who were present and/or participated;

iii) the nature and content of the communication;

INTERROGATORY NO. 110

Have you ever been notified of any problem, potential problem, complaint or concern (including any reports of nonactivation or possibility of nonactivation) regarding or in any way relating to an Omega sprinkler? If so:

a) identify who notified you;

b) indicate how and when you were notified;

c) describe and explain the contents of the notification;

d) identify all persons who have knowledge of the notification and/or the problem, potential problem, complaint or concern;

e) describe and explain your response to the notification;

f) did you or anyone else of whom you are aware examine and/or test the Omega about which you were notified of any problem, potential problem, complaint or concern, the system in which it was installed, and/or any other sprinkler from the same site? If so:

i) identify the sprinkler;

ii) describe the tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;

iv) describe and explain the results of the tests and/or examinations, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test and/or examination results;

g) identify and describe all communications regarding or relating in any way to the notification, the sprinkler, and/or any the testing and/or examination in part f), including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 111

Have you notified any person and/or entity of any problem, potential problem, complaint or concern (including any reports of nonactivation or possibility of nonactivation) regarding or in any way relating to an Omega sprinkler? If so:

a) identify who you notified, and all persons and/or entities who received the notification or copies thereof;

b) indicate how and when you notified the persons and/or entities identified in your response to part (a) above;

c) describe and explain the contents of the notification;

d) identify all persons who have knowledge of the notification and/or the problem, potential problem, complaint or concern, including who drafted, reviewed and/or approved the notification;

e) did you receive any response to the notification? If so:

i) identify the person and/or entity from whom you received a response;

ii) indicate how and when you received the response;

iii) describe and explain the contents of the response;

f) identify and describe all communications regarding or relating in any way to the notification and/or response, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 112

Indicate whether you ever requested any information from any sprinkler contractor or sprinkler owner regarding any Omega sprinkler. If so:

a) identify the persons and/or entities from whom you requested information;

b) indicate how and when you requested the information;

c) describe and explain what information you requested;

d) identify all persons who have knowledge of the request for information, including those who drafted, reviewed and/or approved the request for information;

e) did you receive any response to the request for information? If so:

i) identify the person and/or entity from whom you received a response;

ii) indicate how and when you received the response;

iii) describe and explain the contents of the response;

f) identify and describe all communications regarding or relating in any way to the request for information and/or the response to that request, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 113

Have you or anyone on your behalf provided (either by sale or without charge) sprinklers to anyone to replace some or all of the Omegas installed in a particular location? If so, indicate the total number of Omegas replaced, and the total value of the replacement (labor plus cost of sprinklers, and any other associated expenses).

INTERROGATORY NO. 114

With respect to each location in which you provided (either by sale or without charge)

sprinklers to anyone to replace some or all of the Omegas that were installed there:

a) identify the location;

b) indicate what make and/or model Omegas were replaced, and the quantity of each replaced;

c) indicate what make and/or model sprinkler were provided as a replacement, and the quantity of each provided;

d) identify the person and/or entity to whom you provided the replacements;

e) describe and explain the circumstances under which you provided the replacements;

f) identify the person and/or entity who paid the cost of the replacement;

g) indicate the cost of the replacement;

h) describe and explain what the replacement involved;

i) did you or anyone else of whom you are aware examine and/or test the Omega that was replaced, the system in which it was installed, and/or any other sprinkler from the same site? If so:

i) identify the sprinkler;

ii) describe the tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;

iv) describe and explain the results of the tests and/or examinations, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test and/or

examination results;

j) identify and describe all communications regarding or relating in any way to the replacement of the sprinklers, the sprinkler that was replaced, the replacement sprinkler, and/or any the testing and/or examination the replaced sprinkler, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 115

Have you ever tested Omega sprinklers from a building or structure and indicated to the building owner/operator or anyone else that all Omegas activated properly? If so:

a) identify each Omega you tested;

b) identify the location in which the Omega had been installed;

c) for each location, indicate how many Omegas were installed there prior to testing, and how many were tested;

d) describe the tests and/or examinations, and provide a detailed protocol;

e) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;

f) describe and explain the results of the tests and/or examinations, including all observations and conclusions;

g) identify the persons and entities involved in evaluating the test and/or examination results;

h) did you or anyone else of whom you are aware examine and/or test the system in which it was installed? If so:

   i) describe the tests and/or examinations, and provide a detailed protocol;

   ii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;

   iii) describe and explain the results of the tests and/or examinations, including all observations and conclusions;

   iv) identify the persons and entities involved in evaluating the test and/or examination results;

i) did any person or entity other than you examine and/or test sprinklers from the same site? If so:

   i) identify the sprinkler;

   ii) describe the tests and/or examinations, and provide a detailed protocol;

   iii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;

   iv) describe and explain the results of the tests and/or examinations, including all observations and conclusions;

   v) identify the persons and entities involved in evaluating the test and/or examination results;

j) identify and describe all communications regarding or relating in any way to

the sprinklers, the testing and/or the results, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

INTERROGATORY NO. 116

Identify each person whom you expect to call as an expert witness at trial or hearing in this matter, and provide the following information:

a) the subject matter on which the expert is expected to testify;

b) the substance of the facts and opinions to which the expert is expected to testify;

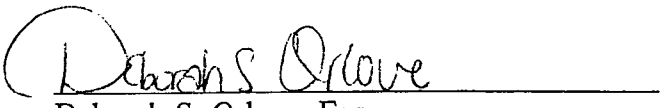
c) provide a summary of the grounds for each opinion to which the expert is expected to testify.

INTERROGATORY NO. 117

Identify each person whom you expect to call as a fact witness at trial or hearing in this matter, and provide the following information:

a) the subject matter on which the witness is expected to testify;

b) the substance of the facts to which the witness is expected to testify.



Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.

Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, Maryland 20814
301-504-0626

DATED: April 20, 1998

central\interrog.dso

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, Complaint Counsel's **First Set of Interrogatories to Respondents Central Sprinkler Corp. and Central Sprinkler Co.** and **First Requests for Production of Documents and Things to Respondents Central Sprinkler Corp. and Central Sprinkler Co.** were deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

J. Gordon Cooney, Jr.
Thomas P. Hogan, Jr.
Emily J. Lawrence
MORGAN, LEWIS & BOCKIUS LLP
2000 One Logan Square
Philadelphia, PA 19103
(215) 963-5000

Michael F. Healy
MORGAN, LEWIS & BOCKIUS LLP
1800 M Street, NW
Washington, DC 20036-5869
(202) 467-7000

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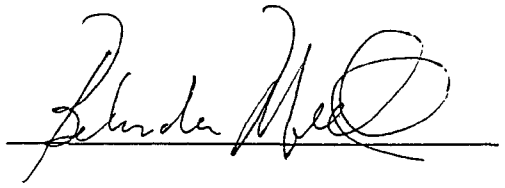
Five Neshaminy Interplex, Suite 315
Trevose, PA 19053
(215) 639-4070

Attorneys for Central Sprinkler Corporation and Central Sprinkler Company



Dated: 4/20/98

central.cer

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

CPSC/OFC OF THE SECRETARY
FREEDOM OF INFORMATION
1998 JUN 18 · A 10: 55

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents	)	

FIRST REQUESTS FOR PRODUCTION OF DOCUMENTS AND THINGS TO RESPONDENTS CENTRAL SPRINKLER CORP. AND CENTRAL SPRINKLER CO.

Complaint Counsel hereby propounds its First Requests for Production of Documents and Things upon Respondents Central Sprinkler Corp. and Central Sprinkler Co.

PLEASE TAKE NOTICE that pursuant to 16 C.F.R. § 1025.33, Respondents must respond to these Requests within 30 days after service of same; inspection of the items requested shall take place on that same day at the office of Complaint Counsel, Consumer Product Safety Commission, Office of Compliance, 4330 East West Highway, Bethesda, MD 20814.

PLEASE TAKE FURTHER NOTICE that pursuant to 16 C.F.R. § 1025.31, Respondents are under a continuing duty to supplement their responses to the staff's discovery requests to include information later obtained, regardless of whether the response to the discovery request was complete when made.

DEFINITIONS

Throughout the following Requests and Definitions, unless the context otherwise requires, the singular includes the plural, the masculine includes the feminine, and neuter, or vice versa.

As used herein, the terms below are defined as follows:

"Activate" in the context of Omega sprinklers means full opening (as opposed to partial opening) of the sprinkler -- i.e., full release of the plunger housing -- upon exposure to the Omega's triggering temperature.

"Adhesion" and "Adhered," in the context of a sprinkler "o" ring, refers to adhesion or adhered to the plunger housing and/or main housing of the sprinkler.

"Cause" means to bring about, effect, make happen, contribute to, induce, produce, and/or compel.

"Claim" refers to all lawsuits, governmental actions or orders, disputes, demands for payment, indemnification or reimbursement, complaints, and/or potential lawsuits that contain allegations against you and/or your agents and/or employees.

"Communication" means any transfer of information, ideas, opinions or thought by any means at any time or place under any circumstances, including any transfer of data from one location to another by electrical, electronic or similar means.

"Distribute" means to deliver, sell, give, allot, or otherwise provide, and includes the giving away of free samples and promotional items.

"Document" or "Record" shall have the broadest meanings permissible, and shall include the original and any non-identical copy of any written, graphic, photographic, audio,

electronic or visual material, however produced or reproduced, of any kind or description, whether sent or received or neither, including, but not limited to: papers, books, letters, facsimiles, photographs, motion pictures, video tapes, audio recordings, correspondence, drawings, sketches, schematics, manuals, blueprints, work papers, intra- and interoffice communications, memoranda, notes, transcripts, minutes, reports, recordings of telephone or other conversations, or of interviews, conferences, or meetings, affidavits, statements, summaries, opinions, court pleadings, reports, indices, studies, analyses, evaluations, contracts, licenses, agreements, questionnaires, answers to questionnaires, statistical records, desk calendars, appointment books, diaries, telephone logs, lists, tabulations, charts, graphs, data sheets, computer tapes, disks, printouts or programs, microfilms, all other records kept by electronic, photographic, or mechanical means, and things similar to any of the foregoing, regardless of their author or origin, however denominated, no matter how produced or maintained, regardless of whether in your actual or constructive possession, custody or control, and regardless of whether or not communicated to any person other than the maker. A draft is a separate document or record within the meaning of this term.

If you claim that any document or record is privileged, specify the privilege claimed and the factual basis you contend supports the assertion of the privilege. If any document or record was, but is no longer, in your possession, custody, or control, provide the following information:

(a) state the disposition of the document or record;

(b) state the date such disposition was made;

(c) identify the present custodian of the document or record and state his or her

address or, if the document or record no longer exists, so state;

(d) identify the person who made the decision regarding the disposition of the document or record; and

(e) state the reason for the disposition and describe the document or record and the contents of the document or record, including the title, the author, the position or title of the author, addressee, the position or title of the addressee, whether indicated or blind copies were made, date, subject matter, number of pages, attachments or appendices, and all persons to whom the document was distributed, shown or explained.

"Field test," for purposes of these Interrogatories, shall mean any test performed on a sprinkler while it is installed in a sprinkler system.

"Identify" or "identity" shall mean, when referring to an individual person, the person's full name, present or last known employer, present or last known address, occupation, business position, and telephone number, and the relationship or association, if any, to a Respondent in this action.

When referring to an entity, the terms "identify" or "identity" shall mean its present and any former name(s), the business address of its principal place of business, its state of incorporation, registration, or organization, the identity and address of its registered agent in each state where it is present and doing business or has a place of business, its present officers, directors, and shareholders, and its relationship, if any, to a Respondent in this action. Once a person or entity has been identified in accordance with this paragraph, only the name of that person or entity need be listed in response to subsequent discovery

requesting the identification of that person or entity.

When referring to a document or record, the terms "identify" or "identity" shall mean a description of the document or record including its date of preparation and transmission, the author, sender and recipient, the custodian of the record, and a summary of the subject matter.

When referring to an Omega or other brand sprinkler, "identify" or "identity means to provide the following information:

(a) the sprinkler manufacturer

(b) model name and number;

(c) manufacture date;

(d) activation temperature;

(e) "o" ring type (if applicable)

(f) all dates of UL listing;

(g) the UL standards for safety under which the sprinkler is/was listed;

(h) the type of piping in which the sprinkler is or was installed (if applicable);

(i) the name, address and telephone number of the building in which the sprinkler was installed (if applicable); and the name, address and telephone number of the owner of that building;

"Manufacture" means to make, produce, assemble, fabricate, or work into usable form.

"Omega" means any and all models and makes (variations within a model) of Omega series or brand automatic fire sprinklers.

"Relating to" shall mean consisting of, referring to, describing, discussing, constituting, evidencing, containing, mentioning, concerning, pertaining to, citing, summarizing, analyzing,

or bearing any logical or factual connection with the matter discussed.

"UL" or "Underwriters Laboratories, Inc." means Underwriters Laboratories, Inc., 333 Pfingsten Road, Northbrook, IL 60062 and any subsidiaries, divisions, or agents of Underwriters Laboratories, Inc.

"You," "your," "yourself" means the Respondent to whom this discovery is directed, including any officer, director, representative, insurer, agent or employee thereof, and also includes any agent, person or entity acting on your behalf.

INSTRUCTIONS

1. Each Request shall be answered completely, separately, and fully.

2. The following Requests are to be regarded as continuing. You are required to supplement or modify any response as additional or different information becomes known to you.

3. Each person consulted in answering any Response shall be identified in the body of the response to the particular Response.

4. If you cannot answer any Response in full after exercising due diligence, so state and answer or produce to the extent possible, specifying your inability to answer or produce the remainder, stating whatever information or knowledge you have concerning the unanswered portion or unproduced documents, and describing your efforts to secure the unknown information or unproduced documents.

5. If you assert any privilege in responding to any Response, state the type of privilege asserted and the basis for its assertion. In addition, briefly identify the document or record with respect to which the privilege is asserted. For any document or record with

respect to which a privilege is asserted, state:

(a) The type of document or record (e.g., letter, memorandum, contract, etc.), the date of the document, and the subject matter of the document or record;

(b) The name, address and position of the author of the document or record and of any person who assisted in its preparation;

(c) The name, address and position of each addressee or recipient of the document or record, or any copies of it; and

(d) The present location of the document or record and the name, address and position of the person having custody of it.

For any communication with respect to which a privilege is asserted, identify the persons or entities among whom the communication took place, the date of the communication, and the subject.

REQUESTS FOR PRODUCTION

REQUEST NO. 1

Provide all records relating in any way to your sale of any Omega sprinkler, including but not limited to purchase orders, shipping documents, billing statements and sales receipts.

REQUEST NO. 2

Provide all records relating in any way to your provision of any Omega sprinkler as a free sample or promotional item.

REQUEST NO. 3

Provide all records relating in any way to marketing and/or sale of Omega sprinklers by you.

REQUEST NO. 4

For each year in which you manufactured and/or distributed Omega sprinklers, provide all records relating in any way to

(a) your gross income;

(b) your net income;

(c) the amount in revenues generated from product sales;

(d) the amount in revenues generated from sales of Omega sprinklers.

REQUEST NO. 5

Provide all records relating in any way to the number of Omega sprinklers installed in the United States and/or its territories in:

(a) steel piping systems;

(b) copper piping systems;

(c) plastic piping systems;

(d) polybutylene piping systems;

(e) other piping systems not listed above (specify the type of piping system)?

REQUEST NO. 6

Provide all records relating in any way to the number of Omega sprinklers installed in the United States and/or its territories in:

a) private homes

b) apartment buildings

c) schools (including universities and colleges, public or private)

d) nursing homes

e) hospitals

f) detention facilities (including jails, juvenile detention facilities, etc.)

g) homeless shelters

h) facilities used for recreation (e.g., health clubs, gymnasiums, sports arenas, public pools, country clubs, etc.)

i) hotels

j) museums

k) offices (including office buildings)

l) warehouses with no public access areas

m) industrial facilities with no public access areas

REQUEST NO. 7

Provide all records relating in any way to the current sales price for each Omega make and/or model listed in your response to Complaint Counsel's Interrogatory No. 13.

REQUEST NO. 8

Provide the complete personnel files for all persons identified in your response to Complaint Counsel's Interrogatory No. 15.

REQUEST NO. 9

Provide the complete personnel files for all persons involved in design and/or development of each make and/or model Omega sprinkler.

REQUEST NO. 10

Provide all records relating in any way to the design of and/or specifications for each component part and each chemical (including lubricants), tool and/or substance used in the

Omega manufacturing process.

REQUEST NO. 11

Provide all records relating in any way to your acquisition of any component part, chemical (including lubricants, etc.), tool and/or substance identified in your response to Complaint Counsel's Interrogatory No. 17.

REQUEST NO. 12

Provide the complete personnel files of any persons who were/are employed by you who in any way took part or were involved in the design, specifications, and/or development of each component part, chemical (including lubricants, etc.), tool and/or substance identified in your response to Complaint Counsel's Interrogatory No. 17.

REQUEST NO. 13

Provide all records relating in any way to the procedures and specifications for the manufacture of each different make and/or model Omega sprinkler, including any changes in such procedures and/or specifications over time, including all tools, chemicals and substances used in the manufacture of same, including but not limited to cut sheets, drawings, and manufacturing instructions.

REQUEST NO. 14

Provide three samples of each make and model of Omega sprinkler that you have ever manufactured.

REQUEST NO. 15

Provide three samples of each tool, chemical and/or substance used in the manufacture of each make and model of Omega sprinkler. (If any such tools, chemicals and/or substances

are used for more than one make and/or model of Omega, you need only provide one set of three samples).

REQUEST NO. 16

Provide all records relating in any way to any chemical or substance used in the manufacture of Omega sprinkler(s) to prevent leaking of those sprinklers when they are later installed into a sprinkler system.

REQUEST NO. 17

Provide all records relating in any way to any tests performed by you or anyone else to assess whether and/or how each chemical and/or substance listed in your response to Complaint Counsel's Interrogatory No. 23 affects the operation of Omega sprinkler(s) or any Omega component part.

REQUEST NO. 18

Provide all records relating in any way to each communication between you and any persons and/or entities (including your employees, agents, and consultants) regarding each chemical and/or substance listed in your response to Complaint Counsel's Interrogatory No. 23.

REQUEST NO. 19

Provide all records relating in any way to each prototypes and/or precursors of any of the Omega sprinklers listed in your response to Complaint Counsel's Interrogatory No. 5.

REQUEST NO. 20

Provide the complete personnel files of any and all employees who were in any way involved in designing, developing and/or reviewing any and all prototypes and/or precursors

of any of the Omega sprinklers listed in your response to Complaint Counsel's Interrogatory No. 5.

REQUEST NO. 21

Provide all records relating in any way to any and all measures and/or procedures taken by you or anyone on your behalf at any time before, during, and/or after each Omega sprinkler is manufactured, to ensure that each Omega sprinkler will fully and properly activate when exposed to its activation (triggering) temperature.

REQUEST NO. 22

Provide all records relating in any way to any actual or alleged problems with, imperfections or flaws in, defects or deficiencies in or associated with any component part(s) of any Omega sprinkler, or any chemical, tool or substance used in manufacturing Omegas (including whether any component part has been or alleged to have been out of tolerance) of which you have knowledge or have been advised.

REQUEST NO. 23

Provide all records relating in any way to the mechanism of proper operation of each different make and model of Omega sprinkler, once exposed to its activation (triggering) temperature.

REQUEST NO. 24

Provide all records relating in any way to whether pressure (not internal to or part of the Omega itself) is required for activation of any make and/or model of Omega sprinkler.

REQUEST NO. 25

Provide all records relating in any way to the amount of pressure (not internal to or

part of the Omega itself) required for activation of each make and/or model of Omega sprinkler.

REQUEST NO. 26

Provide all records relating in any way to any non-Omega sprinklers that contain an "o" ring.

.REQUEST NO. 27

Provide all records relating in any way to the approval, listing and/or certification of each Omega make and/or model, and each adaptation or device to be used with any Omega make and/or model (such as the "helper spring"), including testing or submission for approval, listing and/or certification by a certifying laboratory or institution (such as UL or FM), and including all records relating in any way to whether approval, listing or certification was ever refused, withdrawn, discontinued or cancelled for any Omega sprinkler, sprinkler component part or allegedly assistive operating device (such as the helper spring), and/or whether any certifying laboratory or institution has ever objected to your sale and/or distribution of any Omega sprinkler.

REQUEST NO. 28

Provide all records relating in any way to any advertisement, representation, indication and/or suggestion in any marketing material that Omega sprinklers that are not listed or certified by FM are listed or certified by FM.

REQUEST NO. 29

Provide all records relating in any way to any advertisement, representation, indication and/or suggestion in any marketing material that Omega sprinklers that are not listed or

certified by UL are listed or certified by UL.

REQUEST NO. 30

Provide all records relating in any way to any Omega that did not or allegedly did not activate in a fire.

REQUEST NO. 31

Provide all records relating in any way to anyone who was injured or allegedly was injured as a result of or in association with a fire (including death incurred or allegedly incurred in attempting to escape the fire) in which any Omega did not or allegedly did not activate.

REQUEST NO. 32

Provide all records relating in any way to anyone who died or allegedly died as a result of or in association with a fire (including death incurred or allegedly incurred in attempting to escape the fire) in which any Omega did not or allegedly did not activate.

REQUEST NO. 33

Provide all records relating in any way to any property damage or allegedly property damage as a result of or in association with a fire (including death incurred or allegedly incurred in attempting to escape the fire) in which any Omega did not or allegedly did not activate.

REQUEST NO. 34

Provide all records relating in any way to any testing and/or examination of each Omega that failed to activate or allegedly failed to activate in a fire, the system in which that

Omega was installed, and/or any other sprinkler from the same site.

REQUEST NO. 35

Provide all records relating in any way to each Omega sprinkler of which you are aware or have been notified that, when tested, did not activate at 7 psig or below when exposed to its activation/triggering temperature.

REQUEST NO. 36

Provide all records relating in any way to any examination and/or test on any Omega of which you are aware that failed to activate or allegedly failed to activate at 7 psig or below when exposed to its activation/triggering temperature in testing, the system in which it was installed, and/or any other sprinkler from the same site.

REQUEST NO. 37

Provide all records relating in any way to any Omega sprinkler of which you are aware that, when tested in the field, did not activate or allegedly did not activate when exposed to its activation/triggering temperature.

REQUEST NO. 38

Provide all records relating in any way to any examination and/or test on any Omega of which you are aware that failed to activate or allegedly failed to activate when exposed to its activation/triggering temperature when tested in the field.

REQUEST NO. 39

Provide all records relating in any way to the design and/or development of the Omega "helper spring," and/or specifications for the manufacture of the "helper spring."

REQUEST NO. 40

If you contend that an Omega that is installed into a sprinkler system containing water at a pressure of at least 7 psig, that does not activate upon being exposed to its activation (triggering) temperature for long enough for its fusible like to melt, will activate if fitted with the "helper spring" (that Central has proposed for use with the Omega), provide all records that you claim or believe support your contention.

REQUEST NO. 41

Provide all records relating in any way to the method of operation of "helper spring."

REQUEST NO. 42

Provide all records relating in any way to any and all tests performed by you or anyone else to assess whether and/or how the "helper spring" affects the operation of an Omega sprinkler or any Omega component part.

REQUEST NO. 43

Provide all records relating in any way to your communications with any persons and/or entities (including your employees, agents, and consultants) regarding the operation and/or efficacy of the helper spring.

REQUEST NO. 44

Provide all records relating in any way to any Omega sprinkler or component of which you are aware or have been notified has cracked or broken, or allegedly cracked or broken.

REQUEST NO. 45

Provide all records relating in any way to any Omega sprinkler or component of which you are aware or have been notified has exhibited corrosion.

REQUEST NO. 46

Provide all records relating in any way to any Omega sprinkler or component of which you are aware or have been notified has leaked and/or weeped when tested or in a fire.

REQUEST NO. 47

Provide all records relating in any way to any Omega sprinkler or component of which you are aware or have been notified has activated unnecessarily or prematurely (either without or before being exposed to its activation/triggering temperature) when tested or in a fire

REQUEST NO. 48

If you contend that dezincification may cause an Omega to:

(a) leak and/or weep;

(b) activate prematurely and/or unnecessarily;

(c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or

(d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or

(e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature),

provide all records that you claim or believe support your contention.

REQUEST NO. 49

Provide all records relating in any way to any Omega with a plunger housing made of an alloy other than CDA 35330, from a plastic or copper piping system, that has exhibited or allegedly exhibited dezincification.

REQUEST NO. 50

Provide all records relating in any way to testing and/or examination of the system in which any Omega with a plunger housing made of an alloy other than CDA 35330, from a plastic or copper piping system, that has exhibited or allegedly exhibited dezincification, was installed, and/or testing and/or examination of any other sprinkler from the same site.

REQUEST NO. 51

Provide all records relating in any way to any Omega with a plunger housing made of CDA 35330 alloy, from a plastic or copper piping system, that has exhibited or allegedly exhibited dezincification.

REQUEST NO. 52

Provide all records relating in any way to testing and/or examination of the system in which any Omega with a plunger housing made of CDA 35330 alloy, from a plastic or copper piping system, that has exhibited or allegedly exhibited dezincification was installed, and/or testing and/or examination of any other sprinkler from the same site.

REQUEST NO. 53

Provide all records relating in any way to any Omega from a piping system that is neither copper or plastic that has exhibited or allegedly exhibited dezincification.

REQUEST NO. 54

Provide all records relating in any way to testing and/or examination of the system in which any Omega from a piping system that is neither copper or plastic, that has exhibited or allegedly exhibited dezincification, was installed, and/or testing and/or examination of any other sprinkler from the same site.

REQUEST NO. 55

Provide all records relating in any way to any Omega sprinkler from a copper or plastic piping system that did not exhibit dezincification, and that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire.

REQUEST NO. 56

Provide all records relating in any way to testing and/or examination of the system in which any Omega that did not exhibit dezincification, and that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire, was installed, and/or testing and/or examination of any other sprinkler from the same site.

REQUEST NO. 57

Provide all records relating in any way to any and all changes listed in your response to Complaint Counsel's Interrogatory No. 47.

REQUEST NO. 58

Provide all records relating in any way to any and all tests and/or examinations conducted to determine whether an Omega manufactured after any and all changes listed in your response to Complaint Counsel's Interrogatory No. 47 exhibits dezincification.

REQUEST NO. 59

Provide all records relating in any way to any and all substances that you contend have been used by sprinkler installers/contractors, plumbers and/or others directly involved in installation and/or maintenance of sprinkler systems, that may cause an Omega to:

(a) leak and/or weep;

(b) activate prematurely and/or unnecessarily;

(c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or

(d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or

(e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature).

REQUEST NO. 60

If you contend that the use of stop leak or other sealant, leakage prevention substance or pipe cement by sprinkler installers/contractors, plumbers and/or others directly involved in installation and/or maintenance of sprinkler systems may cause an Omega to:

(a) leak and/or weep;

(b) activate prematurely and/or unnecessarily;

(c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or

(d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or

(e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature),

provide all records that you claim or believe support your contention.

REQUEST NO. 61

Provide all records relating in any way to any and all Omegas that were exposed or were allegedly exposed to stop leak or any other sealant, leakage prevention substance or pipe cement.

REQUEST NO. 62

Provide all records relating in any way to testing and/or examination of the system in which any and all Omegas that have been exposed or allegedly have been exposed to stop leak or any other sealant, leakage prevention substance or pipe cement, were installed, and/or testing and/or examination of any other sprinkler from the same site.

REQUEST NO. 63

Provide all records relating in any way to any and all Omegas that were not exposed to stop leak or any other sealant, leakage prevention substance or pipe cement, but that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire?

REQUEST NO. 64

Provide all records relating in any way to any and all changes listed in your response to Complaint Counsel's Interrogatory No. 51.

REQUEST NO. 65

Provide all records relating in any way to any and all tests and/or examinations conducted to determine whether an Omega manufactured after any and all changes listed in your response to Complaint Counsel's Interrogatory No. 51 was affected by the use of stop

leak or any other sealant, leakage prevention substance or pipe cement.

REQUEST NO. 66

If you contend that the use of cutting oil or other substances used by sprinkler installers/contractors, plumbers and/or others directly involved in installation and/or maintenance of sprinkler systems to cut pipe may cause an Omega to:

(a) leak and/or weep;

(b) activate prematurely and/or unnecessarily;

(c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or

(d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or

(e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature),

provide all records that you claim or believe support your contention.

REQUEST NO. 67

Provide all records relating in any way to any Omega that was exposed or was allegedly exposed to cutting oils or other substances used to cut pipe.

REQUEST NO. 68

Provide all records relating in any way to testing and/or examination of the system in which any Omega that has been exposed or allegedly has been exposed to cutting oils or other substances used to cut pipe, was installed, and/or testing and/or examination of any other sprinkler from the same site.

REQUEST NO. 69

Provide all records relating in any way to any Omega sprinkler that was not exposed to cutting oil or other substance used to cut pipe, but that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire.

REQUEST NO. 70

Provide all records relating in any way to testing and/or examination of the system in which any Omega that was not exposed or allegedly exposed to cutting oils or other substances used to cut pipe, but that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire, was installed, and/or testing and/or examination of any other sprinkler from the same site.

REQUEST NO. 71

Provide all records relating in any way to any and all changes listed in your response to Complaint Counsel's Interrogatory No. 55.

REQUEST NO. 72

Provide all records relating in any way to the testing and/or examination of any Omega manufactured after any and all changes listed in your response to Complaint Counsel's Interrogatory No. 55, to determine whether it was exposed to cutting oil or other substance used to cut pipe

REQUEST NO. 73

If you contend that swelling of the "o" ring in an Omega sprinkler may cause the

Omega to:

(a) leak and/or weep;

(b) activate prematurely and/or unnecessarily;

(c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or

(d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or

(e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature),

provide all records that you believe or claim support your contention.

REQUEST NO. 74

Provide all records relating in any way to any and all Omegas containing an EPDM "o" ring, from a steel piping system, that have exhibited or allegedly exhibited "o" ring swelling.

REQUEST NO. 75

Provide all records relating in any way to testing and/or examination of the system in which any Omega containing an EPDM "o" ring, from a steel piping system, that has exhibited or allegedly exhibited "o" ring swelling, was installed, and/or testing and/or examination of any other sprinkler from the same site.

REQUEST NO. 76

Provide all records relating in any way to any Omega containing a silicone "o" ring, from a steel piping system, that has exhibited or allegedly exhibited "o" ring swelling.

REQUEST NO. 77

Provide all records relating in any way to testing and/or examination of the system in which any Omega containing a silicone "o" ring, from a steel piping system, that has exhibited or allegedly exhibited "o" ring swelling, was installed, and/or testing and/or examination of any other sprinkler from the same site.

REQUEST NO. 78

Provide all records relating in any way to any Omega from a piping system that is not steel that has exhibited or allegedly exhibited "o" ring swelling.

REQUEST NO. 79

Provide all records relating in any way to testing and/or examination of the system in which any Omega, from a steel piping system, that has exhibited or allegedly exhibited "o" ring swelling, was installed, and/or testing and/or examination of any other sprinkler from the same site.

REQUEST NO. 80

Provide all records relating in any way to any Omega from a steel piping system that did not exhibit "o" ring swelling, but that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire.

REQUEST NO. 81

Provide all records relating in any way to testing and/or examination of the system in which any Omega that did not exhibit "o" ring swelling, but that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at

a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire, was installed, and/or testing and/or examination of any other sprinkler from the same site.

REQUEST NO. 82

Provide all records relating in any way to any and all changes listed in your response to Complaint Counsel's Interrogatory No. 61.

REQUEST NO. 83

Provide all records relating in any way to the testing and/or examination of any Omega manufactured after any and all changes listed in your response to Complaint Counsel's Interrogatory No. 61, to determine whether it exhibits "o" ring swelling.

REQUEST NO. 84

Provide all records relating in any way to the methods used by you or anyone on your behalf to determine whether an Omega has a swollen "o" ring.

REQUEST NO. 85

If you contend that adhesion of an Omega sprinkler's "o" ring to the plunger housing or main housing of the Omega may cause the Omega to:

(a) leak and/or weep;

(b) activate prematurely and/or unnecessarily;

(c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or

(d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or

(e) fail to activate in a fire (when the Omega is exposed to its activation/triggering

temperature),

provide all records that you claim or believe support your contention.

REQUEST NO. 86

Provide all records relating in any way to any Omega that has exhibited or allegedly exhibited "o" ring adhesion.

REQUEST NO. 87

Provide all records relating in any way to any and all changes listed in your response to Complaint Counsel's Interrogatory No. 64.

REQUEST NO. 88

Provide all records relating in any way to the testing and/or examination of any Omega manufactured after any and all changes listed in your response to Complaint Counsel's Interrogatory No. 64, to determine whether the Omega exhibits "o" ring adhesion.

REQUEST NO. 89

Provide all records relating in any way to the methods used by you or anyone on your behalf to determine whether an Omega exhibits "o" ring adhesion.

REQUEST NO. 90

Provide all records relating in any way to any and all fires in which all Omegas exposed to temperatures at or in excess of their activation/triggering temperature activated.

REQUEST NO. 91

Provide all records relating in any way to any testing and/or examination of any Omegas from sites in which all Omegas exposed to temperatures at or in excess of their activation/triggering temperature activated.

REQUEST NO. 92

Provide all records relating in any way to any tests and/or examinations of Omega sprinklers conducted by you or anyone on your behalf.

REQUEST NO. 93

Provide all records relating in any way to any and all tests and/or examinations of Omega sprinklers conducted pursuant to the protocol in UL 199 or UL 1626, that one or more Omegas did not pass (according to the criteria listed in UL 199 for that test).

REQUEST NO. 94

Provide all records relating in any way to any testing of any Omega conducted by you or on your behalf in which the Omega that, upon being exposed to its activation/triggering temperature, did not activate within 5 seconds at a pressure at or below 7 psig pressure.

REQUEST NO. 95

Provide all records relating in any way to any meetings, discussions and/or communications in which you were in any way involved, and/or which you have received, in which the following were discussed:

a) failure of Omega sprinklers to activate in testing or in a fire;

b) dezincification as a cause or possible cause of Omega non-activation in testing or in a fire;

c) stop leak or other leak prevention substance as a cause or possible cause of Omega non-activation in testing or in a fire;

d) "o" ring swelling as a cause or possible cause of Omega non-activation in testing or in a fire;

e) "o" ring adhesion as a cause or possible cause of Omega non-activation in testing or in a fire;

f) excessive hydrocarbons as a cause or possible cause of Omega non-activation in testing or in a fire;

g) improper system design as a cause or possible cause of Omega non-activation in testing or in a fire;

h) UL listing or certification of any Omega sprinkler or sprinkler assistive device such as the "helper spring;"

i) FM listing or certification of any Omega sprinkler or sprinkler assistive device such as the "helper spring;"

j) NFPA 13 requirements or applicability with respect to fire sprinklers or sprinkler systems;

k) NFPA 25 requirements or applicability with respect to fire sprinklers or sprinkler systems;

l) UL 199 requirements or applicability with respect to fire sprinklers or sprinkler systems;

m) UL 1626 requirements or applicability with respect to fire sprinklers or sprinkler systems.

REQUEST NO. 96

Provide all records relating in any way to any problem, potential problem, complaint or concern (including any reports of nonactivation or possibility of nonactivation) or which you have been notified, regarding or in any way relating to an Omega sprinkler.

REQUEST NO. 97

Provide all records relating in any way to your notification (or notification on your behalf) of any person and/or entity of any and all problems, potential problems, complaints or concerns (including any reports of nonactivation or possibility of nonactivation) regarding or in any way related to any Omega sprinkler.

REQUEST NO. 98

Provide all records relating in any way to any and all requests for information by you (or on your behalf) to any sprinkler contractor or sprinkler owner regarding any Omega sprinkler, including the sprinkler contractor or owner's response.

REQUEST NO. 99

Provide all records relating in any way to your (or anyone on your behalf's) provision (either by sale or without charge) of sprinklers to anyone to replace some or all of the Omegas installed in a particular location.

REQUEST NO. 100

Provide all records relating in any way to the cost of replacement of any and all Omega sprinklers.

REQUEST NO. 101

Provide all records relating in any way to your testing (or testing on your behalf) of any Omega sprinklers from any building or structure in which Omega sprinklers are/were installed.

Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.

Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, Maryland 20814
301-504-0626

DATED: April 20, 1998

central\requests.dso

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, Complaint Counsel's **First Set of Interrogatories to Respondents Central Sprinkler Corp. and Central Sprinkler Co.** and **First Requests for Production of Documents and Things to Respondents Central Sprinkler Corp. and Central Sprinkler Co.** were deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

J. Gordon Cooney, Jr.
Thomas P. Hogan, Jr.
Emily J. Lawrence
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2000 One Logan Square
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(215) 639-4070

Attorneys for Central Sprinkler Corporation and Central Sprinkler Company

Dated: 4/20/98

central.cer

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

DUPLICATE

1998 JUN 18 A 10:55

In the Matter of	:	
	:	
Central Sprinkler Corp.	:	
	:	**CPSC Docket No. 98-2**
and	:	
	:	
Central Sprinkler Co.,	:	
	:	
Respondents.	:	
	:	

RESPONDENTS' RESPONSES AND OBJECTIONS TO COMPLAINT COUNSEL'S FIRST SET OF INTERROGATORIES

Respondents Central Sprinkler Corporation and Central Sprinkler Company (collectively, "Central"), pursuant to 16 C.F.R. § 1025.32, hereby provide responses and objections to Complaint Counsel's First Set of Interrogatories. Central's responses may be supplemented in accordance with 16 C.F.R. § 1025.31(f).

PREFATORY STATEMENT

Central hereby fully incorporates by reference the Prefatory Statement set forth in Respondents' Responses and Objections to Complaint Counsel's First Request for Production of Documents and Things.

OBJECTIONS TO EACH AND EVERY DISCOVERY REQUEST

Central hereby full incorporates by reference the Objections To Each and Every Discovery Request set forth in Respondents' Responses and Objections to Complaint Counsel's First Set of Interrogatories.

INTERROGATORY RESPONSES

INTERROGATORY NO. 1: Identify the person(s) answering these Interrogatories.

RESPONSE NO. 1: Carmine Schiavone and counsel for Central.

INTERROGATORY NO. 2: Identify yourself.

RESPONSE NO. 2: Counsel for Central.

INTERROGATORY NO. 3: Identify all officers, directors and/or shareholders of your company since its formation. For each such person, specify all positions they have held, and the dates they held each position.

RESPONSE NO. 3: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; and it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: annual reports, organizational charts.

INTERROGATORY NO. 4: Provide the date on which the first "Omega" sprinkler was sold or given away as a free sample or promotional item. Identify the fist [sic] "Omega" sprinkler sold or given away as a free sample.

RESPONSE NO. 4: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents that are neither relevant nor reasonably

calculated to lead to the discovery of admissible evidence. Subject to and without waiver of the foregoing objections, Central responds as follows: The first Flow Control was sold in 1978, and the first Omega sprinkler was sold in 1982.

INTERROGATORY NO. 5: Identify all makes and/or models of "Omega" sprinklers you have ever designed, manufactured, and/or distributed. For each model, indicate the date(s) it was designed, manufactured and distributed.

RESPONSE NO. 5: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome. Subject to and without waiver of the foregoing objections, Central responds as follows: C-1; C-1A; C-1A PRO; C-1A PRO ID; EC-20; EC-20A; EC-20 AID; HEC-12; HEC-12 ID; HEC-12 PRO; HEC-12A PRO; HEC-12 RES; HEC-20; HEC-20 ID; R-1; R-1A; R-1M; AC; M; and Flow Control. For the remainder of the information requested in this interrogatory, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: cut sheets, product catalogues, engineering drawings.

INTERROGATORY NO. 6: Provide the total number of Omega sprinklers that:

a) have been sold;
b) have been given away as free samples or promotional items;
c) are installed in the United States and its territories. Of these, how many contain:
    i) EPDM "o" rings;
    ii) silicone "o" rings;
    iii) neither EPDM or silicone "o" rings (specify whether the model has an "o" ring, and if so, the composition of the "o" ring).

RESPONSE NO. 6: Central estimates that approximately 8.9 million Omegas have been sold and installed. All Omegas contain either EPDM or silicone o-rings. For the remainder of the information requested in this interrogatory, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: sales reports.

INTERROGATORY NO. 7: How many Omega sprinklers:

a) have been sold;
b) have been given away as free samples or promotional items;
c) are installed

in each state and territory of the United States.

RESPONSE NO. 7: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; and it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiver of the foregoing objections, Central responds as follows: Central estimates that approximately 8.9 million Omegas have been sold. Central is not able to provide precise information in response to the remaining questions in this interrogatory. Because Central generally does not sell to end-users and generally does not install sprinkler heads, Central lacks specific knowledge regarding the number of Omegas sold to end-users and installed for end-users. To the extent that Central has any such information, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 8: Provide the sales price for each Omega sold by you (or anyone on your behalf) in the United States and/or its territories.

RESPONSE NO. 8: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: price books, product catalogues.

INTERROGATORY NO. 9: For each year in which you manufactured and/or distributed Omega sprinklers, provide:

a) your gross income;
b) your net income;
c) the amount in revenues generated from product sales;
d) the amount in revenues generated from sales of Omega sprinklers.

RESPONSE NO. 9: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred

to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: annual reports, sales reports.

INTERROGATORY NO. 10: How many total Omega sprinklers are installed in the United States and/or its territories in:

a) steel piping systems;
b) copper piping systems;
c) plastic piping systems;
d) polybutylene piping systems;
e) other piping systems not listed above (specify the type of piping system)?

RESPONSE NO. 10: Central responds as follows: Central is not able to provide precise information in response to this interrogatory. Because Central generally does not sell to end-users and generally does not install sprinkler heads, Central lacks specific knowledge regarding the number of Omegas installed in the various types of piping systems. Central has estimated that there are approximately 5.0 million Omegas installed in steel piping systems, and approximately 3.9 million Omegas installed in non-steel piping systems. To the extent that Central has any such information, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 11: How many Omega sprinklers are installed in each state and territory of the United States in:

a) steel piping systems;
b) copper piping systems;
c) plastic piping systems;
d) polybutylene piping systems;

e) other piping systems not listed above (specify the type of piping system)?

RESPONSE NO. 11: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; and it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiver of the foregoing objections, Central responds as follows: See Interrogatory Response No. 10.

INTERROGATORY NO. 12: How many Omega sprinklers are installed in the United States and/or its territories in:

a) private homes
b) apartment buildings
c) schools (including universities and colleges, public or private)
d) nursing homes
e) hospitals
f) detention facilities (including jails, juvenile detention facilities, etc.)
g) homeless shelters
h) facilities used for recreation (e.g., health clubs, gymnasiums, sports arenas, public pools, country clubs, etc.)
i) hotels
j) museums
k) offices (including office buildings)
1) warehouses with no public access areas
m) industrial facilities with no public access areas

RESPONSE NO. 12: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: See Interrogatory Response No. 10. In addition, to the extent that Central has any such information, pursuant to 16 C.F.R. §

1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 13: Identify which Omega makes and/or models you are currently manufacturing and/or selling.

RESPONSE NO. 13: Central responds as follows: C-1A; C-1A PRO; C-1A PRO ID; EC-20A; EC-20 AID; HEC-12; HEC-12 ID; HEC-12 PRO; HEC-12 RES; HEC-20 ID; R-1M; and Flow Control. In addition, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: product catalogues, cut sheets, price books.

INTERROGATORY NO. 14: What is the current sales price for each Omega make and/or model listed in your response to Interrogatory No. 13?

RESPONSE NO. 14: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome, it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: product catalogues, price books.

INTERROGATORY NO. 15: Identify all of your employees, agents, representatives or consultants who have held a supervisory, managerial, or executive position or role in the following areas of your company at any time:

1) sales;
2) marketing;
3) product design and/or development;
4) engineering and/or technical services;
5) customer service/customer relations;
6) public and/or governmental relations;
7) product manufacturing and/or production;
8) product sales, marketing and/or distribution;
9) corporate mergers and/or acquisitions;
10) quality assurance/control;
11) any divisions, subdivisions or areas that deal or dealt with Omega automatic fire sprinklers and/or any component parts of Omega automatic fire sprinklers.

For each employee, agent, representative or consultant, please state the position(s) and title(s) of those position(s), term(s) of employment, and salary. If the person is no longer in your employ, please indicate their reason for leaving and, if known, provide their current address and telephone number.

RESPONSE NO. 15: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: annual reports, employee status reports.

INTERROGATORY NO. 16: Identify all persons and/or entities who were in any way involved in:

a) design and/or development;
b) testing
c) the UL listing process and/or submission of Omega sprinkler samples and/or prototypes for same;
d) marketing;
e) sale; or
f) manufacturing of any makes and/or models of each make and/or model Omega sprinkler.

For each such person and entity, indicate:

i) whether the person or entity is currently employed by your company;
ii) their position in your company (or, if not in your company, elsewhere) at the time of their involvement;
iii) which makes and/or models the involvement related to; and
iv) describe in detail the nature of their involvement.

RESPONSE NO. 16: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: annual reports, employee status reports.

INTERROGATORY NO. 17: For each make and/or model of Omega sprinkler, identify and describe (including specifications for) each component part and each chemical (including lubricants), tool and/or substance used in the Omega manufacturing process.

RESPONSE NO. 17: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is overly vague, unduly broad, and/or unnecessarily burdensome. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: bills of materials, sub-assembly drawings, work instructions.

INTERROGATORY NO. 18: Identify the manufacturer of each component part, chemical (including lubricants, etc.), tool and/or substance identified in your response to Interrogatory No. 17.

RESPONSE NO. 18: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is overly vague, unduly broad, and/or unnecessarily burdensome. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel

is specifically referred to the following categories of documents: bills of materials, purchase orders.

INTERROGATORY NO. 19: Identify the person and/or entity who supplied to you each component part, chemical (including lubricants, etc.), tool and/or substance identified in your response to Interrogatory No. 17.

RESPONSE NO. 19: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is overly vague, unduly broad, and/or unnecessarily burdensome. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: bills of materials; purchase orders.

INTERROGATORY NO. 20: Identify all persons and/or entities who were involved in any way in the design, specifications, and/or development of each component part, chemical (including lubricants, etc.), tool and/or substance identified in your response to Interrogatory No. 17.

RESPONSE NO. 20: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial

information; and it is overly vague, unduly broad, and/or unnecessarily burdensome. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 21: Describe in detail the procedures and specifications for the manufacture of each different make and/or model Omega sprinkler, including any changes in such procedures and/or specifications over time. Specify and describe all tools, chemicals and substances used, including when, how and in what amount they are used.

RESPONSE NO. 21: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is overly vague, unduly broad, and/or unnecessarily burdensome. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: bills of materials, sub-assembly drawings, work instructions, engineering change notices, project proposals, corrective action reports.

INTERROGATORY NO. 22: For each change in procedure or specification identified in your response to Interrogatory No. 21:

a) explain the differences between the procedure or specification and its predecessor(s);
b) explain the reasons for the change;
c) identify all persons and/or entities involved in bringing about the change, and explain their role in same;
d) identify all persons and/or entities who implemented the change;

e) indicate whether any tests were done on the models before or after the change occurred. If so:
   i) describe the tests and provide a detailed protocol;
   ii) identify the persons and entities involved in setting up and/or conducting the tests;
   iii) describe and explain the results of the tests, including all observations and conclusions;
   iv) identify the persons and entities involved in evaluating the test results.

RESPONSE NO. 22: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is overly vague, unduly broad, and/or unnecessarily burdensome. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: engineering change notices, project proposals, material review board minutes, first article reports, vendor certifications, corrective action reports.

INTERROGATORY NO. 23: Have you (or anyone on your behalf) ever utilized any chemical or substance in the manufacture of Omega sprinkler(s) to prevent leaking of those sprinklers when they are later installed into a sprinkler system? If so, identify, for each such chemical or substance:

a) its name (and brand name, if applicable);
b) its chemical composition;
c) its manufacturer; and
d) the person and/or entity from whom you purchased and/or received the chemical or substance;
e) identify and describe any tests performed by you or anyone else to assess whether and/or how the substance affects the operation of Omega sprinkler(s) or any Omega component part, providing the following information:
   i) describe the tests and provide a detailed protocol;

ii) identify the persons and entities involved in setting up and/or conducting the tests;
iii) describe and explain the results of the tests, including all observations and conclusions;
iv) identify the persons and entities involved in evaluating the test results.

f) indicate whether you have communicated with any persons and/or entities (including your employees, agents, and consultants) regarding any such chemical or substance. If so, provide the following information:
i) identify all such persons and/or entities;
ii) state the date of the communication;
iii) describe the content of the communication;
iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 23: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome. Subject to and without waiver of the foregoing objections, Central responds as follows: to the extent that this interrogatory is referring to products such as "Stop-Leak," Central has not utilized such substances.

INTERROGATORY NO. 24: Were/are there any prototypes or precursors of any of the Omega sprinklers listed in your response to Interrogatory No. 6? If so:

a) identify and describe each prototypes or precursor, including any modifications in composition or design;
b) indicate the date on which it was designed and/or developed;
c) identify all persons and entities who were in any way involved in designing, developing and/or reviewing the prototype or precursor;
d) identify the Omega model to which the prototype or precursor corresponds;
(e) describe all tests and evaluations performed on the prototype or precursor, providing the following information:
i) the date on which the test or evaluation was conducted;
ii) the protocol for the test or evaluation;
iii) identify all persons and entities who conducted, attended, reviewed, and/or supervised the test or evaluation;
f) indicate whether the prototype or precursor was ever submitted to a testing laboratory for review, certification or listing. If so, fully describe the circumstances and outcome of the submission and testing, and identify the laboratory;

g) indicate whether you have communicated with any persons and/or entities (including your employees, agents, and consultants) regarding any such prototype or precursor. If so, provide the following information:
   i) identify all such persons and/or entities;
   ii) state the date of the communication;
   iii) describe the content of the communication;
   iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 24: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 25: Identify and describe all measures and/or procedures taken by you or anyone on your behalf at any time before, during, and/or after each Omega sprinkler is manufactured, to ensure that each Omega sprinkler will fully and properly activate when exposed to its activation (triggering) temperature.

RESPONSE NO. 25: A general, non-exhaustive description of such measures and procedures may be described as follows: Central maintains work instructions on its manufacturing floor to ensure that the employees know the process and procedure for assembly of Omega sprinklers. In addition, there is a quality plan for the assembly of Omegas, which is inspected by

quality control inspectors to ensure that it is being followed for proper assembly. The quality control inspectors may conduct visual and/or measurement tasks to verify that the heads coming from the production line meet or exceed the specifications in the quality plan. Moreover, quality control personnel conduct random bath tests of the eutectic to ensure proper temperature operation. UL inspections also are conducted by quality control personnel to ensure that the Omegas produced meet or exceed UL 199 and UL 1626 requirements.

For a more detailed description of such measures and procedures, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals, work instructions.

INTERROGATORY NO. 26: Have you ever known or been advised of any problems with, imperfections or flaws in, defects or deficiencies in or associated with any component part(s) of any Omega sprinkler, or any chemical, tool or substance used in manufacturing Omegas, including whether any component part has been or alleged to have been out of tolerance? If so, for each such problem, flaw, defect and deficiency:

a) describe in full detail the problem, imperfection, flaw, defect, deficiency or extent to which the part was out of tolerance;

b) indicate the date on which you were notified or learned of the problem, flaw, defect or deficiency;

c) indicate how you became aware or were notified of the problem, flaw, defect or deficiency;

d) describe all actions, if any, you took as a result, indicating when those actions were taken; and

e) state whether the affected component part was ever delisted, recalled, discontinued. taken off the market, or requested to be returned to the manufacturer, supplier, distributor, etc. and, if so, explain the circumstances of same.

RESPONSE NO. 26: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it calls for a legal conclusion. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: incoming inspection reports, first article reports, non-conformance reports.

INTERROGATORY NO. 27: Explain in full detail the mechanism of proper operation of each different make and model of Omega sprinkler, once exposed to its activation (triggering) temperature.

RESPONSE NO. 27: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, the general mechanism of operation for most Omegas may be described as follows: A fusible alloy pellet is compressed by a bearing disc into a copper housing by a ball plunger. Heat is absorbed by the heat collecting fins and conducted to the alloy pellet. At the rated temperature, the alloy melts, causing the ball plunger to drop, freeing balls from the retaining groove. This movement allows system water pressure to force the orifice reeling mechanism and deflector assembly open. Water is then discharged in a designed flow pattern. For specific

information regarding each different make and models of Omega sprinklers, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 28: Once the activation (triggering) temperature has been reached, indicate whether water pressure or any other source of pressure (not internal to or part of the Omega itself) is a prerequisite to or requirement for activation of any make and/or model of Omega sprinkler(s). If so:

a) identify the Omega
b) indicate, for each make and/or model of Omega, what the necessary pressure is (in psig);
c) indicate the expected or required source of that pressure;
d) explain how the pressure activates or assists the Omega's activation;
e) explain why the sprinkler will not activate without that pressure.

RESPONSE NO. 28: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: Water pressure is one element in the activation of Omegas. Central also incorporates its Response No. 27. The necessary pressure for activation varies depending on the Omega model and the specific building and system in which it is installed. The appropriate testing criteria is based on the hydraulically calculated operating pressure specific to the particular installed system in each individual building. In order to calculate that pressure, Complaint Counsel is referred to information and/or documents that are not in Central's possession, custody, or control; and/or pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 29: Are you aware of any non-Omega sprinklers that contain an "o" ring? If so:

a) identify the sprinkler make and/or model;
b) identify the manufacturer of the sprinkler;
c) indicate where in the sprinkler the "o" ring is located;
d) explain the mechanism of proper operation/activation of the sprinkler, including how the "o" ring is used; and
e) identify all persons and entities involved in any way in the design of each such sprinkler make and/or model;
f) indicate whether you are aware or have been notified of any instances in which a non-Omega sprinkler containing an "o" ring did not or allegedly did not activate, either in testing or in a fire, when exposed to its activation (triggering) temperature. If so, indicate when, how, and from whom you received such notification;
g) identify all tests of which you are aware that were conducted on the sprinkler to determine whether or not it operates properly, providing the following information:
    i) identify the sprinkler;
    ii) describe the tests and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting the tests;
    iv) describe and explain the results of the tests, including all observations and conclusions;
    v) identify the persons and entities involved in evaluating the test results;
h) indicate whether you have communicated with any persons and/or entities (including your employees, agents, and consultants) regarding the operation of any non-Omega sprinklers containing an "o" ring. If so, provide the following information:
    i) identify all such persons and/or entities;
    ii) state the date of the communication;
    iii) describe the content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 29: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel; and it seeks information and/or documents protected from discovery by the

attorney-client privilege and/or work product doctrine. Subject to and without waiver of the foregoing objections, Central responds as follows: Central is aware of non-Omega sprinklers that contain o-rings, including other sprinklers manufactured by Central Sprinkler Company and certain sprinkler models manufactured by other companies. For the remaining information requested by this interrogatory, Complaint Counsel is referred to information and/or documents that are not in Central's possession, custody, or control; and/or pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 30: Indicate which Omega makes and/or models, and which, if any, adaptations or devices to be used with any Omega make and/or model (such as the "helper spring"), have been tested or submitted for approval, listing and/or certification by a certifying laboratory or institution such as UL or FM? For each such Omega, for each testing and/or submission, and for each certifying laboratory or institution:

a) describe all efforts involved and steps taken in an effort to obtain approval, listing and/or certification;
b) indicate the date on which each such effort or step took place;
c) indicate the project number, if any, that each such effort or step related to or was part of,
d) identify all persons and/or entities involved in each effort or step;
e) with respect to any testing and/or examinations:
    i) describe the tests and/or examinations, and provide a detailed protocol;
    ii) identify the persons and entities involved in setting up and/or conducting the tests;
    iii) describe and explain the results of the tests, including all observations and conclusions;
    iv) identify the persons and entities involved in evaluating the test results;
f) describe all communications regarding or relating in any way to the listing and/or certification, including the following information:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication;

g) indicate whether and when listing and/or certification was granted, refused, or postponed by the certifying laboratory or institution.

RESPONSE NO. 30: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel; and it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: correspondence from UL and/or FM, listing books, listing documents and cards.

INTERROGATORY NO. 31: Indicate whether approval, listing or certification was ever refused, withdrawn, discontinued or canceled for any Omega sprinkler, sprinkler component part or allegedly assistive operating device (such as the helper spring), and/or whether any certifying laboratory or institution has ever objected to your sale and/or distribution of any Omega sprinkler. If so:

a) identify the Omega and/or Omega component part or allegedly assistive operating device;
b) explain the circumstances and date;
c) identify all persons and/or entities involved;
d) identify and describe all communications regarding or relating in any way to the refusal, withdrawal, discontinuation, cancellation, or objected to sale and/or distribution, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was

directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 31: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: correspondence from UL and/or FM, listing documents.

INTERROGATORY NO. 32: Have you ever advertised, represented, indicated or suggested in any marketing material that Omega sprinklers that are not listed or certified by FM are listed or certified by FM? If so:

a) identify the advertisement or marketing material;

b) indicate whether and when you were notified of the false advertisement, representation, indication or suggestion. If so, indicate:

i) how and from whom you received the notification;

ii) when you received the notification;

iii) describe the contents of the notification;

iv) describe your response to the notification.

RESPONSE NO. 32: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiver of the foregoing objections, Central responds as follows: Central has never knowingly engaged in such actions.

INTERROGATORY NO. 33: Have you ever advertised, indicated or suggested in any marketing material that Omega sprinklers that are not listed or certified by UL are listed or certified by UL? If so:

a) identify the advertisement or marketing material;
b) indicate whether and when you were notified of the false advertisement, representation, indication or suggestion. If so, indicate:
   i) how and from whom you received the notification;
   ii) when you received the notification;
   iii) describe the contents of the notification;
   iv) describe your response to the notification.

RESPONSE NO. 33: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiver of the foregoing objections, Central responds as follows: Central has never knowingly engaged in such actions. Regarding the EC-20A model Omega, at one time, UL had completed the review process for the model and actually had issued a listing card for the corresponding commercial model, but, as an unintentional oversight, the actual listing card for the EC-20A was not issued at the same time. For more detailed information, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 34: Indicate whether you are aware or have ever been notified of an Omega that did not or allegedly did not activate in a fire? If so:

a) identify the Omega;
b) indicate when, where and how the fire occurred;
c) what was the system pressure was (in psig) at the time of the fire and/or nonactivation;
d) indicate whether anyone sustained or allegedly sustained bodily injury as a result of or in association with the fire (including injuries sustained or allegedly sustained in attempting to escape the fire). If so:
    i) identify the injured person;
    ii) indicate how the injury was or was alleged to have been sustained;
    iii) indicate whether a suit, claim, or demand was ever made against you or in which you were implicated relating to the incident or injury; provide details of same;
e) indicate whether anyone died or allegedly died as a result of or in association with the fire (including death incurred or allegedly incurred in attempting to escape the fire). If so:
    i) identify the decedent;
    ii) indicate how and where the death occurred;
    iii) indicate whether a suit, claim, or demand was ever made against you or in which you were implicated relating to the incident or death; provide details of same;
f) indicate whether any property was or allegedly was damaged, lost or destroyed as a result of or in association with the fire (including damage sustained or allegedly sustained in attempting to remove the property from the fire, or in attempting to put out the fire). If so:
    i) identify the owner of the property;
    ii) indicate how the property was or allegedly was damaged;
    iii) indicate the value or alleged value of the property;
    iv) indicate whether a suit, claim, or demand was ever made against you or in which you were implicated relating to the incident or damage; provide details of same;
g) indicate whether the Omega was fitted with a "helper spring;"
h) indicate when and how you became aware of the fire and/or the nonactivation, including from whom you received the notification;
i) identify and describe all communications regarding or relating in any way to the fire and/or nonactivation, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

j) indicate whether you or anyone else tested and/or examined any Omega that failed to activate or allegedly failed to activate in a fire, the sprinkler system in which the Omega was installed, and/or any other sprinkler from the same site?
If so:
   i) identify the sprinkler;
   ii) describe the tests and/or examinations, and provide a detailed protocol;
   iii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;
   iv) describe and explain the results of the tests and/or examinations, including all observations and conclusions;
   v) identify the persons and entities involved in evaluating the test and/or examination results;

k) indicate whether the Omega "o" ring was examined for swelling and/or adhesion.
If so:
   i) indicate whether swelling and/or adhesion was present;
   ii) indicate on what basis and by what criteria it was determined whether the "o" ring was swollen and/or adhered;
   iii) identify all persons and/or entities involved in determining whether the "o" ring was swollen and/or adhered;

1) indicate whether the Omega and/or the system from which it came was tested and/or examined for "stop leak" or any other leakage prevention substance. If so:
   i) indicate whether "stop leak" or any other such substance was present;
   ii) indicate on what basis and by what criteria it was determined whether "stop leak" or any other such substance was present;
   iii) identify all persons and/or entities involved in determining whether "stop leak" or any other such substance was present;

m) indicate whether the Omega was examined for dezincification. If so:
   i) indicate whether dezincification had occurred;
   ii) indicate on what basis and by what criteria it was determined whether dezincification had occurred;
   iii) identify all persons and/or entities involved in determining whether dezincification had occurred;

n) explain why the Omega failed to activate in the fire.

RESPONSE NO. 34: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that

constitute trade secrets or other confidential research, development, or commercial information; and it calls for a legal conclusion.

Subject to and without waiver of the foregoing objections, Central responds as follows: Following is a list of locations regarding which Central has "been notified of an Omega that did not or allegedly did not activate in a fire." By listing the locations below, Central does not concede that any Omega sprinkler involved did not activate properly or that any non-activation was caused by a defect in the sprinkler. To the contrary, for example, certain of the locations listed below involved fires that burned from outside the structure to the inside, systems that were contaminated with prohibited substances (e.g., Stop-Leak), or systems where the water supply may have been shut off or otherwise disabled. Central has not had an opportunity to investigate fully a number of locations listed below, and Central also is in the process of investigating other fires where Omegas were or allegedly were involved. To the extent that any responsive information is discovered during such ongoing investigations, Central will provide supplemental information in response to this interrogatory.

A. Jackson Memorial Hospital, Miami, Florida

B. Marriott Hotel, Romulus, Michigan

C. Veterans' Affairs Building, Lake Canandaqua, New York

D. Crossroads, Ft. Wayne, Indiana

E. Mel's Marina, Gulf Breeze, Florida

F. Kent Manor Inn, Annapolis, Maryland

G. Casa Reale Apartments, Los Angeles, California

H. Escondido Gardens, Escondido, California

I. Joshua Tree Apartments, Scottsdale, Arizona

J. Lorene Lodge, Marietta, Georgia

K. Yorba Residence, Riverside, California

L. Days Inn, Horsham, Pennsylvania

M. Monserrat School of Art, Beverly, Massachusetts

N. Boarding House, Milford, Massachusetts

O. Private Residence, Dallas, Texas

P. The Fairway at Piper Glen, Charlotte, North Carolina

Q. Lockemill Plaza, Concord, North Carolina

For the remainder of the information requested in this interrogatory, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: For information responsive to the remaining questions in this interrogatory, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: customer service department files, return authorizations, diagnostic reports.

INTERROGATORY NO. 35: Indicate whether you are aware or have ever been notified of an Omega sprinkler that, when tested, did not activate or allegedly did not activate at 7 psig or below when exposed to its activation/triggering temperature? If so:

a) identify the Omega;
b) indicate when, how, and from whom you received such notification;
c) describe and explain the circumstances of the nonactivation at 7 psig, including

i) when and where the testing and nonactivation at or below 7 psig took place;
ii) describe the tests and provide a detailed protocol:
iii) identify the persons and entities involved in setting up and/or conducting the tests;
iv) describe and explain the results of the tests, including all observations and conclusions;
v) identify the persons and entities involved in evaluating the test results.

d) indicate at what pressure, if any, the Omega activated (or if it failed to activate together, indicate the highest pressure to which the sprinkler was subjected);

e) describe and explain your response to the notification;

f) did you or anyone else of whom you are aware examine and/or test the Omega that failed to activate (after it failed to activate), the system in which it was installed, and/or any other sprinkler from the same site? If so:
i) identify the sprinkler;
ii) describe the tests and/or examinations
iii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;
iv) describe and explain the results of the tests and/or examinations, including all observations and conclusions;
v) identify the persons and entities involved in evaluating the test and/or examination results;

g) identify and describe all communications regarding or relating in any way to the notification, the sprinkler, the testing and/or examination, and/or the nonactivation at 7 psig or below, including:
i) the date on which the communication took place;
ii) the persons and/or entities to and from whom the communication was directed;
iii) the nature and content of the communication;
iv) identify all persons and/or entities present during the communication.

h) indicate whether the Omega was equipped or fitted with a "helper spring;"

i) indicate whether the Omega "o" ring was examined for swelling and/or adhesion. If so:
i) indicate whether swelling and/or adhesion was present;
ii) indicate on what basis and by what criteria it was determined whether the "o" ring was swollen and/or adhered;
iii) identify all persons and/or entities involved in determining whether the "o" ring was swollen and/or adhered;

j) indicate whether the Omega and/or the system from which it came was tested and/or examined for "stop leak" or any other leakage prevention substance. If so:
i) indicate whether "stop leak" or any other such substance was present;
ii) indicate on what basis and by what criteria it was determined whether "stop leak" or any other such substance was present;

iii) identify all persons and/or entities involved in determining whether stop leak" or any other such substance was present;

k) indicate whether the Omega was examined for dezincification. If so:
   i) indicate whether dezincification had occurred;
   ii) indicate on what basis and by what criteria it was determined whether dezincification had occurred;
   iii) identify all persons and/or entities involved in determining whether dezincification had occurred;

l) explain why each such Omega did not activate at or below 7 psig.

RESPONSE NO. 35: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: return authorizations, diagnostic reports.

INTERROGATORY NO. 36: Indicate whether you are aware or have ever been notified of an Omega sprinkler that, when tested in the field, did not activate or allegedly did not activate when exposed to its activation/triggering temperature? If so:

a) identify the Omega;
b) indicate when, how, and from whom you received such notification;

c) describe and explain the circumstances of the nonactivation, including:
   i) when and where the testing and nonactivation took place;
   ii) describe the tests and provide a detailed protocol;
   iii) identify the persons and entities involved in setting up and/or conducting the tests;
   iv) describe and explain the results of the tests, including all observations and conclusions;
   v) identify the persons and entities involved in evaluating the test results.

d) indicate what the pressure of the system (in which the Omega was installed) was at the time of the field test;

e) describe and explain your response to the notification;

f) did you or anyone else of whom you are aware examine and/or test the Omega that failed to activate (after it failed to activate), the system in which it was installed, and/or any other sprinkler from the same site? If so:
   i) identify the sprinkler;
   ii) describe the tests and/or examinations, and provide a detailed protocol;
   iii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;
   iv) describe and explain the results of the tests and/or examinations, including all observations and conclusions;
   v) identify the persons and entities involved in evaluating the test and/or examination results;

g) identify and describe all communications regarding or relating in any way to the notification, the sprinkler, the testing and/or examination, and/or the nonactivation, including:
   i) the date on which the communication took place;
   ii) the persons and/or entities to and from whom the communication was directed;
   iii) the nature and content of the communication;
   iv) identify all persons and/or entities present during the communication.

h) indicate whether the Omega was equipped or fitted with a "helper spring;"

i) indicate whether the Omega "o" ring was examined for swelling and/or adhesion. If so:
   i) indicate whether swelling and/or adhesion was present;
   ii) indicate on what basis and by what criteria it was determined whether the "o" ring was swollen and/or adhered;
   iii) identify all persons and/or entities involved in determining whether the "o" ring was swollen and/or adhered;

j) indicate whether the Omega and/or the system from which it came was tested and/or examined for "stop leak" or any other leakage prevention substance. If so:
   i) indicate whether "stop leak" or any other such substance was present;
   ii) indicate on what basis and by what criteria it was determined whether "stop leak" or any other such substance was present;

iii) identify all persons and/or entities involved in determining whether "stop leak" or any other such substance was present;

k) indicate whether the Omega was examined for dezincification. If so:
   i) indicate whether dezincification had occurred;
   ii) indicate on what basis and by what criteria it was determined whether dezincification had occurred;
   iii) identify all persons and/or entities involved in determining whether dezincification had occurred;

l) explain why each such Omega did not activate when field tested.

RESPONSE NO. 36: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: return authorizations, diagnostic reports.

INTERROGATORY NO. 37: Do you contend that an Omega that is installed into a sprinkler system containing water at a pressure of at least 7 psig, that does not activate upon being exposed to its activation triggering temperature for long enough for its fusible like [sic] to melt, will activate if fitted with the "helper spring" (that Central has proposed for use with the Omega)? If so:

a) explain the basis for your contention;
b) describe in detail the method of operation of the "helper spring;"
c) describe in detail the specifications for the "helper spring;"
d) identify the manufacturer of the "helper spring;"

e) identify all persons and/or entities involved in the design and/or development of the "helper spring."

f) describe and any tests performed by you or anyone else to assess whether and/or how the "helper spring" affects the operation of an Omega sprinkler or any Omega component part, providing the following information:
   i) describe the tests and provide a detailed protocol;
   ii) identify the persons and entities involved in setting up and/or conducting the tests;
   iii) describe and explain the results of the tests, including all observations and conclusions;
   iv) identify the persons and entities involved in evaluating the test results.

g) indicate whether you have communicated with any persons and/or entities (including your employees, agents, and consultants) regarding the operation and/or efficacy of the helper spring. If so, provide the following information:
   i) identify all such persons and/or entities;
   ii) state the date of the communication;
   iii) describe the content of the communication;
   iv) identify all persons and/or entities present during the communication;

h) if you allege that an Omega sprinkler fitted with a helper spring will activate at a lower system pressure than an Omega without a helper spring, please indicate:
   i) how much lower the pressure required to activate the helper-spring fitted Omega is than the pressure required to activate an Omega not fitted with the helper spring; and
   ii) explain the basis for your allegation;
   iii) indicate what evidence supports your allegation.

RESPONSE NO. 37: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: Omegas fitted with "helper springs" will activate at the appropriate

hydraulically calculated operating pressure specific to the particular installed system in each building. For the remainder of the information requested by this interrogatory, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: return authorizations, diagnostic reports, activity reports, purchase orders, engineering reports, listing documents.

INTERROGATORY NO. 38: Have you ever been aware or been notified of an Omega sprinkler or component that has cracked or broken? If so:

a) identify the Omega and, if applicable, its component part;
b) describe the circumstances of the cracking and/or breakage, including the date on which it occurred;
c) identify the person and/or entity (including your employees and/or consultants) who notified you of the cracking and/or breakage;
d) detail when and how you became aware or received notification of the cracking and/or breakage;
e) describe and explain your response to the notification;
f) indicate whether you or anyone of whom you are aware examined and/or tested the affected sprinkler, its component part (if applicable), and/or other sprinklers from that site. If so:
    i) describe all such tests and/or examinations, and provide a detailed protocol;
    ii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;
    iii) describe and explain the results of each test and/or examination, including all observations and conclusions;
    iv) identify the persons and entities involved in evaluating the test and/or examination results;
g) identify and describe all communications regarding or relating in any way to the affected sprinkler, the cracking and/or breakage, and/or tests and/or examinations relating thereto, indicating:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication;
h) explain in full detail why the cracking and/or breakage occurred.

RESPONSE NO. 38: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: return authorizations, diagnostic reports.

INTERROGATORY NO. 39: Have you ever been aware or been notified of an Omega sprinkler or any sprinkler component that has exhibited corrosion? If so:

a) identify the Omega and, if applicable, its component part;
b) describe the circumstances of the corrosion, including the date on which it occurred;
c) identify the person and/or entity (including your employees and/or consultants) who notified you of the corrosion;
d) detail when and how you became aware or received notification of the corrosion;
e) describe and explain your response to the notification;
f) indicate whether you or anyone of whom you are aware examined and/or tested the affected sprinkler, its component part (if applicable), and/or other sprinklers from that site. If so:
    i) describe all such tests and/or examinations, and provide a detailed protocol;
    ii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;
    iii) describe and explain the results of each test and/or examination, including all observations and conclusions;
    iv) identify the persons and entities involved in evaluating the test or examination results;

g) identify and describe all communications regarding or relating in any way to the affected sprinkler, the corrosion, and/or tests and/or examinations relating thereto, indicating:
   i) the date on which the communication took place;
   ii) the persons and/or entities to and from whom the communication was directed;
   iii) the nature and content of the communication;
   iv) identify all persons and/or entities present during the communication;

h) explain in full detail how and why the corrosion occurred.

RESPONSE NO. 39: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: return authorizations, diagnostic reports.

INTERROGATORY NO. 40: Indicate whether you are aware or have ever been notified of an Omega sprinkler that leaked and/or weeped when tested or in a fire? If so:

a) identify the Omega;
b) indicate when, how, and from whom you received notification or became aware of the leakage and/or weeping;
c) describe and explain the circumstances of the leaking and/or weeping, including when and where the leakage and/or weeping took place. If the leakage and/or weeping took place in testing:
   i) describe the tests and provide a detailed protocol;

ii) identify the persons and entities involved in setting up and/or conducting the tests;

iii) describe and explain the results of the tests, including all observations and conclusions (and including at what pressure the sprinkler leaked and/or wept);

iv) identify the persons and entities involved in evaluating the test and/or examination results.

d) indicate whether you or anyone else of whom you are aware tested and/or examined the Omega (after it leaked and/or wept), and/or any other sprinkler from the same site. If so:

i) identify the sprinkler;

ii) describe the tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;

iv) describe and explain the results of the tests and/or examinations, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test and/or examination results.

e) describe and explain your response to the notification;

f) identify and describe all communications regarding or relating in any way to the notification, the sprinkler, the testing, and/or the leakage and/or weeping, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

g) indicate whether the Omega that leaked or wept was equipped or fitted with a "helper spring;"

h) indicate whether the "o" ring of the Omega that leaked or wept was examined for swelling and/or adhesion. If so:

i) indicate whether swelling and/or adhesion was present;

ii) indicate on what basis and by what criteria it was determined whether the "o" ring was swollen and/or adhered;

iii) identify all persons and/or entities involved in determining whether the "o" ring was swollen and/or adhered;

i) explain why the Omega leaked and/or wept.

RESPONSE NO. 40: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of

admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: return authorizations, diagnostic reports.

INTERROGATORY NO. 41: Indicate whether you are aware or have ever been notified of an Omega sprinkler that activated unnecessarily or prematurely (either without or before being exposed to its activation/triggering temperature) when tested or in a fire? If so:

a) identify the Omega;
b) indicate when, how, and from whom you received notification or became aware of the unnecessary or premature activation;
c) describe and explain the circumstances of the unnecessary and/or premature activation; including when and where the activation took place. If during testing:
    i) describe the tests and provide a detailed protocol;
    ii) identify the persons and entities involved in setting up and/or conducting the tests;
    iii) describe and explain the results of the tests, including all observations and conclusions (and including at what temperature and pressure the sprinkler activated);
    iv) identify the persons and entities involved in evaluating the test results.
d) indicate whether you or anyone else of which you are aware tested and/or examined the Omega (after it activated prematurely and/or unnecessarily), and/or any other sprinkler from the same site. If so:
    i) identify the sprinkler;
    ii) describe the tests and/or examinations, and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;

iv) describe and explain the results of the tests and/or examinations, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test and/or examination results.

e) describe and explain your response to the notification;

f) identify and describe all communications regarding or relating in any way to the notification, the sprinkler, the testing, and/or the premature and/or unnecessary activation, including:

i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;

iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication-

g) indicate whether the Omega that activated prematurely and/or unnecessarily was equipped or fitted with a "helper spring;"

h) indicate whether the "o" ring of the Omega that activated prematurely and/or unnecessarily was examined for swelling and/or adhesion. If so:

i) indicate whether swelling and/or adhesion was or was not present;

ii) indicate on what basis and by what criteria it was determined whether the "o" ring was swollen and/or adhered;

iii) identify all persons and/or entities involved in determining whether the ,lo" ring was swollen and/or adhered;

i) explain why the Omega activated prematurely and/or unnecessarily.

RESPONSE NO. 41: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. §

1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 42: Do you contend that dezincification may cause an Omega to:

a) leak and/or weep;
b) activate prematurely and/or unnecessarily;
c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or
d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or
e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature). If so:
    i) explain the basis for your contention;
    ii) identify the Omegas in which dezincification causes or may cause (a), (b), (c), and/or (d), above;
    iii) identify the systems in which dezincification causes or may cause (a), (b), (c) and/or (d), above;
    iv) describe the circumstances under which dezincification causes or may cause (a), (b), (c) and/or (d), above.

RESPONSE NO. 42: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 43: Have you or anyone of whom you are aware ever determined or alleged that an Omega with a plunger housing made of an alloy other than CDA 35330, from a plastic or copper piping system, exhibits dezincification? If so:

a) identify the Omega;
b) identify the person and/or entity that made the determination or allegation;
c) indicate the date on which the determination or allegation was made;
d) describe the methods and criteria used to determine and confirm the existence of dezincification;
e) identify the person and/or entity (including your employees or consultants) who notified you of the alleged dezincification;
f) indicate how and when you were notified of the alleged dezincification;
g) detail your response to the notification or awareness;
h) did you or anyone else of whom you are aware test and/or examine the Omega, the system in which it was installed and/or any other sprinkler from the same site? If so:
    i) identify the Omega;
    ii) describe all such tests and/or examinations, and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;
    iv) describe and explain the results of each test and/or examination, including all observations and conclusions;
    v) identify the persons and entities involved in evaluating the test and/or examination results;
i) identify and describe all communications regarding or relating in any way to the Omega, the alleged dezincification, the examination and/or conclusion, and any tests and/or examinations relating thereto, indicating:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.
j) With respect to each such Omega, indicate whether you contend that the dezincification caused the Omega to:
    i) leak and/or weep;
    ii) prematurely and/or unnecessarily activate;
    iii) fail to activate at 7 psig or below in testing (when exposed to its activation/triggering temperature;
    iv) fail to activate in field testing (when exposed to its activation/triggering temperature);
    v) fail to activate in a fire (when exposed to its activation/triggering temperature).

    If so, explain fully the basis for your contention.

RESPONSE NO. 43: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 44: Have you or anyone of whom you are aware ever determined or alleged that an Omega with a plunger housing made of CDA 35330 alloy, from a plastic or copper piping system, exhibits dezincification? If so:

a) identify the Omega;
b) identify the person and/or entity that made the determination or allegation;
c) indicate the date on which the determination or allegation was made;
d) describe the methods and criteria used to determine and confirm the existence of dezincification;
e) identify the person and/or entity (including your employees or consultants) who notified you of the alleged dezincification;
f) indicate how and when you were notified of the alleged dezincification;
g) detail your response to the notification or awareness;
h) did you or anyone else of whom you are aware test and/or examine the Omega and/or any other sprinkler from the same site? If so:
    i) identify the Omega;
    ii) describe all such tests and/or examinations, and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;
    iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

v) identify the persons and entities involved in evaluating the test and/or examination results;

i) identify and describe all communications regarding or relating in any way to the Omega, the alleged dezincification, the examination and/or conclusion, and any tests and/or examinations relating thereto, indicating:
   i) the date on which the communication took place;
   ii) the persons and/or entities to and from whom the communication was directed;
   iii) the nature and content of the communication;
   iv) identify all persons and/or entities present during the communication.

j) With respect to each such Omega, indicate whether you or anyone else of whom you are aware contend that the dezincification caused the Omega to:
   i) leak and/or weep;
   ii) prematurely and/or unnecessarily activate;
   iii) fail to activate at 7 psig or below in testing (when exposed to its activation/triggering temperature;
   iv) fail to activate in field testing (when exposed to its activation/triggering temperature);
   v) fail to activate in a fire (when exposed to its activation/triggering temperature).

If so, explain fully the basis for your contention or, if not your contention, identify the person and/or entity who so contended, and explain your understanding of the basis for their contention.

RESPONSE NO. 44: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence ; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. §

1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 45: Have you or anyone of whom you are aware ever determined or alleged that an Omega from a piping system that is neither copper or plastic exhibits dezincification? If so:

a) identify the Omega;
b) identify the person and/or entity that made the determination or allegation;
c) indicate the date on which the determination or allegation was made;
d) describe the methods and criteria used to determine and confirm the existence of dezincification;
e) identify the person and/or entity (including your employees or consultants) who notified you of the alleged dezincification;
f) indicate how and when you were notified of the alleged dezincification;
g) detail your response to the notification or awareness;
h) did you or anyone else of whom you are aware test and/or examine the Omega and/or any other sprinkler from the same site? If so:
    i) identify the Omega;
    ii) describe all such tests and/or examinations, and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;
    iv) describe and explain the results of each test and/or examination, including all observations and conclusions;
    v) identify the persons and entities involved in evaluating the test and/or examination results;
i) identify and describe all communications regarding or relating in any way to the Omega, the alleged dezincification, the examination and/or conclusion, and any tests and/or examinations relating thereto, indicating:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 45: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential

research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 46: Are you aware or have you ever been notified of an Omega sprinkler from a copper or plastic piping system that did not exhibit dezincification, and that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire? If so:

a) identify the Omega;
b) describe the circumstances under which the Omega did not activate;
c) indicate at what pressure, if any, the Omega activated (or if it failed to activate altogether, indicate the highest pressure to which the Omega was subjected);
d) identify the person and/or entity (including your employees and/or consultants) who notified you of the Omega and/or its nonactivation under the circumstances above;
e) indicate how and when you became aware or received notification of the nonactivation under the circumstances described above;
f) indicate on what basis and by what criteria it was determined whether dezincification was present;
g) detail your response to the notification or awareness;
h) indicate whether you or anyone else of whom you are aware examined and/or tested the affected sprinkler and/or other sprinklers from that site. If so:
    i) identify the Omega;
    ii) describe all such tests and/or examinations, and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;
    iv) describe and explain the results of each test and/or examination, including all observations and conclusions;
    v) identify the persons and entities involved in evaluating the test results;
i) identify and describe all communications regarding or relating in any way to the Omega and/or its nonactivation, and/or tests and/or examinations relating thereto, indicating:
    i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;
iii) the nature and content of the communication;
iv) identify all persons and/or entities present during the communication.

j) explain in full detail why the Omega did not activate.

RESPONSE NO. 46: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: return authorizations, diagnostic reports.

INTERROGATORY NO. 47: Do you allege that any change in the manufacturing process and/or component parts, including any tools, substances or chemicals used in the manufacturing process, renders the Omegas manufactured after a certain date unsusceptible to dezincification? If so:

a) describe the alleged change, and indicate which Omega makes and models were changed;
b) indicate the date on which the change was effected;
c) identify all persons and/or entities involved in effecting the change, describing each such person's role in effecting the change;

d) indicate whether you or anyone else of whom you are aware has tested and/or examined an Omega manufactured after the change to determine whether it exhibits dezincification? If so:
   i) identify the Omega;
   ii) describe all such tests and/or examinations, and provide a detailed protocol;
   iii) identify the persons and entities involved in setting up and/or conducting each test or examination;
   iv) describe and explain the results of each test and/or examination, including all observations and conclusions;
   v) identify the persons and entities involved in evaluating the test and/or examination results;

e) identify and describe all communications regarding or relating in any way to the change and/or tests and/or examinations relating thereto, indicating:
   i) the date on which the communication took place;
   ii) the persons and/or entities to and from whom the communication was directed;
   iii) the nature and content of the communication;
   iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 47: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: There is no brass material which is totally "unsusceptible to dezincification," as they all contain some percentage of zinc. This is an industry-wide issue. However, changes made to the Omega sprinklers during 1990 make for a more stable and resistive sprinkler when the brass alloy is exposed to conditions which promote dezincification. For the remainder of the information requested by this interrogatory, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents:

engineering change notices, bills of materials, diagnostic reports, return authorizations, project proposals, first article reports, vendor certifications, material review board minutes.

INTERROGATORY NO. 48: Do you contend that the use of stop leak or other sealant, leakage prevention substance or pipe cement by sprinkler installers/contractors, plumbers and/or others directly involved in installation and/or maintenance of sprinkler systems may cause an Omega to:

a) leak and/or weep;
b) activate prematurely and/or unnecessarily;
c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or
d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or
e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature). If so:
    i) explain the basis for your contention;
    ii) identify the Omegas in which the use of stop leak or other sealant, leakage prevention substance or pipe cement causes or may cause (a), (b), (c), and/or (d), above;
    iii) identify the systems in which the use of stop leak or other sealant, leakage prevention substance or pipe cement causes or may cause (a), (b), (c) and/or (d), above;
    iv) identify the substances you contend are used;
    v) describe the circumstances under which the use of stop leak or other sealant, leakage prevention substance or pipe cement causes or may cause (a), (b), (c) and/or (d), above.

RESPONSE NO. 48: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: the use of "Stop-Leak" or other sealant materials, which are prohibited from use in sprinkler systems, may cause activation problems for Omegas. For the remainder of the information requested by this

interrogatory, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: return authorizations, diagnostic reports.

INTERROGATORY NO. 49: Have you or anyone of whom you are aware ever determined or alleged that an Omega sprinkler was exposed to stop leak or any other sealant, leakage prevention substance or pipe cement? If so:

a) identify the Omega;
b) identify the substance to which the Omega was allegedly exposed, including the manufacturer, chemical name, brand name, and chemical composition;
c) identify the person and/or entity that made the determination or allegation;
d) indicate the date on which the determination or allegation was made;
e) describe the methods and criteria used to determine and confirm the existence of the stop leak or the other sealant, leak prevention substance or pipe cement;
f) identify the person and/or entity (including your employees or consultants) who notified you of the alleged exposure to stop leak or any other sealant, leakage prevention substance or pipe cement;
g) indicate how and when you were notified of the alleged exposure to stop leak or any other sealant, leakage prevention substance or pipe cement;
h) detail your response to the notification or awareness;
i) did you or anyone else of whom you are aware test and/or examine the Omega and/or any other sprinkler from the same site? If so:
    i) identify the Omega;
    ii) describe all such tests and/or examinations, and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;
    iv) describe and explain the results of each test and/or examination, including all observations and conclusions;
    v) identify the persons and entities involved in evaluating the test and/or examination results;
j) identify and describe all communications regarding or relating in any way to the Omega, the alleged exposure to stop leak or any other sealant, leakage prevention substance or pipe cement, the examination and/or conclusion, and any tests and/or examinations relating thereto, indicating:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

k) With respect to each such Omega, indicate whether you contend that the exposure to stop leak or any other sealant, leakage prevention substance or pipe cement caused the Omega to:

i) leak and/or weep;

ii) prematurely and/or unnecessarily activate;

iii) fail to activate at 7 psig or below in testing (when exposed to its activation/triggering temperature;

iv) fail to activate in field testing (when exposed to its activation/triggering temperature);

v) fail to activate in a fire (when exposed to its activation/triggering temperature);

If so, explain fully the basis for your contention.

RESPONSE NO. 49: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: Yes. For the remainder of the information requested by this interrogatory, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: return authorizations, diagnostic reports.

INTERROGATORY NO. 50: Are you aware or have you ever been notified of an Omega sprinkler that was not exposed to stop leak or any other sealant, leakage prevention substance or pipe cement, and that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire? If so:

a) identify the Omega;

b) describe the circumstances under which the Omega did not activate;

c) indicate at what pressure, if any, the Omega activated (or if it failed to activate altogether, indicate the highest pressure to which the Omega was subjected);

d) identify the person and/or entity (including your employees and/or consultants) who notified you of the Omega and/or its nonactivation under the circumstances above;
e) indicate how and when you became aware or received notification of the nonactivation under the circumstances described above;
f) indicate on what basis and by what criteria it was determined whether stop leak or any other sealant, leakage prevention substance or pipe cement was present;
g) detail your response to the notification or awareness;
h) indicate whether you or anyone else of whom you are aware examined and/or tested the affected sprinkler and/or other sprinklers from that site. If so:
    i) identify the Omega;
    ii) describe all such tests and/or examinations, and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;
    iv) describe and explain the results of each test and/or examination, including all observations and conclusions;
    v) identify the persons and entities involved in evaluating the test results;
i) identify and describe all communications regarding or relating in any way to the Omega and/or its nonactivation, and/or tests and/or examinations relating thereto, indicating:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication;
j) explain in full detail why the Omega did not activate.

RESPONSE NO. 50: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and

without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: return authorizations, diagnostic reports.

INTERROGATORY NO. 51: Do you allege that any change in the manufacturing process and/or component parts, including any tools, substances or chemicals used in the manufacturing process, renders the Omegas manufactured after a certain date unsusceptible to the effects that you allege in your response to Interrogatory No. 48 are caused or may be caused by the use of stop leak or any other sealant, leakage prevention substance or pipe cement? If so, for each such substance (stop leak or any other sealant, leakage prevention substance or pipe cement):

a) identify the substance;
b) describe the alleged change, and identify the Omega makes and models to which the change applies;
c) indicate the date on which the change was effected;
d) identify all persons and/or entities involved in effecting the change, describing each such person's role in effecting the change;
e) indicate whether you or anyone else of whom you are aware has tested and/or examined an Omega manufactured after the change to determine whether it exhibits the effects that you allege in your response to Interrogatory No. 48 are caused or may be caused by the use of stop leak or any other sealant, leakage prevention substance or pipe cement? If so:
    i) identify the Omega;
    ii) describe all such tests and/or examinations, and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting each test or examination;
    iv) describe and explain the results of each test and/or examination, including all observations and conclusions;
    v) identify the persons and entities involved in evaluating the test and/or examination results;
e) identify and describe all communications regarding or relating in any way to the change and/or tests and/or examinations relating thereto, indicating:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 51: Central Sprinkler responds as follows: to the best of its knowledge, there are no changes in the manufacturing process that would render Omegas "unsusceptible" to the effects of "Stop-Leak" and similar materials expressly forbidden for use in sprinkler systems.

INTERROGATORY NO. 52: Do you contend that the use of cutting oil or other substances used by sprinkler installers/contractors, plumbers and/or others directly involved in installation and/or maintenance of sprinkler systems to cut pipe may cause an Omega to:

a) leak and/or weep;
b) activate prematurely and/or unnecessarily;
c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or
d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or
e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature). If so:
    i) explain the basis for your contention;
    ii) identify the Omegas in which the use of cutting oils or other substances used to cut pipe causes or may cause (a), (b), (c), and/or (d), above;
    iii) identify the systems in which the use of cutting oils or other substances used to cut pipe causes or may cause (a), (b), (c) and/or (d), above;
    iv) identify the substances you contend are used;
    v) describe the circumstances under which the use of cutting oils or other substances used to cut pipe causes or may cause (a), (b), (c) and/or (d), above.

RESPONSE NO. 52: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: Central contends that the use of cutting oils does not cause any of the stated effects in

currently manufactured Omegas, which use silicone o-rings. Testing of the sprinklers using silicone o-rings is ongoing. Cutting oils used by sprinkler installers may have some effect on activation of Omegas that use EPDM o-rings; any such effect may be ascertained through appropriate testing. For the rest of the information requested by this interrogatory, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 53: Have you or anyone of whom you are aware ever determined or alleged that an Omega sprinkler was exposed to cutting oils or other substances used to cut pipe? If so:

a) identify the Omega;
b) identify the substance to which the Omega was allegedly exposed, including the manufacturer, chemical name, brand name, and chemical composition;
c) identify the person and/or entity that made the determination or allegation;
d) indicate the date on which the determination or allegation was made;
e) describe the methods and criteria used to determine and confirm the existence of the cutting oil or other substance used to cut pipe;
f) identify the person and/or entity (including your employees or consultants) who notified you of the alleged exposure to cutting oil or other substance to cut pipe;
g) indicate how and when you were notified of the alleged exposure to cutting oil or other substance to cut pipe;
h) detail your response to the notification or awareness;
i) did you or anyone else of whom you are aware test and/or examine the Omega and/or any other sprinkler from the same sites If so:
    i) identify the Omega;
    ii) describe all such tests and/or examinations, and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;
    iv) describe and explain the results of each test and/or examination, including all observations and conclusions;
    v) identify the persons and entities involved in evaluating the test and/or examination results;
j) identify and describe all communications regarding or relating in any way to the Omega, the alleged exposure to cutting oil or other substance to cut pipe, the examination and/or conclusion, and any tests and/or examinations relating thereto, indicating:
    i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;
iii) the nature and content of the communication;
iv) identify all persons and/or entities present during the communication;

k) With respect to each such Omega, indicate whether you contend that the exposure to cutting oil or other substance to cut pipe caused the Omega to:
i) leak and/or weep;
ii) prematurely and/or unnecessarily activate;
iii) fail to activate at 7 psig or below in testing (when exposed to its activation/triggering temperature;
iv) fail to activate in field testing (when exposed to its activation/triggering temperature);
v) fail to activate in a fire (when exposed to its activation/triggering temperature).
If so, explain fully the basis for your contention.

RESPONSE NO. 53: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: Yes. For the remainder of the information requested by this interrogatory, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: return authorizations, diagnostic reports.

INTERROGATORY NO. 54: Are you aware or have you ever been notified of an Omega sprinkler that was not exposed to cutting oil or other substance used to cut pipe, and that when

exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire? If so:

a) identify the Omega;
b) describe the circumstances under which the Omega did not activate;
c) indicate at what pressure, if any, the Omega activated (or if it failed to activate altogether, indicate the highest pressure to which the Omega was subjected);
d) identify the person and/or entity (including your employees and/or consultants)who notified you of the Omega and/or its nonactivation under the circumstances above;
e) indicate how and when you became aware or received notification of the nonactivation under the circumstances described above;
f) indicate on what basis and by what criteria it was determined whether cutting oil or other substance to cut pipe was present;
g) detail your response to the notification or awareness;
h) indicate whether you or anyone else of whom you are aware examined and/or tested the affected sprinkler and/or other sprinklers from that site. If so:
    i) identify the Omega;
    ii) describe all such tests and/or examinations, and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;
    iv) describe and explain the results of each test and/or examination, including all observations and conclusions;
    v) identify the persons and entities involved in evaluating the test results;
i) identify and describe all communications regarding or relating in any way to the Omega and/or its nonactivation, and/or tests and/or examinations relating thereto, indicating:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication;
j) explain in full detail why the Omega did not activate.

RESPONSE NO. 54: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that

constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: return authorizations, diagnostic reports.

INTERROGATORY NO. 55: Do you allege that any change in the manufacturing process and/or component parts, including any tools, substances or chemicals used in the manufacturing process, renders the Omegas manufactured after a certain date unsusceptible to the effects that you allege in your response to Interrogatory No. 52 are caused or may be caused by the use of cutting oil or other substance used to cut pipe? If so, for each such substance (cutting oil or other substance used to cut pipe):

a) identify the substance;
b) describe the alleged change, and identify the Omega makes and models to which the change applies;
c) indicate the date on which the change was effected;
d) identify all persons and/or entities involved in effecting the change, describing each such person's role in effecting the change;
e) indicate whether you or anyone else of whom you are aware has tested and/or examined an Omega manufactured after the change to determine whether it exhibits the effects that you allege in your response to Interrogatory No. 52 are caused or may be caused by the use of cutting oil or other substance used to cut pipe? If so:
    i) identify the Omega;
    ii) describe all such tests and/or examinations, and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting each test or examination;
    iv) describe and explain the results of each test and/or examination, including all observations and conclusions;
    v) identify the persons and entities involved in evaluating the test and/or examination results;
f) identify and describe all communications regarding or relating in any way to the change and/or tests and/or examinations relating thereto, indicating:

i) the date on which the communication took place;
ii) the persons and/or entities to and from whom the communication was directed;
iii) the nature and content of the communication;
iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 55: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: Central contends that the use of cutting oils does not cause any of the stated effects in currently manufactured Omegas, which use silicone o-rings. Testing of the sprinklers using silicone o-rings is ongoing. For the rest of the information requested by this interrogatory, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 56: Do you contend that swelling of the "o" ring in an Omega sprinkler may cause the Omega to:

a) leak and/or weep;
b) activate prematurely and/or unnecessarily;
c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature), and/or
d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or
e) fail to activate in a Fire (when the Omega is exposed to its activation/triggering temperature). If so:
    i) explain the basis for your contention;
    ii) identify the Omegas in which "o" ring swelling causes or may cause (a), (b), (1c), and/or (d), above, indicating what type of "o" ring (EPDM, silicone, or other) is used in that Omega;
    iii) identify the systems in which "o" ring swelling causes or may cause (a), (b), (c) and/or (d), above;

iv) describe the circumstances under which "o" ring swelling causes or may cause (a), (b), (c) and/or (d), above.

RESPONSE NO. 56: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 57: Have you or anyone of whom you are aware ever determined or alleged that an Omega containing an EPDM "o" ring, from a steel piping system, exhibits "o" ring swelling? If so:

a) identify the Omega;
b) identify the person and/or entity that made the determination or allegation;
c) indicate the date on which the determination or allegation was made;
d) describe the methods and criteria used to determine and confirm the existence of "o" ring swelling;
e) identify the person and/or entity (including your employees or consultants) who notified you of the alleged "o" ring swelling;
f) indicate how and when you were notified of the alleged "o" ring swelling;
g) detail your response to the notification or awareness;
h) did you or anyone else of whom you are aware test and/or examine the Omega and/or any other sprinkler from the same site? If so:
    i) identify the Omega;
    ii) describe all such tests and/or examinations, and provide a detailed protocol;

iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination,
iv) describe and explain the results of each test and/or examination, including all observations and conclusions;
v) identify the persons and entities involved in evaluating the test and/or examination results;

i) identify and describe all communications regarding or relating in any way to the Omega, the alleged "o" ring swelling, the examination and/or conclusion, and any tests and/or examinations relating thereto, indicating:
i) the date on which the communication took place;
ii) the persons and/or entities to and from whom the communication was directed;
iii) the nature and content of the communication;
iv) identify all persons and/or entities present during the communication;

j) With respect to each such Omega, indicate whether you contend that the "o" ring swelling caused the Omega to:
i) leak and/or weep;
ii) prematurely and/or unnecessarily activate;
iii) fail to activate at 7 psig or below in testing (when exposed to its activation/triggering temperature;
iv) fail to activate in field testing (when exposed to its activation/triggering temperature);
v) fail to activate in a fire (when exposed to its activation/triggering temperature).

If so, explain fully the basis for your contention.

RESPONSE NO. 57: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. §

1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: return authorizations, diagnostic reports.

INTERROGATORY NO. 58: Have you or anyone of whom you are aware ever determined or alleged that an Omega containing a silicone "o" ring, from a steel piping system, exhibits "o" ring swelling? If so:

a) identify the Omega;
b) identify the person and/or entity that made the determination or allegation;
c) indicate the date on which the determination or allegation was made;
d) describe the methods and criteria used to determine and confirm the existence of "o" ring swelling;
e) identify the person and/or entity (including your employees or consultants) who notified you of the alleged "o" ring swelling;
f) indicate how and when you were notified of the alleged "o" ring swelling;
g) detail your response to the notification or awareness;
h) did you or anyone else of whom you are aware test and/or examine the Omega and/or any other sprinkler from the same site? If so:
    i) identify the Omega;
    ii) describe all such tests and/or examinations, and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;
    iv) describe and explain the results of each test and/or examination, including all observations and conclusions;
    v) identify the persons and entities involved in evaluating the test and/or examination results;
i) identify and describe all communications regarding or relating in any way to the Omega, the alleged "o" ring swelling, the examination and/or conclusion, and any tests and/or examinations relating thereto, indicating:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication;
j) With respect to each such Omega, indicate whether you or anyone else of whom you are aware contend that the "o" ring swelling caused the Omega to:
    i) leak and/or weep;
    ii) prematurely and/or unnecessarily activate;

iii) fail to activate at 7 psig or below in testing (when exposed to its activation/triggering temperature;
iv) fail to activate in field testing (when exposed to its activation/triggering temperature),
v) fail to activate in a fire (when exposed to its activation/triggering temperature).

If so, explain f-ally the basis for your contention or, if not your contention, identify the person and/or entity who so contends, and explain your understanding of their basis for that contention.

RESPONSE NO. 58: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: return authorizations, diagnostic reports.

INTERROGATORY NO. 59: Have you or anyone of whom you are aware ever determined or alleged that an Omega from a piping system that is not steel exhibits "o" ring swelling? If so:

a) identify the Omega;
b) indicate what type of "o" ring the Omega contained (EPDM, silicone, or other type of "o" ring);
c) identify the person and/or entity that made the determination or allegation;

d) indicate the date on which the determination or allegation was made;
e) describe the methods and criteria used to determine and confirm the existence of "o" ring swelling;
f) identify the person and/or entity (including your employees or consultants) who notified you of the alleged "o" ring swelling;
g) indicate how and when you were notified of the alleged "o" ring swelling;
h) detail your response to the notification or awareness;
i) did you or anyone else of whom you are aware test and/or examine the Omega and/or any other sprinkler from the same site? If so:
    i) identify the Omega;
    ii) describe all such tests and/or examinations, and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;
    iv) describe and explain the results of each test and/or examination, including all observations and conclusions;
    v) identify the persons and entities involved in evaluating the test and/or examination results;
j) identify and describe all communications regarding or relating in any way to the Omega, the alleged "o" ring swelling, the examination and/or conclusion, and any tests and/or examinations relating thereto, indicating:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 59: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. §

1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: return authorizations, diagnostic reports.

INTERROGATORY NO. 60: Are you aware or have you ever been notified of an Omega sprinkler from a steel piping system that did not exhibit "o" ring swelling, and that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire? If so:

a) identify the Omega and indicate what type of "o" ring it contained;
b) describe the circumstances under which the Omega did not activate;
c) indicate at what pressure, if any, the Omega activated (or if it failed to activate altogether, indicate the highest pressure to which the Omega was subjected);
d) identify the person and/or entity (including your employees and/or consultants) who notified you of the Omega and/or its nonactivation under the circumstances above;
e) indicate how and when you became aware or received notification of the nonactivation under the circumstances described above;
f) indicate on what basis and by what criteria it was determined whether "o" ring swelling was present;
g) detail your response to the notification or awareness;
h) indicate whether you or anyone else of whom you are aware examined and/or tested the affected sprinkler and/or other sprinklers from that site. If so:
    i) identify the Omega;
    ii) describe all such tests and/or examinations, and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;
    iv) describe and explain the results of each test and/or examination, including all observations and conclusions;
    v) identify the persons and entities involved in evaluating the test results;
i) identify and describe all communications regarding or relating in any way to the Omega and/or its nonactivation, and/or tests and/or examinations relating thereto, indicating:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication;
j) explain in full detail why the Omega did not activate.

RESPONSE NO. 60: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: return authorizations, diagnostic reports.

INTERROGATORY NO. 61: Do you allege that any change in the manufacturing process and/or component parts, including any tools, substances or chemicals used in the manufacturing process, renders the Omegas manufactured after a certain date unsusceptible to "o" ring swelling? If so:

a) describe the alleged change, and identify the Omega makes and models to which the change applies;
b) indicate the date on which the change was effected;
c) identify all persons and/or entities involved in effecting the change, describing each such person's role in effecting the change;
d) indicate whether you or anyone else of whom you are aware has tested and/or examined an Omega manufactured after the change to determine whether it exhibits "o" ring swelling; If so:
    i) identify the Omega;
    ii) describe all such tests and/or examinations, and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting each test or examination;

iv) describe and explain the results of each test and/or examination, including all observations and conclusions;
v) identify the persons and entities involved in evaluating the test and/or examination results;

e) identify and describe all communications regarding or relating in any way to the change and/or tests and/or examinations relating thereto, indicating:
i) the date on which the communication took place;
ii) the persons and/or entities to and from whom the communication was directed;
iii) the nature and content of the communication;
iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 61: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: Central contends that the silicone o-rings currently used in Omegas render them "unsusceptible" to o-ring swelling. Testing of sprinklers using the silicone o-rings is ongoing. For the remainder of the information requested in this interrogatory, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: engineering change notices, bills of materials, project proposals, first article reports, vendor certifications, testing documents.

INTERROGATORY NO. 62: Do you contend that adhesion of an Omega sprinkler's "o" ring to the plunger housing or main housing of the Omega may cause the Omega to:

a) leak and/or weep;
b) activate prematurely and/or unnecessarily;
c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or

d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or

e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature). If so:

i) explain the basis for your contention;

ii) identify the Omegas in which "o" ring adhesion causes or may cause (a), (b), (c), and/or (d), above;

iii) identify the systems in which "o" ring adhesion causes or may cause (a), (b), (c) and/or (d), above;

iv) identify the Omegas in which "o" ring adhesion causes or may cause (a), (b), (c) and/or (d), above;

v) describe the circumstances under which "o" ring adhesion causes or may cause (a), b), (c) and/or (d), above.

RESPONSE NO. 62: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 63: Have you or anyone of whom you are aware ever determined or alleged that an Omega exhibits "o" ring adhesion? If so:

a) identify the Omega, and indicate what type of "o" ring it contained (EPDM, silicone, or other);

b) identify the person and/or entity that made the determination or allegation;

c) indicate the date on which the determination or allegation was made;

d) describe the methods and criteria used to determine and confirm the existence of "o" ring adhesion;

e) identify the person and/or entity (including your employees or consultants) ,who notified vou of the alleged "o" ring adhesion;

f) indicate how and when you were notified of the alleged "o" ring adhesion;

g) detail your response to the notification or awareness;

h) did you or anyone else of whom you are aware test and/or examine the Omega and/or any other sprinkler from the same site? If so:

  i) identify the Omega;

  ii) describe all such tests and/or examinations, and provide a detailed protocol;

  iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;

  iv) describe and explain the results of each test and/or examination, including all observations and conclusions;

  v) identify the persons and entities involved in evaluating the test and/or examination results;

i) identify and describe all communications regarding or relating in any way to the Omega, the alleged "o" ring adhesion, the examination and/or conclusion, and any tests and/or examinations relating thereto, indicating:

  i) the date on which the communication took place;

  ii) the persons and/or entities to and from whom the communication was directed;

  iii) the nature and content of the communication;

  iv) identify all persons and/or entities present during the communication;

j) With respect to each such Omega, indicate whether you or anyone of whom you are aware contend that the "o" ring adhesion caused the Omega to:

  i) leak and/or weep;

  ii) prematurely and/or unnecessarily activate;

  iii) fail to activate at 7 psig or below in testing (when exposed to its activation/triggering temperature;

  iv) fail to activate in field testing (when exposed to its activation/triggering temperature);

  v) fail to activate in a fire (when exposed to its activation/triggering temperature).

If so, explain fully the basis for your contention or, if not your contention, identify the person and/or entity who so contended, and explain your understanding of the basis for that contention.

RESPONSE NO. 63: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of

admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: return authorizations, diagnostic reports.

INTERROGATORY NO. 64: Do you allege that any change in the manufacturing process and/or component parts, including any tools, substances or chemicals used in the manufacturing process, renders the Omegas manufactured after a certain date unsusceptible to "o" ring adhesion? If so:

a) describe the alleged change, and identify the Omega makes and models to which the change applies;
b) indicate the date on which the change was effected;
c) identify all persons and/or entities involved in effecting the change, describing each such person's role in effecting the change;
d) indicate whether vou or anyone else of whom you are aware has tested and/or examined an Omega manufactured after the change to determine whether it exhibits "o" ring adhesion; If so:
    i) identify the Omega;
    ii) describe all such tests and/or examinations, and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting each test or examination;
    iv) describe and explain the results of each test and/or examination, including all observations and conclusions;
    v) identify the persons and entities involved in evaluating the test and/or examination results;
e) identify and describe all communications regarding or relating in any way to the change and/or tests and/or examinations relating thereto, indicating:
    i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;
iii) the nature and content of the communication;
iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 64: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: Central contends that the silicone o-rings currently used in the Omegas may render them "unsusceptible" to o-ring adhesion. Testing of sprinklers using the silicone o-rings is ongoing. For the remainder of the information requested in this interrogatory, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: engineering change notices, bills of materials, project proposals, first article reports, vendor certifications, testing documents.

INTERROGATORY NO. 65: Do you contend or are you aware of any fires in which all Omegas exposed to temperatures at or in excess of their activation/triggering temperature activated? If so:

a) identify each Omega;
b) indicate when, where and how the fire occurred;
c) what was the system pressure was (in psig) at the time of the fire and/or activation;
d) indicate how long after the Omega was first exposed to its activation/triggering temperature it activated;
e) indicate whether anyone sustained or allegedly sustained bodily injury as a result of or in association with the fire (including injuries sustained or allegedly sustained in attempting to escape the fire). If so:
    i) identify the injured person;
    ii) indicate how the injury was or was alleged to have been sustained;

iii) indicate whether a suit, claim, or demand was ever made against you or in which you were implicated relating to the incident or injury; provide details of same;

f) indicate whether anyone died or allegedly died as a result of or in association with the fire (including death incurred or allegedly incurred in attempting to escape the fire). If so:
   i) identify the decedent;
   ii) indicate how and where the death occurred;
   iii) indicate whether a suit, claim, or demand was ever made against you or in which you were implicated relating to the incident or death; provide details of same;

g) indicate whether any property was or allegedly was damaged, lost or destroyed as a result of or in association with the fire (including damage sustained or allegedly sustained in attempting to remove the property from the fire, or in attempting to put out the fire). If so:
   i) identify the owner of the property;
   ii) indicate how the property was or allegedly was damaged;
   iii) indicate the value or alleged value of the property;
   iv) indicate whether a suit, claim, or demand was ever made against you or in which you were implicated relating to the incident or damage; provide details of same;

h) indicate whether the Omega was fitted with a "helper spring;"

i) indicate when and how you became aware of the fire and/or the activation, including from whom you received the notification;

j) identify and describe all communications regarding or relating in any way to the fire and/or activation, including:
   i) the date on which the communication took place;
   ii) the persons and/or entities to and from whom the communication was directed;
   iii) the nature and content of the communication;
   iv) identify all persons and/or entities present during the communication;

k) indicate whether you or anyone else tested and/or examined any Omega that allegedly activated in a fire, or any other sprinkler from the same site? If so:
   i) identify the sprinkler;
   ii) describe the tests and/or examinations, and provide a detailed protocol-,
   iii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;
   iv) describe and explain the results of the tests and/or examinations, including all observations and conclusions;
   v) identify the persons and entities involved in evaluating the test and/or examination results;

l) indicate whether the Omega "o" ring was examined for swelling and/or adhesion. If so:

i) indicate whether swelling and/or adhesion was present;
ii) indicate on what basis and by what criteria it was determined whether the "o" ring was swollen or adhered;
iii) identify all persons and/or entities involved in determining whether the "o" ring was swollen or adhered;

m) indicate whether the Omega and/or the system from which it came was tested and/or examined for "stop leak" or any other leakage prevention substance. If so:
i) indicate whether "stop leak" or any other such substance was present;
ii) indicate on what basis and by what criteria it was determined whether "stop leak" or any other such substance was present;
iii) identify all persons and/or entities involved in determining whether "stop leak" or any other such substance was present;

n) indicate whether the Omega was examined for dezincification. If so:
i) indicate whether dezincification had occurred;
ii) indicate on what basis and by what criteria it was determined whether dezincification had occurred;
iii) identify all persons and/or entities involved in determining whether dezincification had occurred.

RESPONSE NO. 65: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: Over the course of the fifteen-plus years that the Omegas have been used, the Omegas have successfully activated and controlled many fires. Central is not in possession of all of the documentation regarding every fire in which Omegas activated and controlled a fire. For the remainder of the information requested in this interrogatory, pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the

business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 66: Identify and describe all tests and/or examinations conducted by you or anyone on your behalf on Omega sprinklers. For each test:

a) identify the sprinklers tested;
b) describe the tests and provide a detailed protocol and the date on which each test was conducted;
c) identify the persons and entities involved in:
    i) drafting and/or conceiving the protocol;
    ii) setting up and/or conducting the tests;
d) describe and explain the results of the tests, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test results;
f) identify and describe all communications relating in any way to any such tests and/or test results, indicating:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 66: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 67: Have-you or anyone of whom you are aware ever performed the "load on heat responsive element test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 67: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 68: Have you or anyone of whom you are aware ever performed the "strength of heat responsive element test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
i) the date on which the communication took place;
ii) the persons and/or entities to and from whom the communication was directed;
iii) the nature and content of the communication;
iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 68: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 69: Have you or anyone of whom you are aware ever performed the "leakage test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:
a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;
ii) the persons and/or entities to and from whom the communication was directed;
iii) the nature and content of the communication;
iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 69: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 70: Have you or anyone of whom you are aware ever performed the "hydrostatic strength test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 70: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 71: Have you or anyone of whom you are aware ever performed the "30-day leakage test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 71: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 72: Have you or anyone of whom you are aware ever performed the "water hammer test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 72: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to

and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 73: Have you or anyone of whom you are aware ever performed the "operating temperature (bath) test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 73: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel

is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 74: Have you or anyone of whom you are aware ever performed the "sensitivity tests" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 74: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 75: Have you or anyone of whom you are aware ever performed the "operation - lodgement test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega,
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 75: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 76: Have you or anyone of whom you are aware ever performed the "flow endurance test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;

c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 76: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 77: Have you or anyone of whom you are aware ever performed the "operation - cold soldering test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:
a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;
ii) the persons and/or entities to and from whom the communication was directed;
iii) the nature and content of the communication;
iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 77: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 78: Have you or anyone of whom you are aware ever performed the "high temperature test for uncoated sprinklers" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega,
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 78: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 79: Have you or anyone of whom you are aware ever performed the "high temperature test for coated sprinklers" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 79: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute

trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 80: Have you or anyone of whom you are aware ever performed the "strength of frame test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested. including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 80: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by

Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 81: Have you or anyone of whom you are aware ever performed the "impact resistance test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 81: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 82: Have you or anyone of whom you are aware ever performed the "rough usage test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 82: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 83: Have you or anyone of whom you are aware ever performed the "vibration test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
   i) the date on which the communication took place;
   ii) the persons and/or entities to and from whom the communication was directed;
   iii) the nature and content of the communication;
   iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 83: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 84: Have you or anyone of whom you are aware ever performed the "calibration test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:
a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test,
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
   i) the date on which the communication took place;

ii) the persons and/or entities to and from whom the communication was directed;
iii) the nature and content of the communication;
iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 84: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 85: Have you or anyone of whom you are aware ever performed the "10 pan distribution test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 85: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 86: Have you or anyone of whom you are aware ever performed the "16 pan distribution test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place,
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 86: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute

trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 87: Have you or anyone of whom you are aware ever performed the "water distribution test - conventional (old style) sprinklers" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 87: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by

Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 88: Have you or anyone of whom you are aware ever performed the "100 pan distribution test - sidewall sprinklers" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 88: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 89: Have you or anyone of whom you are aware ever performed the "350 pound wood crib fire test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 89: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 90: Have you or anyone of whom you are aware ever performed the "10-day corrosion test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 90: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 91: Have you or anyone of whom you are aware ever performed the "30-day corrosion test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
   i) the date on which the communication took place;
   ii) the persons and/or entities to and from whom the communication was directed;
   iii) the nature and content of the communication;
   iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 91: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 92: Have you or anyone of whom you are aware ever performed the "90-day moist air test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the omega tested, including:
   i) the date on which the communication took place;
   ii) the persons and/or entities to and from whom the communication was directed;
   iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 92: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 93: Have you or anyone of whom you are aware ever performed the "stress-corrosion cracking of brass sprinkler parts test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 93: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client

privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 94: Have you or anyone of whom you are aware ever performed the "stress-corrosion cracking of stainless sprinkler parts test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place:
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 94: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16

C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 95: Have you or anyone of whom you are aware ever performed the "operational tests on sprinklers incorporating gaskets or "o" ring seals" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 95: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel

is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 96: Have you or anyone of whom you are aware ever performed the "vacuum test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 96: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 97: Have you or anyone of whom you are aware ever performed the "elastomeric parts test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 97: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 98: Have you or anyone of whom you are aware ever performed the "freezing test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;

d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 98: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 99: Have you or anyone of whom you are aware ever performed the "fire test for extended coverage sprinklers intended for light hazard occupancies" according to the testing protocol in UL 199 on an Omega sprinkler? If so:
a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:

i) the date on which the communication took place;
ii) the persons and/or entities to and from whom the communication was directed;
iii) the nature and content of the communication;
iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 99: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 100: Have you or anyone of whom you are aware ever performed the "wall wetting test for extended coverage sprinklers intended for light hazard occupancies" according to the testing protocol in UL 199 on an Omega sprinklers If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 100: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 101: Have you or anyone of whom you are aware ever performed the "evaporation test for sprinkler coatings" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 101: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute

trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 102: Have you or anyone of whom you are aware ever performed the "cycling tests for flow control (FC) sprinklers" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 102: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by

Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 103: Have you or anyone of whom you are aware ever performed the "piled stock fire test for flow control (FC) sprinklers" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 103: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 104: Have you or anyone of whom you are aware ever performed the "piled stock fire test for extended coverage sprinklers intended for ordinary hazard occupancies" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 104: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 105: Have you or anyone of whom you are aware ever performed the "distribution tests for extended coverage sprinklers intended for ordinary hazard occupancies" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;

b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 105: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 106: Have you or anyone of whom you are aware ever performed the "high temperature exposure test for flow control (FC) sprinklers" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega;
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;

f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
   i) the date on which the communication took place;
   ii) the persons and/or entities to and from whom the communication was directed;
   iii) the nature and content of the communication;
   iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 106: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 107: Have you or anyone of whom you are aware ever performed the "production leakage test" according to the testing protocol in UL 199 on an Omega sprinkler? If so:

a) identify the Omega,
b) indicate what version (by date) of UL 199 the testing protocol followed, and the date on which each test was performed;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
   i) the date on which the communication took place;
   ii) the persons and/or entities to and from whom the communication was directed;
   iii) the nature and content of the communication;

iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 107: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: quality control manuals and reports, testing and diagnostic reports, engineering reports.

INTERROGATORY NO. 108: Have you ever tested an Omega that, upon being exposed to its activation/triggering temperature, did not activate within 5 seconds at a pressure at or below 7 psig pressure? If so:

a) identify the Omega;
b) explain why it failed to activate;
c) identify the persons and entities involved in setting up and/or conducting the test;
d) describe and explain the results of the test, including all observations and conclusions;
e) identify the persons and entities involved in evaluating the test;
f) identify and describe all communications regarding or relating in any way to the testing or the Omega tested, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 108: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents

protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: return authorizations, diagnostic reports, quality control reports.

INTERROGATORY NO. 109: Indicate whether you have attended or been present at any meetings or discussions, or issued or received any communications, in which the following were discussed:

a) failure of Omega sprinklers to activate in testing or in a fire;
b) dezincification as a cause or possible cause of Omega non-activation in testing or in a fire;
c) stop leak or other leak prevention substance as a cause or possible cause of Omega non-activation in testing or in a fire;
d) "o" ring swelling as a cause or possible cause of Omega non-activation in testing or in a fire;
e) "o" ring adhesion as a cause or possible cause of Omega non-activation in testing or in a fire;
f) excessive hydrocarbons as a cause or possible cause of Omega non-activation in testing or in a fire;
g) improper system design as a cause or possible cause of Omega non-activation in testing or in a fire;
h) UL listing or certification of any Omega sprinkler or sprinkler assistive device such as the "helper spring;"
i) FM listing or certification of any Omega sprinkler or sprinkler assistive device such as the "helper spring;"
j) NFPA 13 requirements or applicability with respect to fire sprinklers or sprinkler systems;
k) NFPA 25 requirements or applicability with respect to fire sprinklers or sprinkler systems;
l) UL 199 requirements or applicability with respect to fire sprinklers or sprinkler systems;
m) UL 1626 requirements or applicability with respect to fire sprinklers or sprinkler systems. if so, for each such meeting, discussion, and communication, provide:

i) the date on which the meeting, discussion or communication took place;
ii) the persons and/or entities to and from whom the communication was directed or, if a meeting or discussion, identify all persons who were present and/or participated;
iii) the nature and content of the communication;

RESPONSE NO. 109: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

INTERROGATORY NO. 110: Have you ever been notified of any problem, potential problem, complaint or concern (including any reports of nonactivation or possibility of nonactivation) regarding or in any way relating to an Omega sprinkler? If so:

a) identify who notified you;
b) indicate how and when you were notified;
c) describe and explain the contents of the notification;
d) identify all persons who have knowledge of the notification and/or the problem, potential problem, complaint or concern;
e) describe and explain your response to the notification;
f) did you or anyone else of whom you are aware examine and/or test the Omega about which you were notified of any problem, potential problem, complaint or concern, the system in which it was installed, and/or any other sprinkler from the same site? If so:
    i) identify the sprinkler;
    ii) describe the tests and/or examinations, and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;

iv) describe and explain the results of the tests and/or examinations, including all observations and conclusions;
v) identify the persons and entities involved in evaluating the test and/or examination results,

g) identify and describe all communications regarding or relating in any way to the notification, the sprinkler, and/or any the testing and/or examination in part f), including:
i) the date on which the communication took place;
ii) the persons and/or entities to and from whom the communication was directed;
iii) the nature and content of the communication;
iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 110: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel; and it calls for a legal conclusion. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: customer service department files, return authorizations, diagnostic reports.

INTERROGATORY NO. 111: Have you notified any person and/or entity of any problem, potential problem, complaint or concern (including any reports of nonactivation or possibility of nonactivation) regarding or in any way relating to an Omega sprinkler? If so:

a) identify who you notified, and all persons and/or entities who received the notification or copies thereof,
b) indicate how and when you notified the persons and/or entities identified in your response to part (a) above;
c) describe and explain the contents of the notification;
d) identify all persons who have knowledge of the notification and/or the problem, potential problem, complaint or concern, including who drafted, reviewed and/or approved the notification;
e) did you receive any response to the notification? If so:
    i) identify the person and/or entity from whom you received a response;
    ii) indicate how and when you received the response;
    iii) describe and explain the contents of the response;
f) identify and describe all communications regarding or relating in any way to the notification and/or response, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 111: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel; and it calls for a legal conclusion. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel.

Complaint Counsel is specifically referred to the following categories of documents: customer service department files, return authorizations, diagnostic reports.

INTERROGATORY NO. 112: Indicate whether you ever requested any information from any sprinkler contractor or sprinkler owner regarding any Omega sprinkler. If so:

a) identify the persons and/or entities from whom you requested information;
b) indicate how and when you requested the information;
c) describe and explain what information you requested-,
d) identify all persons who have knowledge of the request for information, including those who drafted. reviewed and/or approved the request for information;
e) did you receive any response to the request for information? If so:
    i) identify the person and/or entity from whom you received a response;
    ii) indicate how and when you received the response;
    iii) describe and explain the contents of the response;
f) identify and describe all communications regarding or relating in any way to the request for information and/or the response to that request, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 112: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: customer service department files, return authorizations, diagnostic reports.

INTERROGATORY NO. 113: Have you or anyone on your behalf provided (either by sale or without charge) sprinklers to anyone to replace some or all of the Omegas installed in a particular location? If so, indicate the total number of Omegas replaced, and the total value of the replacement (labor plus cost of sprinklers, and any other associated expenses).

RESPONSE NO. 113: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: customer service department files, return authorizations, diagnostic reports.

INTERROGATORY NO. 114: With respect to each location in which you provided (either by sale or without charge) sprinklers to anyone to replace some or all of the Omegas that were installed there:

a) identify the location;
b) indicate what make and/or model Omegas were replaced, and the quantity of each replaced;
c) indicate what make and/or model sprinkler were provided as a replacement, and the quantity of each provided;
d) identify the person and/or entity to whom you provided the replacements;
e) describe and explain the circumstances under which you provided the replacements;
f) identify the person and/or entity who paid the cost of the replacement;
g) indicate the cost of the replacement;
h) describe and explain what the replacement involved;

i) did you or anyone else of whom you are aware examine and/or test the Omega that was replaced, the system in which it was installed, and/or any other sprinkler from the same site? If so:
   i) identify the sprinkler;
   ii) describe the tests and/or examinations, and provide a detailed protocol;
   iii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;
   iv) describe and explain the results of the tests and/or examinations, including all observations and conclusions;
   v) identify the persons and entities involved in evaluating the test and/or examination results;

j) identify and describe all communications regarding or relating in any way to the replacement of the sprinklers, the sprinkler that was replaced, the replacement sprinkler, and/or any the testing and/or examination the replaced sprinkler, including:
   i) the date on which the communication took place;
   ii) the persons and/or entities to and from whom the communication was directed;
   iii) the nature and content of the communication;
   iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 114: Central objects to this interrogatory on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: customer service department files, return authorizations, diagnostic reports.

INTERROGATORY NO. 115: Have you ever tested Omega sprinklers from a building or structure and indicated to the building owner/operator or anyone else that all Omegas activated properly? If so:

a) identify each Omega you tested;
b) identify the location in which the Omega had been installed;
c) for each location, indicate how many Omegas were installed there prior to testing, and how many were tested;
d) describe the tests and/or examinations, and provide a detailed protocol;
e) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;
f) describe and explain the results of the tests and/or examinations, including all observations and conclusions;
g) identify the persons and entities involved in evaluating the test and/or examination results;
h) did you or anyone else of whom you are aware examine and/or test the system in which it was installed? If so:
    i) describe the tests and/or examinations, and provide a detailed protocol;
    ii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations,
    iii) describe and explain the results of the tests and/or examinations, including all observations and conclusions;
    iv) identify the persons and entities involved in evaluating the test and/or examination results;
i) did any person or entity other than you examine and/or test sprinklers from the same site? If so:
    i) identify the sprinkler;
    ii) describe the tests and/or examinations, and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting the tests and/or examinations;
    iv) describe and explain the results of the tests and/or examinations, including all observations and conclusions;
    v) identify the persons and entities involved in evaluating the test and/or examination results;
j) identify and describe all communications regarding or relating in any way to the sprinklers, the testing and/or the results, including:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.

RESPONSE NO. 115: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.32(d), Complaint Counsel is hereby referred to the business records produced by Central, from which such information may be derived by Complaint Counsel. Complaint Counsel is specifically referred to the following categories of documents: customer service department files, return authorizations, diagnostic reports.

INTERROGATORY NO. 116: Identify each person whom you expect to call as an expert witness at trial or hearing in this matter, and provide the following information:

a) the subject matter on which the expert is expected to testify;
b) the substance of the facts and opinions to which the expert is expected to testify;
c) provide a summary of the grounds for each opinion to which the expert is expected to testify.

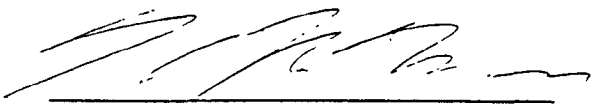
RESPONSE NO. 116: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it is premature. Subject to and without waiver of the foregoing objections, Central responds as follows: Central has not yet determined which witnesses it will call at trial. Central will provide supplemental information on a timely basis pursuant to the applicable rules of practice.

INTERROGATORY NO. 117: Identify each person whom you expect to call as a fact witness at trial or hearing in this matter, and provide the following information:

a) the subject matter on which the witness is expected to testify;
b) the substance of the facts to which the witness is expected to testify.

RESPONSE NO. 117: Central objects to this interrogatory on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it is premature. Subject to and without waiver of the foregoing objections, Central responds as follows: Central has not yet determined which witnesses it will call at trial. Central will provide supplemental information on a timely basis pursuant to the applicable rules of practice.

Dated: May 26, 1998



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Attorneys for Respondents
CENTRAL SPRINKLER CORP. and
CENTRAL SPRINKLER COMPANY

CERTIFICATE OF SERVICE

I, Thomas P. Hogan, Jr., hereby certify that on this date a true and correct copy of the foregoing Respondents' Responses and Objections to Complaint Counsel's First Set of Interrogatories was served via regular mail upon the following:

Eric H. Singer
Howard Tarnoff
Deborah S. Orlove
Complaint Counsel
U.S. Consumer Product Safety Commission
4430 East West Highway
Bethesda, MD 20814

Alan H. Schoem
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Office of Compliance
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4430 East West Highway
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The Hon. William B. Moran
United States Administrative Law Judge
Office of Administrative Law Judges
401 M Street, S.W.
Mail Code 1900L
Washington, DC 20460

Dated: May 26, 1998

Thomas P. Hogan, Jr.

VERIFICATION

I, Carmine Schiavone, pursuant to 16 C.F.R. § 1025.32(b), hereby verify that the responses provided in Respondents' Responses and Objections to Complaint Counsel's First Set of Interrogatories are true and correct, to the best of my knowledge, information, and belief.

Dated: May 26, 1998

Carmine Schiavone
Vice President of Customer Services
Central Sprinkler Company
451 North Cannon Avenue
Lansdale, PA 19446

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UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp.	:	
	:	
and	:	CPSC Docket No. 98-2
	:	
Central Sprinkler Co.,	:	
	:	
Respondents.	:	
	:	

RESPONDENTS' RENEWED MOTION TO COMPEL FULL AND COMPLETE RESPONSES TO INTERROGATORIES AND DOCUMENT REQUESTS

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I. INTRODUCTION

Pursuant to 16 C.F.R. § 1025.36, Respondents Central Sprinkler Corporation and Central Sprinkler Company (collectively, "Central") hereby renew their request that the Presiding Officer compel Complaint Counsel to provide full and complete responses to Central's interrogatories and document requests.

To date, Complaint Counsel has refused to provide discovery that is essential to the preparation of Central's defense in this matter. For instance:

- Complaint Counsel has declined to identify persons with knowledge of relevant information.
- Complaint Counsel has failed to provide complete responses to nearly all of the interrogatories and document requests propounded by Central.
- Complaint Counsel has invalidly asserted that many documents or information in its possession are privileged, even documents created by independent third parties.

These examples represent only a few of the shortcomings evident in Complaint Counsel's discovery responses. Complaint Counsel's numerous "supplemental disclosures" have not cured these errors. Therefore, Central now is forced to ask the Presiding Officer to intervene, and respectfully requests that the Presiding Officer order Complaint Counsel to provide full and complete responses to Central's interrogatories and document requests.

II. PROCEDURAL BACKGROUND

A. The Complaint

Complaint Counsel filed its Complaint in the instant case on March 3, 1998. The Complaint alleges that Central manufactures approximately 20 different models of Omega-brand fire sprinklers. (Compl. ¶ 6). The Complaint asserts that the Omegas "do not and will not function in a significant percentage of instances," and thus create a "substantial risk of injury to the public." (Compl. ¶¶ 10, 15). Based on these allegations, the Complaint requests a total recall of approximately 10 million Omegas allegedly installed over the past 15-plus years. (Compl., Relief Sought, pp. 4-6).

The Complaint, however, provides little further information. It does not state which models of Omegas allegedly are defective. Moreover, although the Complaint alleges that Omegas "fail" or are likely to fail testing, it does not identify what constitutes a "failure," it does not articulate the standard by which Complaint Counsel believes failure is to be measured, and it fails to provide similar basic details. Presumably, the information supporting Complaint Counsel's claims would be provided in discovery.

B. Central's Discovery Requests

On March 26, 1998, Central served: (1) Respondents' First Request for Documents and Things ("Central's Document Requests"), attached hereto as Exhibit "A"; and (2) Respondents' First Set of Interrogatories ("Central's Interrogatories"), attached hereto as Exhibit "B".[1/]

1/ Because of their bulk, the exhibits listed herein are being provided to the Presiding Officer in a separate appendix.

Central's Document Requests and Interrogatories requested extremely basic information from Complaint Counsel. For instance, Central requested specific information regarding the allegations of the Complaint (Interrogatory Nos. 1-99), identification of persons with knowledge of relevant material (Interrogatory Nos. 100-105), information supporting other allegations made by Complaint Counsel regarding the Omegas (Interrogatory Nos. 106-14), information concerning the CPSC's investigation of the Omegas (Interrogatory Nos. 115-23, 130-48), and information relating to any testing and/or design analysis of the Omegas (Interrogatory Nos. 124-129).[2/] Central also requested all of the documents in Complaint Counsel's possession regarding these subjects.

Central's Interrogatories are fundamentally different from Complaint Counsel's Interrogatories. See Respondents' Opposition To Complaint Counsel's Motion To Compel, filed July 1, 1998. As an initial matter, Central's Interrogatories ask generally simple and straightforward questions that are calculated to learn Complaint Counsel's basic contentions in this matter, rather than the incredibly detailed requests for information posed in Complaint Counsel's 1,482 interrogatories. Moreover, the subparts to Central's Interrogatories merely request background information regarding the subject matter of the interrogatory (e.g., persons

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2/ Most of the bulk of the interrogatories was required because there are 20 different models of Omega sprinklers. Complaint Counsel continuously has lumped together each model without recognizing that the design differs from model to model, the test results differ from model to model, and the jurisdictional inquiry differs from model to model since certain models are installed nearly exclusively in commercial settings. In order to gain an understanding of Complaint Counsel's position, therefore, it was necessary to repeat certain interrogatories for each model. Thus, Interrogatory Nos. 5-24 are the same interrogatories, simply repeated for each Omega model; the same is true for Interrogatory Nos. 53-72.

with knowledge, supporting documents); the subparts to Complaint Counsel's Interrogatories ask entirely separate questions. Finally, Central's Interrogatories are much more limited in duration and scope, as they inquire into only information and documents made available to Complaint Counsel during the course of its investigation, which appears to cover about 18 months and approximately 10,000 documents. Complaint Counsel's Interrogatories seek to require Central to provide information compiled from the entire history of Central as a company and from over 600,000 documents.

C. Complaint Counsel's Discovery Responses

On April 27, 1998, Complaint Counsel served: (1) Complaint Counsel's Responses to Respondents' First Request For Production of Documents and Things ("Complaint Counsel's Document Responses"), attached hereto as Exhibit "C"; and (2) Complaint Counsel's Responses to Respondents' First Set of Interrogatories ("Complaint Counsel's Interrogatory Responses"), attached hereto as Exhibit "D". Pursuant to the instructions included in Central's discovery requests, Complaint Counsel also produced Complaint Counsel's Index of Responsive Documents, attached hereto as Exhibit "E". On June 1, 1998, after repeated requests from Central, Complaint Counsel produced a privilege log ("Complaint Counsel's Privilege Log"), attached hereto as Exhibit "F".

However, Complaint Counsel's discovery responses provided little information to Central. According to Complaint Counsel's Index of Responsive Documents, Complaint Moreover, Counsel only provided responses to 12 out Central's 71 document requests. See Exhibit "E". Moreover, regarding virtually every document request, Complaint Counsel claimed that the responsive documents were "protected from discovery by the work product

privilege." See, e.g., Complaint Counsel's Document Responses, Nos. 1, 3, 4, 5, 7, 8, 10, 11, 12, 13, 15, 16, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 56, 57, 58, 59, 61, 62, 63, 68, 69, 70, 71.

Complaint Counsel's Interrogatory Responses did not provide any further information. Complaint Counsel either refused to answer or answered incompletely regarding the majority of the interrogatories. In its responses, Complaint Counsel generally raised a multitude of objections (e.g., relevance, vagueness, privilege), then provided virtually no substantive information.

Complaint Counsel has repeatedly been forced to supplement its discovery responses. To date, Complaint Counsel has served multiple sets of supplemental document productions, either by order of the Presiding Officer or addressing omissions pointed out by Respondents. Complaint Counsel also has submitted several supplemental interrogatory responses. However, none of these supplemental responses cures the deficiencies with Complaint Counsel's discovery responses, which remain substantially incomplete.

Indeed, Complaint Counsel's discovery responses, which were due three weeks before Respondents' discovery responses, set the tenor for discovery in this litigation. Complaint Counsel has been investigating issues related to the Omega sprinkler for over a year, has had the full use of subpoena power during that time, and believed it had sufficient evidence to warrant commencement of this administrative proceeding. Nevertheless, Complaint Counsel's discovery responses -- including its repeated objections and apparent claims that the fruits of its administrative investigation are privileged -- made clear that Complaint Counsel has no intention

of providing to Respondents full and fair discovery responses in this matter, without which Respondents will not be able to defend themselves at trial.

D. Central's Attempts To Resolve This Discovery Dispute

Rather than immediately force the Presiding Officer to rule on the deficiencies with Complaint Counsel's discovery responses, Central attempted to resolve this discovery dispute amicably. Central sent letters to Complaint Counsel on May 1, 4, 7, and 13, 1998. These letters addressed the deficiencies in Complaint Counsel's responses, and requested full and complete supplemental discovery responses. Complaint Counsel responded in letters of May 6, 8, and 20, 1998. In these letters, Complaint Counsel refused to provide certain substantive supplemental discovery responses. See Correspondence Between Complaint Counsel and Respondent's Counsel, attached hereto as Exhibit "G".

On May 20, Respondents filed Respondents' Motion to Compel Full and Complete Responses To Interrogatories And Document Requests. Complaint Counsel then attempted to supplement their discovery responses. The Presiding Officer requested that Respondents take into consideration these supplemental disclosures, and, if necessary, re-file the motion to compel.

Because Complaint Counsel's supplemental responses have not cured many of the multiple deficiencies with Complaint Counsel's original discovery responses, pursuant to 16 C.F.R. § 1025.36, Central now is forced to renew its motion to compel. Central respectfully requests that the Presiding Officer compel Complaint Counsel to provide full and complete responses to Central's Interrogatories and Document Requests. The deficiencies with Complaint Counsel's responses are described in greater length below.

III. ARGUMENT

According to the CPSC rules of practice:

> Parties may obtain discovery regarding any matter, not privileged, which is within the Commission's statutory authority and is relevant to the subject matter involved in the proceedings, whether it relates to the claim or defense of the party seeking discovery or to the claim or defense of any other party, including the existence, description, nature, custody, condition and location of any books, documents, or other tangible things and the identity and location of persons having knowledge of any discoverable matter. It is not ground for objection that the information sought will be inadmissible at the hearing if the information sought appears reasonably calculated to lead to the discovery of admissible evidence.

16 C.F.R. § 1025.31(c)(1). Discovery responses must be "responsive, unevasive and complete." Cornaglia v. Ricciardi, 63 F.R.D. 416, 149 (E.D. Pa. 1974).

It is "beyond question" that a defendant or respondent is entitled to discover the factual basis of claims asserted in a complaint. Cornaglia, 63 F.R.D. at 419; see also Scovill Manuf. Co. v. Sunbeam Corp., 61 F.R.D. 598, 601 (D. Del. 1973); Dubois Brewing Co. v. United States, 34 F.R.D. 126, 127 (W.D. Pa. 1963) (because plaintiffs brought the claim, presumably they know the factual basis for it). Moreover, a defendant or respondent is entitled to know the factual content of claim "with a reasonable degree of specificity." Martin v. Easton Publishing Co., 85 F.R.D. 312, 315 (E.D. Pa. 1980).

Complaint Counsel's Interrogatory Responses and Document Responses, however, fail to meet these fundamental rules of discovery. The specific deficiencies of Complaint Counsel's discovery responses and the individual responses where those deficiencies occur are described below. Because of the pervasiveness of such deficiencies, Central will not attempt to discuss each response separately. Instead, Central will describe the specific problem, provide several

representative examples from Complaint Counsel's responses, then list all of the responses where the problem occurs.

A. Complaint Counsel Has Refused To Identify Persons Having Knowledge Of Discoverable Material.

In Central's Interrogatories, Central requests that Complaint Counsel identify persons having knowledge relevant to the Complaint or other discoverable information. Central poses this request both in one general request, see Interrogatory No. 102, and regarding certain specific issues in more precise requests, see, e.g., Interrogatory Nos. 83 and 87.

The CPSC rules of practice explicitly permit such requests. Section 1025.31 states that "Parties may obtain discovery regarding any matter involved in the proceedings . . . including . . . the identity and location of persons having knowledge of any discoverable matter." 16 C.F.R. § 1025.31(c)(1) (emphasis added). In fact, under the Federal Rules of Civil Procedure, the identity of persons likely to have knowledge of discoverable material is considered so fundamental a part of discovery that it is a required disclosure for all parties, without any discovery request being served. See Fed. R. Civ. P. 26(a)(1)(A); cf. Interrogatory No. 102.

Despite the fact that discovery of such "persons having knowledge" is plainly permitted, Complaint Counsel has refused to identify such persons in response to Central's Interrogatories. Complaint Counsel's failure to identify "persons having knowledge" falls into three categories: (1) Complaint Counsel refuses to identify any persons having knowledge; (2) Complaint Counsel only identifies broad groups of people rather than individual persons; and (3) Complaint Counsel identifies only Central personnel as having knowledge, despite the fact that it is self-evident that

other persons having knowledge are known to Complaint Counsel. Each one of these categories is described below.

In most instances, however, Complaint Counsel completely ignores the request to identify persons having knowledge:

> **Interrogatory No. 83. (a) State whether the Complainant contends that any Omegas manufactured from 1996 through the present and using silicone o-rings have ever failed to activate in any type of testing.**
> **If so:**
>
> **(b) identify and describe any such testing;**
> **(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;**
> **(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and**
> **(e) describe in detail the substance of each such person's knowledge and/or information.**
>
> **Response:** Complaint Counsel objects to this Interrogatory to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore [sic] protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory on the ground that the term "failed to activate" is undefined, unclear, vague and ambiguous. Complaint Counsel is unable to formulate a response to this Interrogatory without clarification of how Respondents define a failure to activate. Without waiving its objections. Complaint Counsel will provide all non-privileged and non-confidential information it has with respect to testing of Omega sprinklers. Complaint Counsel adds that one of the three Omega sprinklers it received from Respondents in February, 1998, which had just been manufactured a few weeks earlier and had never yet been installed in a sprinkler system, did not activate (as that term is defined in Complaint Counsel's discovery requests to Respondents) when exposed to its activation/triggering temperature. The sprinkler partially deployed, releasing drips of water only, and then the fusible link cold soldered, preventing activation. Complaint Counsel has shared this knowledge with respondents, and asked for an explanation of what, why and how this occurred.

> **Interrogatory No. 87. (a) State whether the Complainant contends that the performance of Omegas declines or deteriorates over time.**
> **If so:**
>
> **(b) identify and describe any such performance decline or deterioration;**
> **(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;**

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that the phrase "performance of Omegas declines or deteriorates over time" is undefined, unclear, vague and ambiguous and, without clarification of same, it is impossible to formulate a response to this Interrogatory. However, deterioration of o-ring material and corrosion, which available evidence suggest may contribute failure of Omega sprinklers, may be progressive events.

See Complaint Counsel's Interrogatory Responses, Nos. 83 and 87 (emphasis added).

For other responses, Complaint Counsel provides an inadequate identification of "persons having knowledge." Such a deficiency is exemplified where Complaint Counsel refuses to identify individual people, instead identifying vague groups of people:

Interrogatory No. 51. **With respect to the allegation of Paragraph 10 of the Complaint that the Omegas "do not and/or will not function":**

(a) separately for each Omega model listed in the Complaint, describe in detail all of the causes and/or reasons that the Omegas "do not and/or will not function";

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: [(a) and (b) omitted]

(c) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's allegation. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, and any sprinkler contractors and/or AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about the basis for this allegation. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery.

(d) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Complaint Counsel has insufficient information upon which to formulate a response to this Interrogatories.

See Complaint Counsel's Interrogatory Responses, No. 51 (emphasis added; sub-parts (a) and (b) omitted).

Finally, in some instances, Complaint Counsel fails to identify sufficiently "persons having knowledge" by only listing Central personnel as having any knowledge of a particular subject matter, despite the fact that Complaint Counsel clearly knows of other persons:

> **Interrogatory No. 102. Identify each and every person whom Complainant knows and/or believes to have knowledge or information concerning or related to the subject matter of the Complaint or other discoverable information. For each such person, describe:**
>
> **(a) the person's name;**
> **(b) the person's last known home and business address;**
> **(c) the person's last known telephone number;**
> **(d) the corporate or government affiliation of the person;**
> **(e) whether the Complainant has contacted such person; and**
> **(f) the specific subject matter of the person's knowledge.**
>
> **Response:** Complaint Counsel objects to this Interrogatory on the ground that it is overbroad and unduly burdensome -- there are thousands of people and entities who have information concerning or related to Omega sprinklers. Complaint Counsel further objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore [sic] protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel responds that it believes that Respondents and their current and former employees have such knowledge and information.

See Complaint Counsel's Interrogatory Responses, No. 102 (emphasis added).

Thus, Complaint Counsel has effectively refused to identify "persons having knowledge" of discoverable material.[3/] Without a precise identification of particular individuals with specific

---

3/ Moreover, Complaint Counsel has failed to provide Central with documents from which such information could be ascertained.

knowledge of relevant issues, Central will not be able to pursue discovery via depositions. Such a failure to identify persons having knowledge is not permitted under 16 C.F.R. § 1025.31(c)(1), which expressly permits such discovery.

In the Pre-hearing Conference in this matter conducted on June 16, 1998, the Presiding Officer addressed the issue of identifying persons having knowledge. The Presiding Officer clearly stated that the parties have a duty to provide an identification of specific "persons having knowledge." Central now simply seeks enforcement of that ruling.

Other than interrogatories identifying CPSC staff personnel, the only areas where Complaint Counsel has specified any names of persons having knowledge is in response to interrogatories regarding the labor costs of installing sprinklers and the overall historical effectiveness of sprinklers. See Complaint Counsel's Interrogatory Responses, Nos. 106 and 113. If Complaint Counsel is able to provide specific names regarding these areas, then Complaint Counsel surely must be able to provide the names of persons having knowledge regarding the central areas of dispute in this case. However, Complaint Counsel has refused to provide such information.[4/]

Central respectfully requests that the Presiding Officer compel Complaint Counsel to identify persons having knowledge of discoverable information pursuant to Interrogatory Nos. 5-25, 40-42, 51-73, 76-77, 81-88, 102.

4/ The only other area where Complaint Counsel has provided specific names is in identifying the names of the lawyers and Complaint Counsel's staff members involved in their investigation. See Complaint Counsel Interrogatory Responses, Nos. 115, 132, and 145.

B. **Complaint Counsel Has Provided Substantially Incomplete Responses.**

The CPSC rules of practice provide for a broad scope of permissible discovery. See 16 C.F.R. § 1025.31(c)(1). Despite these provisions, Complaint Counsel has refused to respond to many of Central's Document Requests and Interrogatories, or has provided materially incomplete answers.

For instance, Complaint Counsel's Index of Responsive Documents indicates that Complaint Counsel has provided responsive documents only to Document Request Nos. 1, 4, 9, 15-17, 22, 30, 38, 40, 42, and 43. See Exhibit "E". Thus, Complaint Counsel has actually responded to only of 12 out of Central's 71 document requests. Id.

Complaint Counsel also has refused to respond to many of Central's Interrogatories, even those posing extremely straightforward and fundamental questions. For instance, a plainly critical issue in the instant case concerns what constitutes a "failure" in Complaint Counsel's view. Thus, Respondents served interrogatories concerning the water pressure and temperature at which Complaint Counsel asserts Omegas should activate when tested, and the percentage of heads that should activate when tested, to be considered acceptable. However, Complaint Counsel has avoided responding to discovery requests about these subjects:

> **Interrogatory No. 42. (a) State whether Complainant contends that there is a single standard of water pressure (in psi) at which previously installed sprinkler heads must activate when tested to be deemed by Complainant as not presenting any substantial risk of injury to the public and/or substantial product hazard;**
> **If so:**
> **(b) identify and describe any such standard;**
> **(c) identify all documents which describe, evidence, refer, support, or relate to any such standard;**
> **(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such standard; and**

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the grounds that it is vague, ambiguous and confusing. Complaint Counsel further objects to this Interrogatory on the ground that it is overbroad, and seeks information pertaining to sprinklers other than Omegas. Without waiving its objections, Complaint Counsel responds that once an Omega is removed from service, it will not create the substantial risk of injury to the public of which Complainant complains. Omega sprinklers fail to activate as designed and, in many cases, will not activate at pressures that far exceed the water pressure that may be available in the system at the time of a fire.

Interrogatory No. 43. (a) State whether Complainant contends that there is a single standard of temperature at which previously installed sprinkler heads must activate when tested to be deemed by the Complainant as not presenting any substantial risk of injury to the public and/or substantial product hazard;

If so:

(b) identify and describe any such standard;

(c) identify all documents which describe, evidence, refer, support, or relate to any such standard;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such standard; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: See Response to previous Interrogatory. According to Respondents, Omega sprinklers are designed to activate at particularly defined activation/triggering temperatures, based on the temperature at which the fusible link in their heat collector is intended to convert from solid to liquid form.

Interrogatory No. 44. (a) Describe the percentage of previously installed sprinkler heads that must activate at the standards described in Interrogatory Nos. 42-43 when tested in order to be deemed by the Complainant as not presenting any substantial risk of injury to the public and/or substantial product hazard;

(b) identify all documents which describe, evidence, refer, support, or relate to such a percentage;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of such a percentage; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: See Response to Interrogatory Nos. 42 and 43.

See Complaint Counsel's Interrogatory Responses, Nos. 42-44.

In the foregoing responses, Complaint Counsel completely avoids providing any responsive information. Because Complaint Counsel's action is grounded largely on alleged "failures" of laboratory tests, Central absolutely is entitled to know the specific benchmark that Complaint Counsel has used and will use at trial to establish a failure. This information is plainly relevant and discoverable under 16 C.F.R. § 1025.31(c)(1). Therefore, Complaint Counsel should be required to provide such basic information.

Central also has requested that Complaint Counsel articulate the contentions that they intend to attempt to prove at trial. For instance, Central has requested that Complaint Counsel disclose: (1) whether they contend that there are specific cause or causes responsible for the alleged defect in the Omega sprinklers (Interrogatory Nos. 53-73); (2) whether they contend that Omegas fail at a rate greater than comparable sprinklers (Interrogatory No. 113); (3) whether they contend that any alleged Omega non-activations in a fire was the result of any specific product defect (Interrogatory Nos. 78, 80, 82, 84-86); (4) whether they contend that any personal injuries resulted from any alleged Omega non-activation (Interrogatory Nos. 74-77); (5) whether they contend that the remediation program established by Central is inadequate in any way (Interrogatory Nos.110, 114, 136-43); and (6) whether they contend that Omegas using silicone o-rings are defective (Interrogatory Nos. 82-83, 86, 111).

Complaint Counsel has refused to commit themselves regarding these issues. The Complaint merely alleges, without elaboration, that "Omegas do not and will not function in a significant percentage of instances." (Compl. ¶ 10). In response to multiple interrogatories asking for further details regarding the nature of Complaint Counsel's contentions in this case,

the entire substance of Complaint Counsel's responses is summarized by one conclusory and ambiguous paragraph, repeated over and over again:

> Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

See Interrogatory Response Nos. 53(b) - 73(b).

Central clearly is entitled to request that Complaint Counsel identify their contentions. See 16 C.F.R. § 1025.33(c) (interrogatory not objectionable "merely because an answer . . . would involve an opinion or contention"). It is "beyond question" that a defendant or respondent is entitled to discover the factual basis of claims asserted in a complaint. Cornaglia, 63 F.R.D. at 419; see also Scovill 61 F.R.D. at 601; Dubois Brewing, 34 F.R.D. at 127 (because plaintiffs brought the claim, presumably they know the factual basis for it). Moreover, a defendant or respondent is entitled to know the factual content of claim "with a reasonable degree of specificity." Martin, 85 F.R.D. at 315. Identification of such contentions is crucial to allow Central to engage in discovery and prepare for trial of this matter. See Local 194 v. Standard

Brands, Inc., 27 Fed. R. Serv. 2d 588, 589 (N.D. Ill. 1979) (government must disclose in discovery contentions that it intends to prove at trial).

Moreover, the Presiding Officer already has addressed this issue. At the June 16 Pre-hearing Conference, the Presiding Officer stated that Central was entitled to have Complaint Counsel clearly identify the contentions they intended to place into issue at the trial of this matter. As with the identification of "persons having knowledge," Central now is merely seeking enforcement of that ruling.

Central has been pressing Complaint Counsel to clarify the issues in dispute in this case from the outset, both through formal discovery and informal requests. However, to date, Complaint Counsel's allegations and discovery responses have focused on one narrow issue -- whether laboratory tests allegedly demonstrate that Omegas do not activate at certain minimal amounts of water pressure. If Complaint Counsel intends to interject other contentions at trial, Complaint Counsel must identify those contentions during discovery in order to permit Central to plan its own discovery and prepare for trial; if Complaint Counsel will not reveal such contentions during discovery, then Complaint Counsel should be limited at trial to the single contention it has made to date.

The CPSC rules of practice permit Central to discover the scope of Complaint Counsel's contentions, and such discovery is necessary for Central to plan its discovery and prepare for trial in this matter. Thus, Complaint Counsel should be compelled to provide such fundamental information. Complaint Counsel should not be permitted to refuse to provide discovery responses. Where simple questions are asked, Complaint Counsel should provide simple, responsive, unevasive responses. Respondents have a right to discover the information defined

as relevant in 16 C.F.R. § 1025.31(c)(1); to date, Complaint Counsel has refused to provide such information. Therefore, Central respectfully requests that the Presiding Officer compel Complaint Counsel to provide full and complete responses to Central's discovery requests.

The following responses from Complaint Counsel are materially incomplete: Interrogatory Response Nos. 42-46, 53-76, 78, 80, 82-87, 93-99, 106-14, 119, 129, 136-43; and Document Response Nos. 1-3, 5-8, 10-14, 18-21, 23-29, 31-37, 39, 41, 44-71.

C. Complaint Counsel Has Refused To Produce Documents Based On Invalid Claims To A "Work Product Privilege."

Complaint Counsel has objected to virtually all of Central's Document Requests and many of Central's Interrogatories on the ground that such discovery "seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore [is] protected from discovery by the work product privilege." See, e.g., Complaint Counsel's Document Responses, Nos. 5, 7, 8, 19-29, 34-43; Complaint Counsel's Interrogatory Responses, Nos. 120-23. Complaint Counsel essentially claims that all documents and information that have been reviewed by Complaint Counsel are subject to a claim of "work product privilege." The only documents not covered by this "privilege," according to Complaint Counsel, are publicly available documents or documents originally produced to Complaint Counsel by Central. See, e.g., Complaint Counsel's Interrogatory Responses, Nos. 120-23 (stating that Complaint Counsel will only provide documents "that are in the public domain"). It is thus apparent that Complaint Counsel has attempted to hide much of its case behind a legally flawed invocation of privilege.

The work product doctrine was established in Hickman v. Taylor, 329 U.S. 495 (1947). This doctrine is codified in the CPSC rules of practice at 16 C.F.R. § 1025.31(c)(3). Section 1025.31(c)(3) provides that to the extent "documents and tangible things [were] . . . prepared in anticipation of litigation," such documents and tangible things are subject to discovery "only upon a showing that the party seeking discovery has substantial need of the materials in the preparation of his case and that he is unable without unique hardship to obtain the substantial equivalent of the material by other means." 16 C.F.R. § 1025.31(c)(3).

In the instant case, Complaint Counsel has invoked the work product doctrine to claim that virtually all material in its possession is protected from discovery. Such privilege claims are specious and should be ruled invalid for several reasons. First, for many of the documents listed in Complaint Counsel's Privilege Log, such documents do not meet the substantive requirements of the work product doctrine or attorney-client privilege. Second, to the extent any documents could be considered work product material, the facts contained in such documents are not protected from discovery, and must be provided in response to Central's Interrogatories. Third, the documents and information that constitute the underlying methodologies and rationale behind Complaint Counsel's testing of Omegas is information required by Respondents to evaluate Complaint Counsel's claims, and Complaint Counsel would be required to present such evidence at trial to prove its claims; therefore, the need for such information and documents overcomes any work product protection.

Central respectfully requests that the Presiding Officer compel Complaint Counsel to respond to the discovery requests where Complaint Counsel has objected invalidly based on a claim to work product protection and/or attorney-client privilege.

1. Complaint Counsel Has Not Demonstrated That Documents Withheld Meet The Basic Requirements For Invoking Any Privilege.

Complaint Counsel has withheld certain documents from discovery, listing the documents on Complaint Counsel's Privilege Log and asserting that the attorney-client privilege and/or the work product doctrine protect the documents from discovery. Because Complaint Counsel has not carried its burden of establishing that certain documents on the privilege log are entitled to any protection from discovery, the documents must be produced to Central.

a. Documents And Information Provided to Complaint Counsel By Independent Third Parties Are Not Protected By The Work Product Doctrine.

Several of Central's Document Requests seek information provided to Complaint Counsel by independent third parties:

> **Request No. 7.: All documents provided to the CPSC by any person, organization, business, or any other entity regarding or related to the Omegas and/or Respondents.**
> **Response:** Complaint Counsel objects to this Request on the grounds that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and [sic] protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel would be pleased to produce specific documents, or specific categories of documents, that Respondents seek to discover, upon rephrasal of this Request.

See Complaint Counsel's Document Responses, No. 7 (emphasis added).

Central sought similar information in Central's Interrogatories:

> **Interrogatory No. 120.: Describe in detail any and all communications between the CPSC and any dealer, retailer, or distributor in connection with the Omegas. Your response should include, without limitation, the following:**
> **(a) the identity of any and all persons employed or otherwise retained by the CPSC who participated in this aspect of the investigation;**

(b) the identity of any and all dealers, retailers, or distributors with whom the CPSC communicated in connection with this aspect of the investigation of the Omegas;

(c) a description of the content of the CPSC's communications with each such dealer, retailer, or distributor;

(d) the identification of any questionnaires or other surveys used by the CPSC in communicating with each such dealer, retailer, or distributor; and

(e) the identification of any and all data, reports, surveys results, or other information revealing the results of this aspect of the investigation.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests information prepared by or for Complaint Counsel in preparation for litigation, and thus [sic] protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory to the extent that it seeks information provided to CPSC by third parties who claim confidentiality or trade secret. Without waiving its objection, Complaint Counsel will provide copies of all such communications that are in the public domain.

Interrogatory No. 121.: Describe in detail and all communications between the CPSC and any Authority Having Jurisdiction ("AHJ") in connection with the Omegas. Your response should include, without limitation, the following:

(a) the identity of any and all persons employed or otherwise retained by the CPSC who participated in this aspect of the investigation;

(b) the identity of any and all AHJ's with whom the CPSC communicated in connection with this aspect of the investigation;

(c) a description of the content of the CPSC's communication with each such AHJ;

(d) the identification of any questionnaires or other surveys used by the CPSC in communicating with each such AHJ; and

(e) the identification of any and all data, reports, surveys results, or other information revealing the results of this aspect of the investigation.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests information prepared by or for Complaint Counsel in preparation for litigation, and thus [sic] protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory to the extent that it seeks information provided to CPSC by third parties who claim confidentiality or trade secret. Without waiving its objection, Complaint Counsel will provide copies of all such communications that are in the public domain.

See Complaint Counsel's Interrogatory Responses, Nos. 120-21(emphasis added).

These discovery requests from Central seek information created by independent third parties, then supplied to Complaint Counsel. It is self-evident that such information and

documents are not protected by the work product doctrine. The CPSC's regulations provide that the work product doctrine protects against "disclosure of the mental impressions, conclusions, opinions, or legal theories of an attorney or other representative of a party." See 16 C.F.R. § 1025.31(c)(3) (emphasis added). If a document is prepared for or by a non-party to the litigation, the work product protection does not apply. 6 Moore's Fed. Practice, § 26.70[4] (Matthew Bender 3d ed.)

Further, a party cannot shield information from discovery by hiring as a "litigation consultant" a person who might otherwise be a fact witness in the case. Id.; see also State of New York v. Solvent Chem. Co., Inc., 166 F.R.D. 284, 286, 289 (W.D.N.Y. 1996) (conduct of party in retaining former employee, an important fact witness, as a litigation consultant, threatened to undermine integrity of adversary process). Moreover, the mere fact that Complaint Counsel has received and reviewed such documents does not convert these documents into work product material. Therefore, the Presiding Officer should compel Complaint Counsel to provide to Central all documents and information in Complaint Counsel's possession that were created or provided by independent third parties.

For example, Complaint Counsel has asserted the work product protection regarding notes made by Frank Teevan, concerning a November 5, 1996 meeting between Teevan and Central. See Complaint Counsel's Privilege Log, Document No. 116. Mr. Teevan, however, is an assistant fire marshall in Virginia. It is difficult to conceive how documents created by such a third party, years prior to the filing of the instant Complaint, about a meeting between Central and the third party, qualify for any work product protection. Such documents must be produced.

Similarly, Complaint Counsel has claimed work product protection regarding communications (letters, audiotapes, e-mails) from former employees of Central. See Complaint Counsel's Privilege Log, Document Nos. 57, 60, 63, 64, 73, 81, 85, 86, 88, 93-97, 103, 104, 106, 111, and 112. Because these communications originate from independent third parties (who cannot be classified as informants, consultants, or agents of the CPSC), rather than from "an attorney or other representative of a party" under 16 C.F.R. § 1025.31(c)(3), such communications are not protected by the work product doctrine. The Presiding Officer already has addressed this issue, and held that such communications are not protected from discovery. See Order Regarding Complaint Counsel's Second Motion for Protective Order and In Camera Submission, filed June 19, 1998. Accordingly, such communications must be produced to Central.

b. Documents And Information Provided Or Prepared For Independent Third Parties Are Not Protected By The Work Product Doctrine.

Documents addressed to or received by third party entities that are neither Complaint Counsel, the CPSC, nor their representatives are not protected by the work product doctrine because the doctrine does not protect documents prepared for a non-party. See 6 Moore's Fed. Practice, § 26.70[4] (Matthew Bender 3d ed.). For example, Document Nos. 65 and 70 were addressed to "State Attorney General." See Complaint Counsel's Privilege Log. Because the State Attorneys General are not parties to this administrative action between the CPSC and Central, documents prepared for them are not protected by the work product doctrine and are discoverable by Central. Similarly, Document Nos. 13, 63, 64, 73, 76, 84, 88, 90, 93, 94, 97, 103, 104, 106, 111, and 112 are discoverable as documents prepared for non-parties and must be

produced. Further, if any of the individuals listed as "Addressees" or "Recipients" in Complaint Counsel's Privilege Log are not attorneys or other representatives of the CPSC, the documents addressed to or received by them must also be produced forthwith.

Because Complaint Counsel has not carried its burden of establishing that certain documents on its Privilege Log are entitled to the protection of the work product doctrine, the documents identified therein are discoverable and must be produced to Central.

c. Complaint Counsel Has Not Established That The Claimed Attorney-Client Privilege Is Applicable To The Documents It Seeks To Withhold.

In order for the attorney-client privilege to apply to a communication, several criteria must be satisfied. See Montgomery v. Leftwich, Moore & Douglas, 161 F.R.D. 224, 225-26 (D.D.C. 1995). Among them, the communication must be made by a client to an attorney or the attorney's subordinate, and the communication must be made outside the presence of strangers. Id. at 225. Further, communications made by the attorney to the client are shielded only if such communications rest on confidential information obtained from the client. Id. at 226. Based on these principles, many of the documents claimed as privileged by Complaint Counsel must be produced to Central.

There is no indication from Complaint Counsel's privilege log that many of the individuals named in the log are either CPSC employees and thus "clients" of Complaint Counsel, or, conversely, are Complaint Counsel or their subordinates receiving communications from a client. For example, although attorneys Eric Stone, Eric Singer, Alan Schoem, Deborah Orlove, and Howard Tarnoff have been representing the CPSC in this matter, there is no indication that other named individuals (except Jeffrey Bromme and Stephen Lemberg) are also

attorneys representing the CPSC. Nor is there any suggestion that many of the named individuals in the Privilege Log are CPSC employees who could be considered as the clients of Complaint Counsel. Thus, Complaint Counsel must identify with precision the status of the individuals listed in their Privilege Log, or the privilege cannot be maintained. See Montgomery, 161 F.R.D. at 225 (party asserting the privilege has burden of establishing its applicability).

In summary, many of the documents for which Complaint Counsel has invoked the attorney-client privilege do not appear to represent communications between an attorney and a client. Therefore, at the most basic level, such documents are not protected by the attorney-client privilege.

2. The Work Product Doctrine Only Protects Documents, Not Facts.

Even in areas where Complaint Counsel might be in possession of some documents constituting work product material, Complaint Counsel still must produce the facts and data underlying such documents. The work product doctrine by its very terms only protects "documents and tangible things" from discovery. See 16 C.F.R. § 1025.31(c)(3). The underlying facts contained in such documents are not protected from discovery. See Wright, Miller & Marcus, Federal Practice and Procedure: Civil 2d § 2024; Resolution Trust Corp. v. Dabney, 73 F.3d 262, 266 (10th Cir. 1995).

Thus, even where Complaint Counsel objects to producing actual documents based on the work product doctrine, Complaint Counsel still must provide the information and facts contained in those documents in response to Central's Interrogatories. For instance, Complaint Counsel has raised a work product objection to Central's Document Request No. 8:

Request No. 8.: All documents that constitute, provide evidence of, refer, or relate to any testing of the Omegas conducted by or on behalf of the CPSC.
Response: Complaint Counsel objects to this Request on the grounds that it seeks documents prepared by or for Complaint Counsel in anticipation of litigation, and therefore [sic] protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel responds that it will share with Respondents the results of any testing it intends to introduce into evidence at the hearing in this matter, once those determinations have been made.

See Complaint Counsel's Document Responses, No. 8.

However, even if Complaint Counsel could avoid producing responsive documents to Request No. 8 based on a claim of work product protection, Complaint Counsel must supply the underlying facts and data contained in such documents in response to an interrogatory which requests such information. Central's Interrogatory No. 124 requests such information, but Complaint Counsel has refused to provide a full and complete response:

Interrogatory No. 124.: Identify and describe any and all testing of the Omegas conducted by or on behalf of the CPSC. Your response should include, without limitation, the following:

(a) a description of any testing protocols used by the CPSC in testing the Omegas;

(b) the identity of the person(s) who created or established any such testing protocols for the Omegas;

(c) a description of the methodology employed during each and every test of the Omegas;

(d) the date of each and every test of the Omegas;

(e) an identification of the person(s) who conducted, participated in, or were otherwise present during each test of the Omegas;

(f) a description of the results of each and every test of the Omegas; and

(g) the identification of any and all documents (including videotapes and audiotapes) relating to any testing of the Omegas.

Response: Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and thus [sic] protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel responds that it is currently in the process of testing Omega sprinklers, and will produce all non-privileged documents relating thereto as soon as they are available.

See Complaint Counsel's Interrogatory Responses, No. 124.

Thus, Complaint Counsel may not totally block discovery by asserting the "work product privilege." If Complaint Counsel does not provide documents based on a claim to work product protection, it still must provide responsive information to Central in response to Central's Interrogatories. Because Complaint Counsel has refused to provide such information to date, either in the form of documents or interrogatory responses, Central respectfully requests that the Presiding Officer compel Complaint Counsel to produce responsive information.

3. The Data And Methodology Underlying Complaint Counsel's Test Results Regarding The Omegas Must Be Produced Despite A Work Product Objection.

Complaint Counsel has produced a data compilation of their test results for the Omegas. See Complaint Counsel's Data Compilation, attached hereto as Exhibit "H". However, these documents only show the sample size and the purported number and percentage of alleged failures. Id. Complaint Counsel's Data Compilation does not reveal such basic information as what is considered a "failure" (in terms of water pressure and activating temperature), the location of the building, the testing methodology, and other basic underlying data. Complaint Counsel has refused to produce such information on the ground that it is protected by the work product doctrine. See Complaint Counsel's Interrogatory Responses, Nos. 124-27; Complaint Counsel's Document Responses, Nos. 8-9.

However, the work product doctrine is not an absolute privilege. Documents that constitute work product material are discoverable where a party can demonstrate a "substantial need" for the materials, and that such documents cannot otherwise be obtained without "unique hardship." 16 C.F.R. § 1025.31(c)(3).

In the instant case, to the extent the work product doctrine applies to any documents regarding the underlying data and methodology for Complaint Counsel's Data Compilation, such documents are still discoverable based on Central's "substantial need" and "unique hardship." It is well established that, once data compilations of test results have been produced, a party seeking discovery is entitled to the underlying rationale and methodology supporting the data compilations despite a work product objection. See, e.g., Wheeling-Pittsburgh Steel Corp. v. Underwriters Laboratories, Inc., 18 F.R.D. 8, 12 (N.D. Ill. 1978) (ordering production of underlying data); Handgards, Inc. v. Johnson & Johnson, 413 F. Supp. 926, 931 (N.D. Cal. 1976) (same); see also United States v. Nobles, 422 U.S. 225, 240-41 (1975) (party must either produce underlying data or all related testimony is excluded); In Re Sealed Case, 676 F.2d 793, 824 (D.C. Cir. 1982) (documents underlying investigative report ordered produced.)

There are two rationales for this exception to the work product doctrine, both applicable in the instant case. First, without the supporting documents and information, a compilation of test results "cannot properly be analyzed" and "would prove meaningless." Wheeling-Pittsburgh, 81 F.R.D. at 12; Handgards, 413 F. Supp. at 931. In the instant case, unless Complaint Counsel supplies the methodology and support for the Data Compilation, Central will not be able to ascertain or challenge the validity of the results, which consist of naked conclusions.

The second rationale for this exception to the work product doctrine is that because the supporting data must be introduced at trial in order to prove the statistical conclusions, the opposing party is entitled to examine such information in discovery. Wheeling-Pittsburgh, 81 F.R.D. at 12. This reasoning also applies in the instant case. To delay allowing Central the

opportunity to examine the methodology and data underlying Complaint Counsel's Data Compilation until trial would be highly prejudicial to Central.[5/]

Thus, even to the extent that certain documents fall within the work product doctrine, such work product protection is overcome in the instant case. Moreover, to the extent that Complaint Counsel refuses to produce the underlying information regarding its Data Compilation, the Presiding Officer should exclude from evidence the results set forth in the Data Compilation. See Nobles, 422 U.S. at 240-41. Thus, Complaint Counsel has a clear choice: produce the documents and information, or assert the work product doctrine and be barred from producing evidence regarding that subject at trial.

* * * * *

Complaint Counsel has repeatedly asserted an unfounded claim to a "work product privilege." Complaint Counsel's objections are invalid because: (1) as revealed by Complaint Counsel's Privilege Log, many purportedly protected documents withheld from discovery by Complaint Counsel do not meet the basic requirements of any privilege; (2) facts, as opposed to documents, are not protected by the work product doctrine; and (3) the methodology and rationale underlying Complaint Counsel's Data Compilation are discoverable because any work product protection regarding such documents is overcome under the circumstances of the instant

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5/ This rationale, however, does not mean that Complaint Counsel can selectively produce only the underlying information that is favorable to Complaint Counsel. Complaint Counsel must produce full and complete.responses, including all of the required background information, good or bad. Permitting Complaint Counsel to produce only the information it plans to introduce at trial would violate the broad scope of permissible discovery provided for under 16 C.F.R. § 1025.31, and would render the adversary process meaningless.

case. Therefore, where Complaint Counsel previously asserted a specious claim to work product protection or attorney-client privilege, the Presiding Officer should compel Complaint Counsel to produce full and complete responses to the discovery requests. Those responses are as follows: Interrogatory Response Nos. 78-85, 100-02, 106-13, 117, 119-24, 126-27, 147; and Document Response Nos. 4-5, 7-8, 10-13, 15-16, 19-29, 34-53, 56-59, 61-63, 68-71.

D. Complaint Counsel Has Delayed Producing Information And Documents For No Apparent Reason.

In Complaint Counsel's discovery responses, Complaint Counsel repeatedly represents that it "will produce" responsive information or documents at some unspecified future time. However, Complaint Counsel has neither provided this promised information nor indicated when they will provide it. For instance:

> Interrogatory No. 124.: **Identify and describe any and all testing of the Omegas conducted by or on behalf of the CPSC. Your response should include, without limitation, the following:**
>
> **(a) a description of any testing protocols used by the CPSC in testing the Omegas;**
>
> **(b) the identity of the person(s) who created or established any such testing protocols for the Omegas;**
>
> **(c) a description of the methodology employed during each and every test of the Omegas;**
>
> **(d) the date of each and every test of the Omegas;**
>
> **(e) an identification of the person(s) who conducted, participated in, or were otherwise present during each test of the Omegas;**
>
> **(f) a description of the results of each and every test of the Omegas; and**
>
> **(g) the identification of any and all documents (including videotapes and audiotapes) relating to any testing of the Omegas.**
>
> Response: Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and thus [sic] protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel responds that it is currently in the process of testing Omega sprinklers, and will produce all non-privileged documents relating thereto as soon as they are available.

See Complaint Counsel's Interrogatory Responses, No. 124 (emphasis added).

Complaint Counsel has represented that it "will produce" the requested information and documents. In letters of May 4, 7, and 13, Central reminded Complaint Counsel of these unanswered discovery requests, but received no response. However, despite the fact that almost two months have elapsed since Complaint Counsel served its responses, it has not produced the promised information, nor has it provided any date when such a production will occur.

This failure to produce promised discovery responses is particularly disturbing in the instant case because the CPSC rules of practice provide a limited time for discovery and preparation for trial. See 16 C.F.R. § 1025.3(g). By delaying its production of discovery responses regardless of any explanation, Complaint Counsel is greatly prejudicing Central's ability to prepare for trial and defend itself in this matter.

Complaint Counsel has promised that it "will produce" the requested information and documents. Because Complaint Counsel has failed to do so, Central now requests that the Presiding Officer compel Complaint Counsel to produce these discovery responses. The following discovery responses demonstrate the above-referenced problem: Interrogatory Response Nos. 74-77, 81, 86 , 88, 117, 119, 124, 126-27, 135-38; and Document Response Nos. 8, 17, 61-63.

E. Complaint Counsel's Interrogatory Responses Have Not Been Verified.

The CPSC rules of practice require that interrogatory responses be signed by the person making such responses "in writing under oath." 16 C.F.R. § 1025.32(b). Such a requirement assures the reliability of the responses and permits a party to depose the person who verified the responses.

Complaint Counsel has failed to provide a verification under oath supporting their interrogatory responses. The Presiding Officer should require Complaint Counsel immediately to submit such a verification.

F. Complaint Counsel May Not Refer To Its Own Self-Serving Pleadings And Other Non-Responsive Discovery Answers Rather Than Providing Full And Complete Responses.

In many of Complaint Counsel's responses to Central's discovery requests, rather than provide full and complete responses, Complaint Counsel merely refers Central to Complaint Counsel's own self-serving pleadings. See, e.g., Complaint Counsel's Interrogatory Responses, Nos. 85-86 (referring Central to the Complaint as substantive evidence). Complaint Counsel avoids responding to other discovery requests by cross-referencing Central to other, equally unresponsive discovery answers from Complaint Counsel. See, e.g., Complaint Counsel's Document Responses, Nos. 21-29 (referring Central to interrogatory responses).

Courts are in agreement that incorporation by reference to a party's own self-serving testimony and pleadings is not a sufficient and responsive answer to a discovery request. See Martin v. Easton Publishing Co., 85 F.R.D. 312, 315 (E.D. Pa. 1980); Scovill Manuf. Co. v. Sunbeam Corp., 61 F.R.D. 598, 601 (D. Del. 1973); Atlanta Coca- Cola Bottling Co. v. Transamerica Insurance Co., 61 F.R.D. 115, 120 (N.D. Ga. 1972); J.J. Delaney Carpet Co. v. Forrest Mills, Inc., 34 F.R.D. 152, 153 (S.D.N.Y. 1963). Instead, a defendant is entitled to know the factual content of plaintiff's claims "with a reasonable degree of specificity." Martin, 85 F.R.D. at 315.

Thus, Complaint Counsel should not be permitted to respond to Central's discovery requests by reference to Complaint Counsel's own pleadings and other non-responsive discovery

answers. The Presiding Officer should compel Complaint Counsel to provide full, complete, and precise responses. The following responses encompass areas where Complaint Counsel has responded improperly by reference, in whole or in part, to its own pleadings and other discovery responses: Interrogatory Response Nos. 4-37, 43-44, 51, 76-77, 81-86, 88; and Document Response Nos. 12-13, 21-29, 44-53, 63, 70.

G. Complaint Counsel Has Raised Groundless Objections Based On Relevance And Vagueness.

Complaint Counsel objects to many of Central's Document Requests and Interrogatories on the grounds that the information requested is not relevant or that the question is vague. A quick review of a few of these responses reveals that these objections lack merit. For instance:

> Interrogatory No. 42.: **(a) State whether Complainant contends that there is a single standard of water pressure (in psi) at which previously installed sprinkler heads must activate when tested to be deemed by the Complainant as not presenting any substantial risk of injury to the public and/or substantial product hazard; If so:**
>
> **(b) identify and describe any such standard;**
>
> **(c) identify all documents which describe, evidence, refer, support, or relate to any such standard;**
>
> **(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such standard; and**
>
> **(e) describe in detail the substance of each such person's knowledge and/or information.**
>
> **Response:** Complaint Counsel objects to this Interrogatory on the grounds that it is vague, ambiguous and confusing. Complaint Counsel further objects to this Interrogatory on the ground that it is overbroad, and seeks irrelevant information pertaining to sprinklers other than Omegas. Without waiving its objections, Complaint Counsel responds that once an Omega is removed from service, it will not create the substantial risk of injury to the public of which Complainant complains. Omega sprinklers fail to activate as designed and, in many cases, will not activate at pressures that far exceed the water pressure that may be available in the system at the time of a fire.

See Complaint Counsel's Interrogatory Responses, No. 42 (emphasis added).

Interrogatory No. 42 asks a simple and straightforward question -- the water pressure at which Omegas must activate when tested to be deemed acceptable. By pretending not to understand this request, claiming that it is "vague, ambiguous and confusing," Complaint Counsel avoids providing a response that: (a) is simple to provide; (b) is plainly relevant to this case; and (c) would greatly focus the dispute between Complaint Counsel and Central. Complaint Counsel should not be permitted to avoid answering by raising a sham vagueness objection.

Complaint Counsel has been treating discovery to date as a game of "hide-and-seek." Such gamesmanship should not be allowed by the Presiding Officer. The following discovery responses contain similar examples of invalid relevance and/or vagueness objections: Interrogatory Response Nos. 26-34, 42-51, 78-85, 87, 129; and Document Response Nos. 9-11, 15-18, 33, 35, 42-43, 57-59, 61-62, 64.

H. Complaint Counsel Is Not Permitted To Object Based On Its Belief That Some Documents Are Equally Available To Central.

Complaint Counsel objects to a significant number of Central's interrogatories on the ground that responsive documents or information "are within [Central's] possession." See, e.g., Complaint Counsel's Document Responses, No. 14. There are two obvious problems with this objection. First, Complaint Counsel does not actually know whether Central is in possession of such documents -- this is an objection based on a guess. Second, Central is entitled to determine via discovery what documents and information are in Complaint Counsel's possession.

Based on this reasoning, courts have held that it is not a valid ground for objection that information or documents are equally available to the interrogator. Petruska v. Johns-Manville,

83 F.R.D. 32, 35 (E.D. Pa. 1979). As long as a document request demands relevant information, the party must respond even if the opposing party has equal access to the information. Dykes v. Morris, 85 F.R.D. 373, 375 (N.D. Ill. 1980). Thus, Complaint Counsel must identify documents in its control that are responsive to Central's discovery requests, even if Complaint Counsel believes that Central might have equal access to such information.

The following responses include Complaint Counsel's impermissible objection that responsive documents are within Central's possession: Interrogatory Response Nos. 1-3; and Document Response Nos. 3, 14, 31, 56, 68, and 70.

I. Complaint Counsel Is Required To Answer Interrogatories Applying The Law To The Facts Of This Case.

The CPSC rules of practice explicitly permit interrogatories to require an answer that involves the application of law to facts. Section 1025.32 provides: "An interrogatory otherwise proper is not objectionable merely because an answer to the interrogatory would involve an opinion or contention which relates to fact or to the application of law to fact . . . ." 16 C.F.R. § 1025.32(c) (emphasis added).

Despite this explicit language, each time Central poses an interrogatory requiring the application of law to fact, Complaint Counsel objects on the ground that such discovery "calls for a legal conclusion." For instance:

> Interrogatory No. 38.: **With respect to the allegation of Paragraph 8 of the Complaint that the Omegas are "designed to perform in accordance with" NFPA Standard 13:**
>
> **(a) identify which specific sub-sections of NFPA Standard 13, if any, address the operating water pressure at which previously installed sprinkler heads should activate when such heads are removed and tested;**
>
> **(b) identify which specific sub-sections of NFPA Standard 13, if any, address the operating water pressure at which installed sprinkler heads**

should activate when such heads are still incorporated into the sprinkler system;

(c) identify which specific sub-sections of NFPA Standard 13, if any, address the required residual water pressure at the most remote sprinkler head in a system after the other sprinkler heads are open and flowing;

(d) identify which specific sub-sections of NFPA Standard 13, if any, are applicable to the allegations of the Complaint; and

(e) describe in terms of psi (pounds per square inch) the testing standard that Complainant contends is created by NFPA Standard 13 that applies to the Omegas.

Response: Complaint Counsel objects to this Interrogatory on the ground that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel responds that the Standard speaks for itself.

See Complaint Counsel's Interrogatory Responses, No. 38.

The language of the CPSC rules of practice is plain and unambiguous -- Central is permitted to pose interrogatories requiring Complaint Counsel to apply the law to the facts of this case. Accordingly, Complaint Counsel's objection that a request "calls for a legal conclusion" is invalid, and the Presiding Officer should compel Complaint Counsel to provide full and complete responses to the following interrogatories: Interrogatory Response Nos.: 5-25, 31-40.

IV. CONCLUSION

Complaint Counsel has deprived Central of the opportunity to begin to prepare its defense in this matter. Complaint Counsel has failed to identify persons having knowledge of potentially relevant information, declined to answer simple and straightforward interrogatories, refused to provide basic documents supporting their charges of failures, and raised baseless objections, the net effect of which has been to delay discovery.

As a result, Central has suffered serious prejudice. A significant portion of the discovery period has elapsed in this case, and Central still has not received basic information from Complaint Counsel. Moreover, Complaint Counsel has succeeded in hiding the substance of any contentions they intend to raise and evidence they plan to introduce at the trial of this matter. As a result, Central has been prevented from preparing adequately for trial, and is being denied an adequate opportunity to defend itself.

Complaint Counsel's refusal to provide meaningful discovery violates the CPSC rules of practice and all standards of fair discovery. Therefore, based on all of the foregoing, pursuant to 16 C.F.R. § 1025.36, Central respectfully requests that the Presiding Officer compel Complaint Counsel to provide full and complete responses to Central's Document Requests and Interrogatories.

Respectfully submitted,

Dated: July 1, 1998

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Attorneys for Respondents
CENTRAL SPRINKLER CORP. and
CENTRAL SPRINKLER COMPANY

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp.	:	
	:	
and	:	**CPSC Docket No. 98-2**
	:	
Central Sprinkler Co.,	:	
	:	
Respondents.	:	
	:	

ORDER

AND NOW, this __ day of _____, 1998, upon consideration of Respondents' Renewed Motion To Compel Full And Complete Responses To Interrogatories And Document Requests, Complaint Counsel's response thereto, and all other evidence before the Presiding Officer, it is hereby ORDERED that Respondents' Motion is GRANTED.

Pursuant to 16 C.F.R. § 1025.36, Complaint Counsel is hereby ordered to provide full and complete responses to Respondents within ten (10) days of the date of this Order. Specifically, Complaint Counsel shall provide the following information:

1. Identification of specific persons having knowledge of potentially relevant material, pursuant to Interrogatory Nos. 5-25, 40-42, 51-73, 76-77, 81-88, and 102.

2. Full and complete responses, including the scope of Complaint Counsel's contentions in the instant case, to Interrogatory Nos. 42-46, 53-76, 78, 80, 82-87, 93-99, 106-14, 119, 129, and 136-43; and Document Request Nos. 1-3, 5-8, 10-14, 18-21, 23-29, 31-37, 39, 41, and 44-71.

3. Full and complete responses to discovery requests where Complaint Counsel has invalidly asserted a claim to the protection of the work product doctrine or attorney-client privilege, pursuant to the following rulings:

a. All documents and information provided to Complaint Counsel by third parties are not protected by the work product doctrine and/or attorney-client privilege;

b. All documents and information provided to or prepared for third parties by Complaint Counsel are not protected by the work product doctrine and/or attorney-client privilege;

c. For all persons named in Complaint Counsel's Privilege Log, Complaint Counsel shall identify whether the individual is an employee of the CPSC, and if so, their position with the CPSC;

d. Because the work product doctrine only protects the production of documents and tangible things, not facts, Complaint Counsel shall provide information responsive to all of Central's Interrogatories without asserting the work product doctrine as an objection; and

e. Pursuant to 16 C.F.R. § 1025.31(c)(3), Complaint Counsel shall produce to Central the data and methodology underlying Complaint Counsel's test results, because Central has demonstrated a substantial need for such materials and such materials cannot otherwise be obtained by Central without unique hardship.

4. Full and complete responses to discovery requests where Complaint Counsel has delayed producing documents or information, pursuant to Interrogatory Nos. 74-77, 81, 86 , 88, 117, 119, 124, 126-27, and 135-38; and Document Request Nos. 8, 17, and 61-63.

5. A written verification under oath for all of Complaint Counsel's interrogatory responses.

6. Full and complete responses, not limited to references to Complaint Counsel's own pleadings and/or other discovery answers, pursuant to Interrogatory Nos. 4-37, 43-44, 51, 76-77, 81-86, and 88; and Document Request Nos. 12-13, 21-29, 44-53, 63, and 70.

7. Full and complete responses, despite and without regard to any relevance or vagueness objections made by Complaint Counsel, pursuant to Interrogatory Nos. 26-34, 42-51, 78-85, 87, and 129; and Document Request Nos. 9-11, 15-18, 33, 35, 42-43, 57-59, 61-62, and 64.

8. Full and complete responses, despite and without regard to any objections by Complaint Counsel that documents or information are equally available to Respondents, pursuant to Interrogatory Nos.1-3; and Document Request Nos. 3, 14, 31, 56, 68, and 70.

9. Full and complete responses applying the law to the fact of this case, pursuant to Interrogatory Nos. 5-25, and 31-40.

BY THE PRESIDING OFFICER:

The Hon. William B. Moran
United States Administrative Law Judge

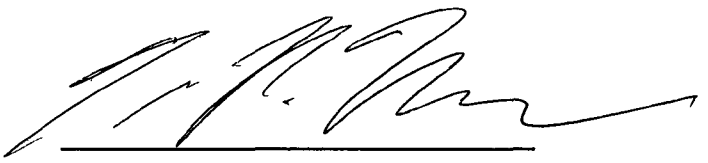
CERTIFICATE OF SERVICE

I, Thomas P. Hogan, Jr., hereby certify that on this date a true and correct copy of the foregoing Respondents' Renewed Motion To Compel Full And Complete Responses To Interrogatories And Document Requests was served via regular mail upon the following:

Deborah S. Orlove
Complaint Counsel
U.S. Consumer Product Safety Commission
4430 East West Highway
Bethesda, MD 20814

The Honorable William B. Moran
Offices of the Administrative Law Judges
Environmental Protection Agency
401 M Street, S.W.
Mail Code 1900 L
Washington, DC 20460

Dated: July 1, 1998



Thomas P. Hogan, Jr.

11/16/98

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp.	:	
	:	
and	:	**CPSC Docket No. 98-2**
	:	
Central Sprinkler Co.,	:	
	:	
Respondents.	:	
	:	

APPENDIX TO
RESPONDENTS' RENEWED MOTION TO COMPEL
FULL AND COMPLETE RESPONSES TO
INTERROGATORIES AND DOCUMENT REQUESTS

Exhibit	Document
A	Respondents' First Request for Documents and Things
B	Respondents' First Set of Interrogatories
C	Complaint Counsel's Responses to Respondents' First Request For Production of Documents and Things
D	Complaint Counsel's Responses to Respondents' First Set of Interrogatories
E	Complaint Counsel's Index of Responsive Documents
F	Complaint Counsel's Privilege Log
G	Correspondence between Complaint Counsel and Respondents' Counsel
H	Complaint Counsel's Data Compilation

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UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

IN THE MATTER OF CENTRAL SPRINKLER CORP. and CENTRAL SPRINKLER CO., Respondents	CPSC DOCKET NO. 98-2

RESPONDENTS' FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS

Respondents Central Sprinkler Corp. ("CSC") and Central Sprinkler Co. ("Central") (collectively, "Respondents"), through their undersigned counsel, hereby propound to the Consumer Product Safety Commission (the "CPSC" or the "Complainant") the following request for documents pursuant to 16 C.F.R. § 1025.33. Complainant is requested to produce the documents and things described herein within thirty (30) days of the service of this request. Complainant's responses should be sent to the offices of Morgan, Lewis and Bockius LLP, 2000 One Logan Square, Philadelphia, PA 19103.

For the purposes of this Request, the following instructions and definitions apply:

INSTRUCTIONS

Respondents hereby fully incorporate by reference the Instructions set forth in Respondents' First Set of Interrogatories.

DEFINITIONS

Respondents hereby fully incorporate by reference the Definitions set forth in Respondents' First Set of Interrogatories.

DOCUMENTS AND THINGS TO BE PRODUCED

1. All documents identified in the "List and Summary of Documentary Evidence" attached to the Complaint.

2. All documents identified in the CPSC's responses to Respondents' First Set of Interrogatories.

3. All documents that constitute the entirety of the CPSC administrative file regarding the Omegas.

4. All documents that constitute subpoenas from the CPSC or other requests for documents to any person, organization, business, or any other entity regarding or related to the Omegas.

5. All documents provided to the CPSC in response to subpoenas from the CPSC or other requests for documents to any person, organization, business, or any other entity regarding or related to the Omegas.

6. All documents provided to the CPSC by Respondents regarding the Omegas.

7. All documents provided to the CPSC by any person, organization, business, or any other entity regarding or related to the Omegas and/or Respondents.

8. All documents that constitute, provide evidence of, refer, or relate to any testing of the Omegas conducted by or on behalf of the CPSC.

9. All documents that constitute, provide evidence of, refer, or relate to any testing of the Omegas conducted by on or behalf of any other person, organization, business, or other entity.

10. All documents that constitute, provide evidence of, refer, or relate to any testing of non-Omega sprinkler heads conducted by on or behalf of the CPSC.

11. All documents that constitute, provide evidence of, refer, or relate to testing of non-Omega sprinkler heads conducted by on or behalf of any other person, organization, business, or other entity.

12. All documents that constitute, provide evidence of, refer, or relate to the alleged jurisdiction of the CPSC over the Omegas.

13. All documents that constitute, provide evidence of, refer, or relate to the jurisdiction of the CPSC over any product, including without limitation any memoranda or other interanal correspondence that addresses the extent of or any limitations on the jurisdiction of the CPSC.

14. All documents that constitute, provide evidence of, refer, or relate to CSC manufacturing, selling, or marketing Omegas.

15. All documents that constitute, provide evidence of, refer, or relate to any fires where Omegas allegedly failed to activate properly.

16. All documents that constitute, provide evidence of, refer, or relate to any fires where Omegas allegedly activated properly.

17. All documents that constitute, provide evidence of, refer, or relate to any fires where non-Omega sprinkler heads allegedly failed to activate properly.

18. All documents that constitute, provide evidence of, refer, or relate to any fires where non-Omega sprinkler heads allegedly activated properly.

19. All documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and former employees of Respondents, including but not

limited to interview notes, questions asked, answers received, documents exchanged or revealed by or between either party, and any audiotape or videotape of such communications.

20. All documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and current employees of Respondents, including but not limited to interview notes, questions asked, answers received, documents exchanged or revealed by or between either party, and any audiotape or videotape of such communications.

21. All documents that constitute, provide evidence of, refer, or relate to "[the] multiple random inquiries of sprinkler contractors across the nation," as referenced in a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo.

22. All documents that constitute, provide evidence of, refer, or relate to "what has been, and remains, customarily required to remove and install sprinklers," as referenced in a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo.

23. All documents that constitute, provide evidence of, refer, or relate to "the evidence we have gathered does not support the view [that] dezincification alone is the cause of the above-required operating pressures in Omegas from plastic pipes," as referenced in a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo.

24. All documents that constitute, provide evidence of, refer, or relate to "the evidence we have gathered does not support the view . . . that swollen o-rings due to cutting oil exposure are the exclusive cause of non-activation in Omegas manufactured before 1996," as referenced in a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo.

25. All documents that constitute, provide evidence of, refer, or relate to "the data [which] point to multiple failure modes rooted in the design and construction of these sprinklers," as referenced in a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo.

26. All documents that constitute, provide evidence of, refer, or relate to any testing, evaluation, consideration, or analyses done by or on behalf of the CPSC regarding the "testing based corrective action," as referenced in a February 19, 1998 letter from Eric Stone of the CPSC to Kathleen Sanzo.

27. All documents that constitute, provide evidence of, refer, or relate to any testing, evaluations, or analyses done by or on behalf of the CPSC which reflects the "serious concerns" of the CPSC regarding whether "Omega sprinklers with silicone o-rings will function in the long term," as referenced in a February 19, 1998 letter from Eric Stone of the CPSC to Kathleen Sanzo.

28. All documents that constitute, provide evidence of, refer, or relate to any testing, evaluations, consideration, or analyses done by or on behalf of the CPSC which addressed Omegas where "the internal shaft was cocked or tipped slightly and jammed in that position," as referenced in a February 24, 1998 letter from Eric Stone of the CPSC to Kathleen Sanzo.

29. All documents that constitute, provide evidence of, refer, or relate to "automatic fire sprinklers' historical rate of proving 99.5 percent effective," as referenced in a January 6, 1998 letter from Eric Singer of the CPSC to state attorneys general.

30. All documents that constitute, provide evidence of, refer, or relate to the CPSC Recall Handbook.

31. All documents received by the CPSC from Respondents or any agent, employee, or representative of Respondents.

32. All Omegas in possession of the CPSC.

33. All non-Omega sprinkler heads in the possession of the CPSC.

34. All audio and/or video tapes regarding or relating to any testing of Omegas.

35. All audio and/or video tape regarding or relating to any testing of non-Omega sprinkler heads.

36. All documents that constitute, provide evidence of, refer, or relate to any personal journals, diaries, or correspondence maintained by the CPSC Staff regarding the Omegas and/or Respondents.

37. All documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and any dealers, retailers, contractors, or any distributors regarding or related to the Omegas and/or Respondents.

38. All documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and any Authorities Having Jurisdiction regarding or related to the Omegas and/or Respondents.

39. All documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and any consumers regarding or related to the Omegas and/or Respondents.

40. All documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and any state law enforcement authorities regarding or related to the Omegas and/or Respondents.

41. All documents that constitute, provide evidence of, refer, or relate to any communications between the CPSC and any federal law enforcement authorities regarding or related to the Omegas and/or Respondents.

42. All documents that constitute, provide evidence of, refer, or relate to scripts, talking points, outlines, or any other material prepared by, for, or on behalf of the CPSC for any press conferences or news releases regarding the Omegas and/or Respondents.

43. All documents that constitute, provide evidence of, refer, or relate to any material regarding the Omegas and/or Respondents created by or on behalf of the CPSC public relations department, media department, or any other CPSC internal department charged with communicating with or providing information to the public media.

44. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 5 of the Complaint that CSC is a "manufacturer" of consumer products.

45. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 6 of the Complaint that the Omegas are "consumer products."

46. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 8 of the Complaint that the Omegas are "designed to perform in accordance with" UL Standard 199 and NFPA Standard 13.

47. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 8 of the Complaint that the Omegas are designed to perform in accordance with certain standards "when exposed to certain temperatures."

48. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 10 of the Complaint that the Omegas "do not and/or will not function in a significant percentage of instances."

49. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 10 of the Complaint that the "Omegas are defective pursuant to 15 U.S.C. § 2064(a)(2) and 16 C.F.R. § 1115.4."

50. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 13 of the Complaint that "failure of the Omegas to function exposes the public to bodily injury and/or death."

51. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 15 of the Complaint that the "defect or defects in the Omegas create a

substantial risk of injury to the public within the meaning of § 15(a)(2) of the CPSA, 15 U.S.C. § 2064(a)(2)."

52. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 16 of the Complaint that "Omegas present a substantial product hazard as described in Sections 15(a)(2), (c) and (d) of the CPSA, 15 U.S.C. §§ 2064(a) (2), (c) and (d)."

53. All documents that constitute, provide evidence of, refer, or relate to the allegation of Paragraph 16 of the Complaint that "action under these provisions is in the public interest."

54. A current curriculum vitae or resume for each and every expert witness whom the CPSC expects to testify on its behalf at the hearing in this matter.

55. All publications of any nature authored by any expert witness whom the CPSC expects to testify on its behalf at the hearing in this matter.

56. Any and all written statements made by Respondents that the CPSC contends constitute an admission with reference to any of the issues raised in the Complaint.

57. All documents that constitute, provide evidence of, refer, or relate to the use of silicone o-rings in sprinkler heads.

58. All documents that constitute, provide evidence of, refer, or relate to the use of EPDM o-rings in sprinkler heads.

59. All documents that constitute, provide evidence of, refer, or relate to the use in sprinkler heads of o-rings comprised of any other material or compound.

60. All documents that constitute, provide evidence of, refer, or relate to the reasons giving rise to the CPSC's decision to investigate alleged risks associated with the Omegas.

61. All documents that constitute, provide evidence of, refer, or relate to any and all incidents known to the CPSC in which a consumer or other person has reported any form of property damage in connection with the Omegas.

62. All documents that constitute, provide evidence of, refer, or relate to any and all incidents known to the CPSC in which a consumer or other person has reported any form of personal injury in connection with the Omegas.

63. Any and all testing protocols used by the CPSC or by any expert or other person on behalf of the CPSC in testing the Omegas.

64. All documents that constitute, provide evidence of, refer, or relate to any alternative design features for the Omegas.

65. All documents that constitute, provide evidence of, refer, or relate to the feasibility and/or propriety of any alternative design features for the Omegas.

66. All documents that constitute, provide evidence of, refer, or relate to the CPSC's preliminary determination of the alleged risks associated with the Omegas.

67. All documents that constitute, provide evidence of, refer, or relate to any changes in the CPSC's preliminary determination and/or initial assignment of the level of hazard allegedly presented by the Omegas.

68. All documents that constitute, provide evidence of, refer, or relate to any corrective action proposal for the Omegas.

69. All documents that constitute, provide evidence of, refer, or relate to the requested recall of the Omegas.

70. All documents that constitute, provide evidence of, refer, or relate to the corrective action proposal presented by Respondents regarding the Omegas.

71. All documents that constitute, provide evidence of, refer, or relate to the CPSC's decision to initiate the instant adjudicative proceeding against the Respondents.

DATED: March 26, 1998

J. Gordon Cooney, Jr. (MFH)

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Trevose, PA 19053
(215) 639-4070

Attorneys for Respondents
CENTRAL SPRINKLER CORP. and
CENTRAL SPRINKLER CO.

CERTIFICATE OF SERVICE

I, Michael F. Healy, hereby certify that on this date a true and correct copy of the foregoing Respondents' First Request for Production of Documents and Things was served by hand upon the following:

Eric L. Stone
Director
Division of Administrative Litigation
U. S. Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

Alan H. Schoem
Assistant Executive Director
Office of Compliance
U.S. Consumer Product Safety Commission
4430 East West Highway
Bethesda, MD 20814

Date: March 26, 1998

Michael F. Healy
Michael F. Healy

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UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

98 MAR 26 P 3:56

IN THE MATTER OF CENTRAL SPRINKLER CORP. and CENTRAL SPRINKLER CO., Respondents	CPSC DOCKET NO. 98-2

RESPONDENTS' FIRST SET OF INTERROGATORIES

Respondents Central Sprinkler Corp. ("CSC") and Central Sprinkler Co. ("Central") (collectively, "Respondents"), through their undersigned counsel, hereby propound the following interrogatories to the Consumer Product Safety Commission (the "CPSC" or the "Complainant") pursuant to 16 C.F.R. § 1025.32. Complainant is requested to respond within thirty (30) days of the service of these interrogatories. Complainant's responses should be sent to the offices of Morgan, Lewis & Bockius LLP, 2000 One Logan Square, Philadelphia, PA 19103.

For the purposes of these Interrogatories, the following definitions and instructions apply:

INSTRUCTIONS

A. In answering these Interrogatories, Document Requests, and/or Requests for Admissions (collectively, the "Discovery Requests"), furnish all information available to you, including any such information in possession of your attorneys or anyone acting on your behalf, and not merely such information known of your own personal knowledge. If you cannot answer the Discovery Requests in full after exercising due diligence to secure the information to do so, so state and answer to the extent possible.

B. If the answer to any of the Discovery Requests is that you lack knowledge of some or all of the requested information, describe all efforts made by you to obtain the information necessary to answer that Discovery Request.

C. If any matter responsive to any of the Discovery Requests is withheld based on any claim of privilege, describe generally the matter withheld, state the privilege being relied upon, and identify all persons or entities who have or have had access to said matters. If you refuse to describe and/or produce any document on the basis of a claim of privilege or protection from discovery of any kind, with respect to each such document, set forth the following information:

(i) the date of the document;

(ii) its authors;

(iii) all recipients of the document;

(iv) the present location and custodian of the document; and

(v) the basis of the claim of privilege or protection from discovery.

D. Each lettered sub-part of a numbered Discovery Request is to be considered a separate Discovery Request for the purpose of Complainant's answers and objections. You must object separately to each sub-part and must answer any other sub-parts.

E. These Discovery Requests are to be deemed continuing in nature, and you shall promptly supply, by way of supplemental response, any additional responsive information that may become known to you or anyone acting on your behalf after your answers have been prepared or served.

F. For all documents produced by Complainant, identify by Bates number which document or documents are responsive to each separate Interrogatory and/or each separate Request for Documents.

DEFINITIONS

A. The "Complaint" means whichever version of the Complaint was last filed and in effect at the time of service of the relevant Discovery Request.

B. "Complainant" and/or the "CPSC" refers to the Consumer Product Safety Commission, the Legal Division of the Office of Compliance of the CPSC, and any employees or agents thereof.

C. "Respondents" refers to Central Sprinkler Corp. and Central Sprinkler Co., all corporate affiliates thereof, and all current or former employees of Central and corporate affiliates

thereof.

D. "CSC" refers to Central Sprinkler Corporation.

E. "Central" refers to Central Sprinkler Company.

F. "Omega" or "Omegas" refers to the line of sprinkler heads identified in the Complaint, including the following models: C-1; C-1A; C-1A PRO; C-1A PRO ID; EC-20; EC-20A; EC-20 AID; HEC-12; HEC-12 ID; HEC-12 PRO; HEC-12A PRO; HEC-12 RES; HEC-20; HEC-20 ID; R-1; R-1A; R-1M; AC; M; and Flow Control.

G. "Person" or "persons" means all individuals and entities, including natural persons, representative persons, public or private corporations, companies, unincorporated associations, partnerships, organizations, government entities or groups, plus any divisions, departments, or units thereof.

H. "Document" or "documents" means any written, printed, typed, recorded, or graphic matter, whether produced or reproduced or stored on paper, cards, tapes, film, electronic facsimile, computer storage devices or any other devices or media, including, but not limited to papers; books; letter; photographs; objects; tangible things; correspondence; telegrams; cables; telex messages; memoranda; notes; notations; records; work papers; transcripts; minutes; reports and recordings of telephone or other conversations, or of interviews, or of conferences, or of other meetings; affidavits; statements; opinions; proposals; reports; studies; analyses; audits; evaluations; contracts; agreements; journals; statistical records; ledgers; books of account; bookkeeping entries; financial statements; tax returns; vouchers; checks; check stubs; invoices; receipts; desk calendars; appointment books; diaries; lists; tabulations; summaries; sound recordings; computer printouts; data processing input and output; microfilms; all records kept by electronic, photographic, or mechanical means; and things similar to any of the foregoing, however denominated. When one or more of the following documents is requested or referred to, the request or reference shall include, but is not limited to, the original and each and every copy and draft thereof having writings, notations, corrections, or markings unique to such copy or draft.

I. "Oral communication" means any and all non-written forms of expression or communication, whether face-to-face or by telephone, in a conference or otherwise.

J. "Identify" or "identification", when used in reference to a document, means to:

1. state the type of document (e.g., letter, log, report, etc.);

2. state its date;

3. state its title, heading or other designation and any other information (e.g., index or file number) which would facilitate the identification thereof;

4. identify the person(s) who prepared and/or signed the document;

5. identify the persons (or if widely distributed, the organization or classes of persons) to whom it was sent;

6. identify the last known location of the document and of each copy thereof having notations or markings unique to such copy;

7. if the document was, but no longer is, in your possession or subject to your control, identify its last know custodian, describe the circumstances under which it passed from your control to that person, and identify each person having knowledge of such circumstances;

8. describe its general subject matter and contents; and

9. if the document exceeds one page in length, or is contained in a series of documents or a larger portion, identify the specific document by appropriate identifying name or symbol, the number of the particular page or pages (or other descriptive aid) and of the line or lines thereof upon which the information referred to in the Discovery Request or your response appears.

K. "Identify" or "identification", when used in reference to a natural person, means to provide the following information:

1. his or her full name;

2. his or her business affiliation(s), position(s), title(s), and job description(s) during the period delineated in the Discovery Request (and the dates during which each affiliation, position, title, and job description applied to him or her);

3. his or her present or last known business address (and the date of that last knowledge); and

4. his or her present or last known residence address (and the date of that last knowledge).

L. "Identify" or "identification", when used in reference to an oral communication or statement, means to:

1. state the date of the oral communication or statement;

2. state the place where it occurred;

3. identify the persons(s) making and listening to the oral communication or statement;

4. identify all other persons present at the time it was made;

5. if by telephone, identify the persons participating in the conversation and where each was located at the time of the call; and

6. describe the substance of the oral communication or statement.

M. "Date" means the exact day, month, and year if ascertainable, or, if not, the best approximation thereof or best approximation in relation to other events.

N. "Describe" means to set forth fully and clearly every relevant fact and/or event, including particulars of time, place and manner.

O. Where the context so requires:

1. the terms "and" and "or" mean "and/or";

2. the plural of a word includes the singular, and the singular includes the plural;

3. the past tense of verb includes the present, and the present tense includes the past;

4. the masculine gender includes feminine and neuter genders, and the neuter gender include the masculine and feminine.

P. All other words are to be given their ordinary and usual meanings, according to a current edition of Webster's Dictionary.

INTERROGATORIES

A. Allegations of the Complaint

1. (a) State whether CSC manufactures Omegas.

If so:

(b) identify and describe any such manufacturing;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such manufacturing;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such manufacturing; and

(e) describe in detail the substance of each such person's knowledge and/or information.

2. (a) State whether CSC sells Omegas.

If so:

(b) identify and describe any such sales;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such sales;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such sales; and

(e) describe in detail the substance of each such person's knowledge and/or information.

3. (a) State whether CSC markets Omegas.

If so:

(b) identify and describe any such marketing;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such marketing;

(d) identify each and every person whom Complainant knows and/or believes to

have knowledge of such marketing; and

(e) describe in detail the substance of each such person's knowledge and/or information.

4. With respect to the allegation of Paragraph 5 of the Complaint that CSC is a "manufacturer" of consumer products:

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

5. (a) State whether the C-1 model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

6. (a) State whether the C-1A model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

7. (a) State whether the C-1A PRO model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

8. (a) State whether the C-1A PRO ID model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or

information.

9. (a) State whether the EC-20 model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

10. (a) State whether the EC-20A model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

11. (a) State whether the EC-20 AID model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

12. (a) State whether the HEC-12 model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

13. (a) State whether the HEC-12 ID model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

14. (a) State whether the HEC-12 PRO model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

15. (a) State whether the HEC-12A PRO model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

16. (a) State whether the HEC-12 RES model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

17. (a) State whether the HEC-20 model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

18. (a) State whether the HEC-20 ID model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

19. (a) State whether the R-1 model of the Omegas constitutes a "consumer product"

pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

20. (a) State whether the R-1A model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

21. (a) State whether the R-1M model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to

have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

22. (a) State whether the AC model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

23. (a) State whether the M model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

24. (a) State whether the Flow Control model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

25. With respect to the allegation of Paragraph 6 of the Complaint that the Omegas are "consumer products":

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

26. (a) Separately for each model of the Omegas listed in the Complaint, state whether such model is sold by Respondents directly to consumers.

If so:

(b) identify all documents which describe, evidence, refer, or relate to any such sales;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such sales; and

(d) describe in detail the substance of each such person's knowledge and/or information.

27. (a) Separately for each model of the Omegas listed in the Complaint, state whether Respondents market such a model to consumers.

If so:

(b) identify all documents which describe, evidence, refer, or relate to any such marketing;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such marketing; and

(d) describe in detail the substance of each such person's knowledge and/or information.

28. (a) Separately for each model of the Omegas listed in the Complaint, state whether such a model is installed by consumers themselves (as opposed to professional contractors).

If so:

(b) identify all documents which describe, evidence, refer, or relate to any such installation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such installation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

29. (a) Separately for each model of the Omegas listed in the Complaint, state whether such a model is serviced by consumers themselves (as opposed to professional contractors).

If so:

(b) identify all documents which describe, evidence, refer, or relate to any such servicing;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such servicing; and

(d) describe in detail the substance of each such person's knowledge and/or

information.

30. (a) Separately for each model of the Omegas listed in the Complaint, state whether such a model is repaired by consumers themselves (as opposed to professional contractors). If so:

(b) identify all documents which describe, evidence, refer, or relate to any such repairs;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such repairs; and

(d) describe in detail the substance of each such person's knowledge and/or information.

31. State whether Omegas installed in buildings used only as storage facilities constitute "consumer products" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

32. State whether Omegas installed in warehouses constitute "consumer products" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates

in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

33. State whether Omegas installed in factories constitute "consumer products" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

34. State whether Omegas installed in computer facilities constitute "consumer products" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

35. State whether there are any factual circumstances under which any Omegas would not constitute a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) identify and describe any such circumstances;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such circumstances;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such circumstances; and

(e) describe in detail the substance of each such person's knowledge and/or information.

36. (a) State whether there are any factual circumstances under which any non-Omega sprinkler heads would not constitute a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) identify and describe any such circumstances;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such circumstances;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such circumstances; and

(e) describe in detail the substance of each such person's knowledge and/or information.

37. (a) Separately for each model of the Omegas listed in the Complaint, describe any and all ways in which consumers use, consume, and/or enjoy such a model.

(b) identify all documents which describe, evidence, refer, or relate to any such use, consumption, or enjoyment;

(c) identify each and every person whom Complainant knows and/or believes to

have knowledge of any such use, consumption, or enjoyment; and

(d) describe in detail the substance of each such person's knowledge and/or information.

38. With respect to the allegation of Paragraph 8 of the Complaint that the Omegas are "designed to perform in accordance with" NFPA Standard 13:

(a) identify which specific sub-sections of NFPA Standard 13, if any, address the operating water pressure at which previously installed sprinkler heads should activate when such heads are removed and tested;

(b) identify which specific sub-sections of NFPA Standard 13, if any, address the operating water pressure at which installed sprinkler heads should activate when such heads are still incorporated into the sprinkler system;

(c) identify which specific sub-sections of NFPA Standard 13, if any, address the required residual water pressure at the most remote sprinkler head in a system after the other sprinkler heads are open and flowing;

(d) identify which specific sub-sections of NFPA Standard 13, if any, are applicable to the allegations of the Complaint; and

(e) describe in terms of psi (pounds per square inch) the testing standard that Complainant contends is created by NFPA Standard 13 that applies to the Omegas.

39. With respect to the allegation of Paragraph 8 of the Complaint that the Omegas are "designed to perform in accordance with" UL Standard 199:

(a) identify which specific sub-sections of UL Standard 199, if any, address the operating water pressure at which previously installed sprinkler heads should activate when such heads are removed and tested;

(b) identify which specific sub-sections of UL Standard 199, if any, address the operating water pressure at which installed sprinkler heads should activate when such heads are still incorporated into the sprinkler system;

(c) identify which specific sub-sections of UL Standard 199, if any, address the required residual water pressure at the most remote sprinkler head in a system after the other sprinkler heads are open and flowing;

(d) identify which specific sub-sections of UL Standard 199, if any, are applicable to the allegations of the Complaint; and

(e) describe in terms of psi the testing standard that Complainant contends is created by UL Standard 199 that applies to the Omegas.

40. With respect to the allegation of Paragraph 8 of the Complaint that the Omegas are "designed to perform in accordance with" UL Standard 199 and NFPA Standard 13:

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

41. With respect to the allegation of Paragraph 8 of the Complaint that the Omegas are designed to perform in accordance with certain standards "when exposed to certain temperatures":

(a) describe in terms of both degrees Fahrenheit and Celsius what temperatures are meant by the phrase "certain temperatures";

(b) set forth the factual basis for this allegation;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(e) describe in detail the substance of each such person's knowledge and/or

information.

42. (a) State whether Complainant contends that there is a single standard of water pressure (in psi) at which previously installed sprinkler heads must activate when tested to be deemed by the Complainant as not presenting any substantial risk of injury to the public and/or substantial product hazard;

If so:

(b) identify and describe any such standard;

(c) identify all documents which describe, evidence, refer, support, or relate to any such a standard;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such standard; and

(e) describe in detail the substance of each such person's knowledge and/or information.

43. (a) State whether Complainant contends that there is a single standard of temperature at which previously installed sprinkler heads must activate when tested to be deemed by the Complainant as not presenting any substantial risk of injury to the public and/or substantial product hazard;

If so:

(b) identify and describe any such standard;

(c) identify all documents which describe, evidence, refer, support, or relate to any such standard;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such standard; and

(e) describe in detail the substance of each such person's knowledge and/or information.

44. (a) Describe the percentage of previously installed sprinkler heads that must activate at the standards described in Interrogatory Nos. 42-43 when tested in order to be deemed by the Complainant as not presenting any substantial risk of injury to public and/or substantial product hazard;

(b) identify all documents which describe, evidence, refer, support, or relate to such a percentage;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of such a percentage; and

(d) describe in detail the substance of each such person's knowledge and/or information.

45. (a) State whether Complainant contends that there is a standard of "failure" that will accurately predict whether a particular Omega will fail to activate in a fire when used in a particular building without regard to the actual hydraulic pressure that exists in the building. If so:

(b) identify and describe any such standard;

(c) identify all documents which describe, evidence, refer, support, or relate to any such standard;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such standard; and

(e) describe in detail the substance of each such person's knowledge and/or information.

46. (a) State whether Complainant contends that if a particular Omega does not activate at a minimum of 7 psi when tested, such an Omega would not activate if a fire occurred in a building where such Omega was installed.

(b) set forth the factual basis for any such contention;

(c) identify all documents which describe, evidence, refer, support, or relate to

any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

47. Describe the average static water pressure (in psi) present in the sprinkler systems of most residential buildings.

48. Describe the average residual water pressure (in psi) present at the most remote sprinkler head in the sprinkler systems of most residential buildings, after the system has been activated.

49. Describe the average static water pressure (in psi) present in the sprinkler systems of most commercial buildings.

50. Describe the average residual water pressure (in psi) present at the most remote sprinkler head in the sprinkler systems of most commercial buildings, after the system has been activated.

51. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas "do not and/or will not function":

(a) separately for each Omega model listed in the Complaint, describe in detail all of the causes and/or reasons that the Omegas "do not and/or will not function";

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

52. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas do not and/or will not function in a "significant percentage" of instances:

(a) expressed in terms of a specific percentage, describe what constitutes "a significant percentage" regarding this allegation;

(b) set forth the factual basis for this allegation;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(e) describe in detail the substance of each such person's knowledge and/or information.

53. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the C-1 model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

54. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the C-1A model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

55. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the C-1A PRO model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

56. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the C-1A PRO ID model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

57. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the EC-20 model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

58. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the EC-20A model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

59. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the EC-20 AID model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

60. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC-12 model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

61. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC-12 ID model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

62. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC-12 PRO model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

63. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC-12A PRO model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

64. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC-12 RES model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

65. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC-20 model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

66. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC-20 ID model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

67. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the R-1 model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

68. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the R-1A model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

69. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the R-1M model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

70. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the AC model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

71. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the M model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

72. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the Flow Control model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

73. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to

have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

74. State whether the failure of any Omega to function has resulted in any bodily injury or injuries.

75. State whether the failure of any Omega to function has resulted in any death or deaths.

76. With respect to the allegation of Paragraph 13 of the Complaint that "failure of the Omegas to function exposes the public to bodily injury and/or death":

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

77. With respect to the allegation of Paragraph 15 of the Complaint that the defect or the defects in the Omegas create a "substantial risk of injury to the public":

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or

information.

78. (a) State whether the Complainant contends that any Omegas used with plastic piping systems installed after 1990 have ever failed to activate in a fire.

If so:

(b) identify and describe any such failures;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

79. (a) State whether the Complainant contends that any Omegas used with plastic piping systems installed after 1990 have ever failed to activate under any type of testing.

If so:

(b) identify and describe any such a contention;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

80. (a) State whether the Complainant contends that any Omegas used with copper piping systems installed after 1990 have ever failed to activate in a fire.

If so:

(b) identify and describe any such failures;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

81. (a) State whether the Complainant contends that any Omegas used with copper piping systems installed after 1990 have ever failed to activate under any type of testing.
If so:

(b) identify and describe any such testing;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

82. (a) State whether the Complainant contends that any Omegas manufactured from 1996 through the present and using silicone o-rings have ever failed to activate in a fire.
If so:

(b) identify and describe any such failures;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

83. (a) State whether the Complainant contends that any Omegas manufactured from 1996 through the present and using silicone o-rings have ever failed to activate in any type of testing.

If so:

(b) identify and describe any such testing;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

84. (a) State whether the Complainant contends that any Omegas used with plastic piping systems installed after 1990 constitute a "substantial product hazard" pursuant to 15 U.S.C. § 2064(a).

If so:

(b) identify and describe any such hazards;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

85. (a) State whether the Complainant contends that any Omegas used with copper piping systems installed after 1990 constitute a "substantial product hazard" pursuant to 15 U.S.C. § 2064(a).

If so:

(b) identify and describe any such hazards;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

86. (a) State whether Complainant contends that any Omegas manufactured using silicone o-rings constitute a "substantial product hazard" pursuant to 15 U.S.C. § 2064(a).

If so:

(b) identify and describe any such hazards;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

87. (a) State whether the Complainant contends that the performance of Omegas declines or deteriorates over time.

If so:

(b) identify and describe any such performance decline or deterioration;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or

information.

88. With respect to the allegation of Paragraph 16 of the Complaint that the Omegas present a "substantial product hazard":

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

89. With respect to the allegation of Paragraph 16 of the Complaint that "action under these provisions is in the public interest":

(a) identify and describe all of the public interest factors which Complainant believes favor "action under these provisions";

(b) set forth the factual basis for such an allegation;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(e) describe in detail the substance of each such person's knowledge and/or information.

90. With respect to the allegation of Paragraph B(1) of the Complaint that Respondent give prompt "public notice of the defect in the Omegas," identify and describe the "public notice" that the Complainant seeks to impose.

91. With respect to the allegation of Paragraph C(3) of the Complaint regarding repair of all Omegas so they will "perform properly," identify and describe what would constitute "performs properly" for purposes of the Complainant.

92. With respect to the allegation of Paragraph C(3) of the Complaint regarding the replacement of all Omegas "with a like or equivalent product which performs properly":

(a) identify and describe any and all "like or equivalent product which performs properly";

(b) state whether Complainant believes that Omegas with a silicone o-ring qualify as a "like or equivalent product which performs properly"; and

(c) state whether Complainant believes that Omegas with a spring collar qualify as a "like or equivalent product which performs properly."

93. With respect to the allegation of Paragraph C(3) of the Complaint regarding a "refund to consumers [of] the purchase price of the Omegas," identify and describe how Complainant would calculate or determine a "refund to consumers [of] of the purchase price of the Omegas."

94. (a) If the Commission orders Respondents to repair some or all of the Omegas pursuant to 15 U.S.C. § 2064(d)(1), identify and describe the nature and amount of the "reasonable and foreseeable expenses" under 15 U.S.C. § 2064(e)(1) that Complainant contends should be reimbursed to persons by Respondents.

(b) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(d) describe in detail the substance of each such person's knowledge and/or information about any such contention.

95. (a) If the Commission orders Respondents to replace some or all of the Omegas pursuant to 15 U.S.C. § 2064(d)(2), identify and describe the nature and amount of the "reasonable and foreseeable expenses" under 15 U.S.C. § 2064(e)(1) that Complainant contends should be reimbursed to persons by Respondents.

(b) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(d) describe in detail the substance of each such person's knowledge and/or information about any such contention.

96. (a) If the Commission orders Respondents to refund some or all of the Omegas pursuant to 15 U.S.C. § 2064(d)(3), identify and describe the nature and amount of the "reasonable and foreseeable expenses" under 15 U.S.C. § 2064(e)(1) that Complainant contends should be reimbursed to persons by Respondents.

(b) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(d) describe in detail the substance of each such person's knowledge and/or information about any such contention.

97. (a) If the Commission orders Respondents to repair some or all of the Omegas pursuant to U.S.C. § 2064(d)(1), identify and describe the nature and amount of the reimbursement to "any other person who is a manufacturer, distributor, or retailer of such product for such other person's expenses in connection with carrying out the order" that Complainant contends should be made by Respondents.

(b) identify all documents which describe, evidence, refer, support, or relate to

any such contention;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(d) describe in detail the substance of each such person's knowledge and/or information about any such contention.

98. (a) If the Commission orders Respondents to replace some or all of the Omegas pursuant to U.S.C. § 2064(d)(2), identify and describe the nature and amount of the reimbursement to "any other person who is a manufacturer, distributor, or retailer of such product for such other person's expenses in connection with carrying out the order" that Complainant contends should be made by Respondents.

(b) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(d) describe in detail the substance of each such person's knowledge and/or information about any such contention.

99. (a) If the Commission orders Respondents to refund the purchase price to some or all of the Omegas pursuant to U.S.C. § 2064(d)(3), identify and describe the nature and amount of the reimbursement to "any other person who is a manufacturer, distributor, or retailer of such product for such other person's expenses in connection with carrying out the order" that Complainant contends should be made by Respondents.

(b) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or

information about any such contention.

B. Potential Witnesses

100. Identify all former and/or current employees of Respondents with whom Complainant has had any contact regarding the Omegas. For each such person, identify and describe:

(a) the person's name;

(b) the person's last known home and business address;

(c) the person's last known telephone number;

(d) the person's last known position with Respondents;

(e) the date of any such contacts;

(f) the nature of any such contacts (e.g., letter, telephone conversation, in-person interview);

(f) a detailed description of the subject matter of such communication; and

(g) the identity of any other persons who were present during such contacts.

101. For each and every contact describe an response to Interrogatory No. 100, identify each and every document that describes, evidences, refers, or relates to such contacts, including without limitation any notes of such contacts, documents shown during the course of such contacts, lists of questions or answers given, or any reports of such communications.

102. Identify each and every person whom Complainant knows and/or believes to have knowledge or information concerning or related to the subject matter of the Complaint or other discoverable information. For each such person, describe:

(a) the person's name;

(b) the person's last known home and business address;

(c) the person's last known telephone number;

(d) the corporate or government affiliation of the person;

(e) whether the Complainant has contacted such person; and

(e) the specific subject matter of the person's knowledge.

103. Identify each and every fact witness that Complainant expects to testify on its behalf at the hearing in this matter. For each such fact witness, identify and describe:

(a) the name, title, business address, and home address for each such witness; and

(b) the subject matter about which each witness is expected to testify.

104. Identify each and every expert witness whom the Complainant expects to testify on its behalf at the hearing in this matter. For each such expert, identify and describe:

(a) the expert's name, title, home address, business address, education, employment since graduation from high school, and all publications authored or edited by the expert;

(b) the subject matter on which each expert is expected to testify;

(c) the substance and facts upon which the expert relies in forming his or her opinion;

(d) the opinions to which the expert is expected to testify;

(e) a summary of the grounds for each such opinion; and

(f) a statement and description of all information and documents upon which the expert relies or expects to rely.

105. Identify and describe any and all oral or written statements made by Respondents that the Complainant contends constitute an admission with reference to any of the issues raised in the Complaint. For each such statement, identify and describe:

(a) the person making the alleged statement;

(b) that person's relationship to Respondents;

(c) the content of the statement;

(d) the date, time, and place of the statement;

(e) the nature of the alleged statement (e.g., written or oral); and

(f) the identity of each person who heard the statement or otherwise has personal knowledge of the statement.

C. Other Allegations Made By the CPSC

106. In a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo, Singer states, "based on multiple random inquiries of sprinkler contractors across the nation in the recent past, we believe that Central's proposed labor payment falls considerably short of what has been, and remains, customarily required to remove and install sprinklers . . . ." With respect to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to the "multiple random inquiries of sprinkler contractors";

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such "multiple random inquires of sprinkler contractors";

(e) describe in detail the substance of each such person's knowledge and/or information of such "multiple random inquiries of sprinkler contractors";

(f) identify and describe in terms of a specific monetary amount "what has been, and remains, customarily required to remove and install sprinklers";

(g) identify each and every document that constitutes, evidences, refers, or relates in any way to "what has been, and remains, customarily required to remove and install sprinklers";

(h) identify each and every person whom Complainant knows and/or believes to have knowledge of "what has been, and remains, customarily required to remove and install sprinklers"; and

(i) describe in detail the substance of each such person's knowledge and/or

information of "what has been, and remains, customarily required to remove and install sprinklers."

107. In a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo, Singer states, "the evidence we have gathered does not support the view that dezincification alone is the cause of above-required operating pressures in Omegas from plastic pipe . . . ." With regard to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify and describe all of the "evidence we have gathered";

(d) identify each and every document that constitutes, evidences, refers, or relates in any way to this statement;

(e) identify each and every person whom Complainant knows and/or believes to have knowledge of this statement; and

(f) describe in detail the substance of each such person's knowledge and/or information.

108. In a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo, Singer states, "the evidence we have gathered does not support the view . . . that swollen o-rings due to cutting oil exposure are the exclusive cause of non-activation in Omegas manufactured before 1996." With regard to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify and describe all of the "evidence we have gathered";

(d) identify each and every document that constitutes, evidences, refers, or relates in any way to this statement;

(e) identify each and every person whom Complainant knows and/or believes to

have knowledge of this statement; and

(f) describe in detail the substance of each such person's knowledge and/or information.

109. In a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo, Singer states, "rather, primarily, the data points to multiple failure modes rooted in the design and construction of these sprinklers." With regard to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify and describe the "multiple failure modes rooted in the design and construction of these sprinklers";

(d) identify and describe "the data" referenced in the statement;

(e) identify and describe each and every document that constitutes, evidences, refers, or relates in any way to this statement;

(f) identify each and every person whom Complainant knows and/or believes to have knowledge of this statement; and

(g) describe in detail the substance of each such person's knowledge and/or information.

110. In a February 19, 1998 letter from Eric Stone of the CPSC to Kathleen Sanzo, the CPSC refuses to accept a "testing based corrective action proposal" from Respondents. With regard to this rejection:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for rejecting a "testing based corrective action proposal";

(c) identify and describe any and all reasons that the CPSC believes are correct in

rejecting such a proposal;

(d) identify each and every document that constitutes, evidences, refers, or relates in any way to the rejection of this proposal;

(e) identify each and every person whom Complainant knows and/or believes to have knowledge of the rejection of this proposal; and

(f) describe in detail the substance of each such person's knowledge and/or information.

111. In a February 19, 1998 letter from Eric Stone of the CPSC to Kathleen Sanzo, the CPSC states that "Central continues to insist on selling Omega sprinklers with silicone o-rings despite serious concerns about whether they will function in the long term." With regard to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify and describe all "serious concerns" that the CPSC has regarding the functioning of Omega sprinklers with silicone o-rings;

(d) identify each and every document that constitutes, evidences, refers, or relates in any way to such "serious concerns"; and

(e) identify each and every person whom Complainant knows and/or believes to have knowledge of such "serious concerns."

112. In a February 24, 1998 letter from Eric Stone of the CPSC to Kathleen Sanzo, Stone states, "x-ray examination of the unit showed that the internal shaft was cocked or tipped slightly and jammed in that position" and that the CPSC "plans to conduct non-destructive analysis of the unit . . . ." With regard to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify and describe any evidence that Omegas may be "cocked or tipped slightly and jammed in that position";

(d) identify each and every document that constitutes, evidences, refers, or relates in any way to the statement that Omegas are "cocked or tipped slightly and jammed in that position";

(e) identify each and every person whom Complainant knows and/or believes to have knowledge of any such problems;

(f) describe in detail the substance of each such person's knowledge and/or information; and

(g) describe any "non-destructive analysis of the unit" performed by or on behalf of the CPSC.

113. In a January 6, 1998 letter from Eric Singer of the CPSC to the state attorneys general, Singer states, "this contrasts with automatic fire sprinklers' historical rate of proving 99.5 percent effective." With regard to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify and describe all evidence that automatic fire sprinklers have an "historical rate of proving 99.5 percent effective";

(d) identify each and every document that constitutes, evidences, refers, or relates in any way to such historical rate of effectiveness;

(e) identify each and every person whom Complainant knows and/or believes to have knowledge of such historical rate of effectiveness; and

(f) describe in detail the substance of each such person's knowledge and/or information.

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UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

OFC OF THE SECRETARY
FREEDOM OF INFORMATION
DUPLICATE
1998 JUN 10 A 10: 55

In the Matter of	:	
	:	
Central Sprinkler Corp.	:	
	:	
and	:	**CPSC Docket No. 98-2**
	:	
Central Sprinkler Co.,	:	
	:	
Respondents.	:	
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RESPONDENTS' RESPONSES AND OBJECTIONS TO COMPLAINT COUNSEL'S FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS

Respondents Central Sprinkler Corporation and Central Sprinkler Company (collectively, "Central"), pursuant to 16 C.F.R. § 1025.33, hereby provide responses and objections to Complaint Counsel's First Request For Production of Documents and Things. Central's responses may be supplemented in accordance with 16 C.F.R. § 1025.31(f).

PREFATORY STATEMENT

Complaint Counsel has made extremely broad discovery requests. The responses to Complaint Counsel's request will exceed 400 boxes of documents, and the copying to make the documents available for inspection will cost Central in excess of $100,000.00. Despite this extraordinary volume and expense, Central will make every effort to comply with Complaint Counsel's requests.

Pursuant to 16 C.F.R. § 1025.33, Central will permit Complaint Counsel to inspect and designate for copying the responsive documents described below. This inspection will take place at a mutually convenient time at the offices of Morgan, Lewis & Bockius LLP, 1800 M Street, N.W., Washington, DC 20036. Because of the extremely large volume of documents, such

documents will be made available for inspection on a "rolling basis," with the documents made available to Complaint Counsel at their request after Central's counsel has reviewed such documents. Central anticipates that it will be able to make available immediately approximately 100 boxes for review by Complaint Counsel, and Central's counsel will continue to review the remaining responsive documents, estimated to encompass 300 boxes, as quickly as possible. Central also anticipates providing Complaint Counsel with a privilege log corresponding to the documents produced on a rolling basis.[1/]

In addition to the approximately 400 boxes described above, Central is in possession of more than 1,000 additional boxes consisting of the following categories: accounts payable purchase journals, accounts payable cash disbursement journals, sales commission reports, accounts receivable trial balances, customer sales activity reports, flash reports, general ledger statements, inventory accounting summaries, accounts payable post reports, labor tickets, invoices and credits, vendor invoices, sales analyses, accounts payable batch files, and miscellaneous documents located in multiple field offices across the nation. Central does not regard these documents to be responsive or relevant to this matter. In addition, the time and expense of reviewing and producing these documents would be prohibitive. Nevertheless, if Complaint Counsel desires to inspect such documents, they should notify Central's counsel, and Central will attempt to provide Complaint Counsel an opportunity to inspect such documents.

1/ If Complaint Counsel desires an independent copy of all of the documents contained in the 400 boxes, and Complaint Counsel is willing to pay for the cost of copying and transporting such documents, Central will of course cooperate fully with Complaint Counsel to arrange for such copying.

As with Complaint Counsel's discovery responses, Central's production of documents is subject to the entry of a reasonable Confidentiality Agreement.

OBJECTIONS TO EACH AND EVERY DISCOVERY REQUEST

Central objects to each and every Interrogatory, Document Request, and/or Request for Admission (collectively, the "Discovery Requests") stated by Complaint Counsel for the reasons set forth herein, and each stated objection is incorporated into the response to each numbered sub-part of the Discovery Requests as if set forth fully therein.

1. Central objects to each and every Discovery Request on the ground and to the extent that they seek information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence, and thus exceed the scope of permissible discovery as defined by 16 C.F.R. § 1025.31(c)(1).

2. Central objects to each and every Discovery Request on the ground and to the extent that they seek information and/or documents that are not in the possession, custody, or control of Central.

3. Central objects to each and every Discovery Request on the ground and to the extent that they call for a conclusion of law.

4. Central objects to each and every Discovery Request on the ground and to the extent that they seek information and/or documents protected from discovery by the attorney-client privilege pursuant to 16 C.F.R. § 1025.31(c)(2); specifically, any information or documents that contain, describe, refer, relate to, or reflect confidential communications between Central and their attorneys or their representatives regarding legal advice, opinions, counsel, or

confidential communications that were created, produced, written, prepared, typed, transcribed, copied, photographed, duplicated, or reproduced.

5. Central objects to each and every Discovery Request on the ground and to the extent they seek information and/or documents protected from discovery by the self-critical privilege or any other applicable privilege.

6. Central objects to each and every Discovery Request on the ground and to the extent that they seek information and/or documents prepared in anticipation of litigation or for trial by or for Central, Central's counsel, or Central's representative, because such materials are protected from discovery pursuant to 16 C.F.R. § 1025.31(c)(3).

7. Central objects to each and every Discovery Request on the ground and to the extent that they seek information and/or documents that contain, report, describe, reflect, refer, or relate to facts or opinions held or known by an expert retained or specially employed by Central in anticipation of litigation or preparation for trial, and who is not expected to be called as a witness at trial, because such material is protected from discovery pursuant to 16 C.F.R. § 1025.31(c)(4).

8. Central objects to each and every Discovery Request on the grounds and to the extent that they are overly vague, unduly broad, and/or unnecessarily burdensome.

9. Central objects to each and every Discovery Request on the grounds and to the extent that they are duplicative of other discovery requests, request information already provided to Complaint Counsel by Central, and/or request information equally available to or ascertainable by Complaint Counsel.

10. Central objects to each and every Discovery Request on the grounds and to the extent that such requests seek documents or information that constitute a trade secret or other confidential research, development, or commercial information.

11. Central objects to each and every Discovery Request on the ground and to the extent that they seek information and/or documents that are not owned by Central and/or are documents in which other parties have a proprietary interest.

12. Central objects to each and every Discovery Request on the grounds and to the extent that it fails to distinguish between Central Sprinkler Corporation and Central Sprinkler Company.

13. To the extent that a document request refers to or incorporates an interrogatory, or any part thereof, Central hereby fully incorporates by reference into the response to the document request any objections raised in responding to the interrogatory.

14. Central objects to each and every Discovery Request on the ground and to the extent that they exceed the scope of discovery permitted under 16 C.F.R. § 1025.31.

15. Central objects to the instruction and definitions included in the Discovery Requests on the ground and to the extent that they exceed the scope of permissible discovery under 16 C.F.R. § 1025.31.

16. To the extent that Central objects to a particular Discovery Request on the basis of a specific objection, Central hereby states that they do not thereby waive the General Objections. To the extent that Central objects to a particular Discovery Request but then proceeds to answer said Discovery Request in whole or in part, Central hereby states that they do not thereby waive any objection to the Discovery Request in question.

RESPONSES

REQUEST NO. 1: Provide all records relating in any way to your sale of any Omega sprinkler, including but not limited to purchase orders, shipping documents, billing statements and sales receipts.

RESPONSE NO. 1: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information.

By way of further explanation of these objections, Central states as follows: Central keeps records such as those requested for up to ten years. Thus, Central has an extremely large number of potentially responsive documents. Total compliance with this request would require production of approximately 900 boxes of invoices (each box containing 3000 to 5000 invoices), as well as similar numbers of shipping documents stored on-site at fourteen locations throughout the United States. In addition, Central generates multiple sales reports, including "flash reports" (total sales activity), sales by part, sales by product, sales by salesman, sales by region, and sales by warehouse. These weekly reports generally are kept for seven years and number in the thousands of boxes.

Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 2: Provide all records relating in any way to your provision of any Omega sprinkler as a free sample or promotional item.

RESPONSE NO. 2: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information.

Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 3: Provide all records relating in any way to marketing and/or sale of Omega sprinklers by you.

RESPONSE NO. 3: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information.

By way of further explanation of these objections, Central states as follows: Potentially responsive documents include all of the documents created by two entire

departments of Central: Technical Service and Sales. Technical Services creates all marketing documents, including product cut sheets, sales catalogues, pricebooks, and instructional videos. An entire floor of a building is dedicated to storage of current and obsolete Technical Services documents. Central's Sales Department is comprised of individuals working and creating documents on three continents, including every state in the United States.

Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 4: For each year in which you manufactured and/or distributed Omega sprinklers, provide all records relating in any way to

(a) your gross income;
(b) your net income;
(c) the amount in revenues generated from product sales;
(d) the amount in revenues generated from sales of Omega sprinklers.

RESPONSE NO. 4: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information.

By way of further explanation of these objections, Central states as follows: There are thousands of potentially responsive reports created on a weekly or monthly basis over sixteen years. While many of these reports exist in paper form, most are stored as data on tape. To retrieve this data, each tape would have to be located, loaded, and queried for relevant information. Central's Information Services department estimates that it would take a person working full-time at least two months to complete this task. Moreover, this request alone could amount to well over a million pages.

Subject to and without waiver of the foregoing objections, Central responds as follows: See Interrogatory Response No. 10. To the extent Central has any such information, pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 5: Provide all records relating in any way to the number of Omega sprinklers installed in the United States and/or its territories in:

(a) steel piping systems;
(b) copper piping systems;
(c) plastic piping systems;
(d) polybutylene piping systems;
(e) other piping systems not listed above (specify the type of piping system)?

RESPONSE NO. 5: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; and it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiver of the foregoing objections, Central responds as follows: See Interrogatory Response No. 10. To the extent Central has any

such information, pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 6: Provide all records relating in any way to the number of Omega sprinklers installed in the United States and/or its territories in:

a) private homes
b) apartment buildings
c) schools (including universities and colleges, public or private)
d) nursing homes
e) hospitals
f) detention facilities (including jails, juvenile detention facilities, etc.)
g) homeless shelters
h) facilities used for recreation (e.g., health clubs, gymnasiums, sports arenas, public pools, country clubs, etc.)
i) hotels
j) museums
k) offices (including office buildings)
l) warehouses with no public access areas
m) industrial facilities with no public access areas

RESPONSE NO. 6: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; and it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiver of the foregoing objections, Central responds as follows: See Interrogatory Response No. 10. To the extent Central has any such information, pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 7: Provide all records relating in any way to the current sales price for each Omega make and/or model listed in your response to Complaint Counsel's Interrogatory No. 13.

RESPONSE NO. 7: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information.

By way of further explanation of these objections, Central states as follows: The final price paid by a particular customer will vary because price is contingent on several factors, including negotiation, discounts for timely payment, credit, quantity and purchasing history.

Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 8: Provide the complete personnel files for all persons identified in your response to Complaint Counsel's Interrogatory No. 15.

RESPONSE NO. 8: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; and it seeks information and/or documents that constitute trade

secrets or other confidential research, development, commercial, or otherwise proprietary information.

REQUEST NO. 9: Provide the complete personnel files for all persons involved in design and/or development of each make and/or model Omega sprinkler.

RESPONSE NO. 9: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, commercial, or otherwise proprietary information.

REQUEST NO. 10: Provide all records relating in any way to the design of and/or specifications for each component part and each chemical (including lubricants), tool and/or substance used in the Omega manufacturing process.

RESPONSE NO. 10: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents

available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 11: Provide all records relating in any way to your acquisition of any component part, chemical (including lubricants, etc.), tool and/or substance identified in your response to Complaint Counsel's Interrogatory No. 17.

RESPONSE NO. 11: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information.

By way of further explanation of these objections, Central states as follows: In addition to the documents Central will produce, there are at least 700 additional boxes of Accounts Payable documents called "batch files" that might contain minimally responsive documents. Batch files are created and stored in such a fashion that responsive documents cannot be separated from non-responsive documents without reading every file. Batch files are stored according to the day a vendor invoice was paid, rather than by a vendor or part. In addition, there are over 700 boxes of Purchase Orders that may contain some responsive materials.

Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents

available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 12: Provide the complete personnel files of any persons who were/are employed by you who in any way took part or were involved in the design, specifications, and/or development of each component part, chemical (including lubricants, etc.), tool and/or substance identified in your response to Complaint Counsel's Interrogatory No. 17.

RESPONSE NO. 12: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, commercial, or otherwise proprietary information.

REQUEST NO. 13: Provide all records relating in any way to the procedures and specifications for the manufacture of each different make and/or model Omega sprinkler, including any changes in such procedures and/or specifications over time, including all tools, chemicals and substances used in the manufacture of same, including but not limited to cut sheets, drawings, and manufacturing instructions.

RESPONSE NO. 13: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or

commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 14: Provide three samples of each make and model of Omega sprinkler that you have ever manufactured.

RESPONSE NO. 14: Central responds as follows: Because the design of many of the Omega models has changed over time, it is possible that samples of every make and model of Omega sprinkler ever manufactured may not still be in existence. Pursuant to 16 C.F.R. § 1025.33, to the extent available, Central will make responsive Omega models manufactured by Central Sprinkler Company available to Complaint Counsel for inspection, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 15: Provide three samples of each tool, chemical and/or substance used in the manufacture of each make and model of Omega sprinkler. (If any such tools, chemicals and/or substances are used for more than one make and/or model of Omega, you need only provide one set of three samples).

RESPONSE NO. 15: Central objects to this request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks things that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks things that constitute trade secrets or other confidential research, development, or commercial information; it is duplicative of other discovery requests; and it seeks things that are not in

Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel.

REQUEST NO. 16: Provide all records relating in any way to any chemical or substance used in the manufacture of Omega sprinkler(s) to prevent leaking of those sprinklers when they are later installed into a sprinkler system.

RESPONSE NO. 16: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome. Subject to and without waiver of the foregoing objections, Central responds as follows: to the extent that this document request is referring to products such as "Stop-Leak," no such documents are known to exist.

REQUEST NO. 17: Provide all records relating in any way to any tests performed by you or anyone else to assess whether and/or how each chemical and/or substance listed in your response to Complaint Counsel's Interrogatory No. 23 affects the operation of Omega sprinkler(s) or any Omega component part.

RESPONSE NO. 17: Central hereby incorporates its response and objections to Interrogatory No. 23.

REQUEST NO. 18: Provide all records relating in any way to each communication between you and any persons and/or entities (including your employees, agents, and consultants) regarding each chemical and/or substance listed in your response to Complaint Counsel's Interrogatory No. 23.

RESPONSE NO. 18: Central hereby incorporates its response and objections to Interrogatory No. 23.

REQUEST NO. 19: Provide all records relating in any way to each prototypes and/or precursors of any of the Omega sprinklers listed in your response to Complaint Counsel's Interrogatory No. 5.

RESPONSE NO. 19: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 20: Provide the complete personnel files of any and all employees who were in any way involved in designing, developing and/or reviewing any and all prototypes and/or precursors of any of the Omega sprinklers listed in your response to Complaint Counsel's Interrogatory No. 5.

RESPONSE NO. 20: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, commercial, or otherwise proprietary information.

REQUEST NO. 21: Provide all records relating in any way to any and all measures and/or procedures taken by you or anyone on your behalf at any time before, during, and/or after each Omega sprinkler is manufactured, to ensure that each Omega sprinkler will fully and properly activate when exposed to its activation (triggering) temperature.

RESPONSE NO. 21: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 22: Provide all records relating in any way to any actual or alleged problems with, imperfections or flaws in, defects or deficiencies in or associated with any component part(s) of any Omega sprinkler, or any chemical, tool or substance used in manufacturing Omegas (including whether any component part has been or alleged to have been out of tolerance) of which you have knowledge or have been advised.

RESPONSE NO. 22: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it calls for a legal conclusion. Subject to and without waiver of the

foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 23: Provide all records relating in any way to the mechanism of proper operation of each different make and model of Omega sprinkler, once exposed to its activation (triggering) temperature.

RESPONSE NO. 23: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it calls for a legal conclusion. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 24: Provide all records relating in any way to whether pressure (not internal to or part of the Omega itself) is required for activation of any make and/or model of Omega sprinkler.

RESPONSE NO. 24: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or

other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 25: Provide all records relating in any way to the amount of pressure (not internal to or part of the Omega itself) required for activation of each make and/or model of Omega sprinkler.

RESPONSE NO. 25: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 26: Provide all records relating in any way to any non-Omega sprinklers that contain an "o" ring.

RESPONSE NO. 26: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome ; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from

discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel; and it is duplicative of other discovery requests.

By way of further explanation of these objections, Central states as follows: Most of the sprinkler heads manufactured by Central contain an o-ring. However, only the Omegas use a dynamic o-ring. The remaining models use a static o-ring seal. In addition, there are sprinklers manufactured by other companies that contain o-rings.

Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 27: Provide all records relating in any way to the approval, listing and/or certification of each Omega make and/or model, and each adaptation or device to be used with any Omega make and/or model (such as the "helper spring"), including testing or submission for approval, listing and/or certification by a certifying laboratory or institution (such as LJL or FM), and including all records relating in any way to whether approval, listing or certification was ever refused, withdrawn, discontinued or canceled for any Omega sprinkler, sprinkler component part or allegedly assistive operating device (such as the helper spring), and/or whether any certifying laboratory or institution has ever objected to your sale and/or distribution of any Omega sprinkler.

RESPONSE NO. 27: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or

work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 28: Provide all records relating in any way to any advertisement, representation, indication and/or suggestion in any marketing material that Omega sprinklers that are not listed or certified by FM are listed or certified by FM.

RESPONSE NO. 28: Central hereby incorporates its response and objections to Interrogatory No. 32.

REQUEST NO. 29: Provide all records relating in any way to any advertisement, representation, indication and/or suggestion in any marketing material that Omega sprinklers that are not listed or certified by UL are listed or certified by UL.

RESPONSE NO. 29: Central hereby incorporates its response and objections to Interrogatory No. 33.

REQUEST NO. 30: Provide all records relating in any way to any Omega that did not or allegedly did not activate in a fire.

RESPONSE NO. 30: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client

privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 31: Provide all records relating in any way to anyone who was injured or allegedly was injured as a result of or in association with a fire (including death incurred or allegedly incurred in attempting to escape the fire) in which any Omega did not or allegedly did not activate.

RESPONSE NO. 31: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 32: Provide all records relating in any way to anyone who died or allegedly died as a result of or in association with a fire (including death incurred or allegedly incurred in attempting to escape the fire) in which any Omega did not or allegedly did not activate.

RESPONSE NO. 32: Central responds as follows: no such documents are known to exist.

REQUEST NO. 33: Provide all records relating in any way to any property damage or allegedly property damage as a result of or in association with a fire (including death incurred or allegedly incurred in attempting to escape the fire) in which any Omega did not or allegedly did not activate.

RESPONSE NO. 33: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 34: Provide all records relating in any way to any testing and/or examination of each Omega that failed to activate or allegedly failed to activate in a fire, the system in which that Omega was installed, and/or any other sprinkler from the same site.

RESPONSE NO. 34: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; it seeks information and/or documents that are not in Central's possession, are not owned by Central,

and/or are equally accessible to or ascertainable by Complaint Counsel; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 35: Provide all records relating in any way to each Omega sprinkler of which you are aware or have been notified that, when tested, did not activate at 7 psig or below when exposed to its activation/triggering temperature.

RESPONSE NO. 35: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; it calls for a legal conclusion; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 36: Provide all records relating in any way to any examination and/or test on any Omega of which you are aware that failed to activate or allegedly failed to activate at 7 psig or below when exposed to its activation/triggering temperature in testing, the system in which it was installed, and/or any other sprinkler from the same site.

RESPONSE NO. 36: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; it calls for a legal conclusion; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 37: Provide all records relating in any way to any Omega sprinkler of which you are aware that, when tested in the field, did not activate or allegedly did not activate when exposed to its activation/triggering temperature.

RESPONSE NO. 37: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 38: Provide all records relating in any way to any examination and/or test on any Omega of which you are aware that failed to activate or allegedly failed to activate when exposed to its activation/triggering temperature when tested in the field.

RESPONSE NO. 38: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 39: Provide all records relating in any way to the design and/or development of the Omega "helper spring," and/or specifications for the manufacture of the "helper spring."

RESPONSE NO. 39: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 40: If you contend that an Omega that is installed into a sprinkler system containing water at a pressure of at least 7 psig, that does not activate upon being exposed to its activation (triggering) temperature for long enough for its fusible like to melt, will activate if fitted with the "helper spring" (that Central has proposed for use with the Omega), provide all records that you claim or believe support your contention.

RESPONSE NO. 40: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 41: Provide all records relating in any way to the method of operation of "helper spring."

RESPONSE NO. 41: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 42: Provide all records relating in any way to any and all tests performed by you or anyone else to assess whether and/or how the "helper spring" affects the operation of an Omega sprinkler or any Omega component part.

RESPONSE NO. 42: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 43: Provide all records relating in any way to your communications with any persons and/or entities (including your employees, agents, and consultants) regarding the operation and/or efficacy of the helper spring.

RESPONSE NO. 43: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 44: Provide all records relating in any way to any Omega sprinkler or component of which you are aware or have been notified has cracked or broken, or allegedly cracked or broken.

RESPONSE NO. 44: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 45: Provide all records relating in any way to any Omega sprinkler or component of which you are aware or have been notified has exhibited corrosion.

RESPONSE NO. 45: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 46: Provide all records relating in any way to any Omega sprinkler or component of which you are aware or have been notified has leaked and/or weeped when tested or in a fire.

RESPONSE NO. 46: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 47: Provide all records relating in any way to any Omega sprinkler or component of which you are aware or have been notified has activated unnecessarily or prematurely (either without or before being exposed to its activation/triggering temperature) when tested or in a fire.

RESPONSE NO. 47: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or

commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 48: If you contend that dezincification may cause an Omega to:

(a) leak and/or weep;
(b) activate prematurely and/or unnecessarily;
(c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or
(d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or
(e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature),

provide all records that you claim or believe support your contention.

RESPONSE NO. 48: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 49: Provide all records relating in any way to any Omega with a plunger housing made of an alloy other than CDA 35330, from a plastic or copper piping system, that has exhibited or allegedly exhibited dezincification.

RESPONSE NO. 49: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 50: Provide all records relating in any way to testing and/or examination of the system in which any Omega with a plunger housing made of an alloy other than CDA 35330, from a plastic or copper piping system, that has exhibited or allegedly exhibited dezincification, was installed, and/or testing and/or examination of any other sprinkler from the same site.

RESPONSE NO. 50: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 51: Provide all records relating in any way to any Omega with a plunger housing made of CDA 35330 alloy, from a plastic or copper piping system, that has exhibited or allegedly exhibited dezincification.

RESPONSE NO. 51: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 52: Provide all records relating in any way to testing and/or examination of the system in which any Omega with a plunger housing made of CDA 35330 alloy, from a plastic or copper piping system, that has exhibited or allegedly exhibited dezincification was installed, and/or testing and/or examination of any other sprinkler from the same site.

RESPONSE NO. 52: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 53: Provide all records relating in any way to any Omega from a piping system that is neither copper or plastic that has exhibited or allegedly exhibited dezincification.

RESPONSE NO. 53: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 54: Provide all records relating in any way to testing and/or examination of the system in which any Omega from a piping system that is neither copper or plastic, that has exhibited or allegedly exhibited dezincification, was installed, and/or testing and/or examination of any other sprinkler from the same site.

RESPONSE NO. 54: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 55: Provide all records relating in any way to any Omega sprinkler from a copper or plastic piping system that did not exhibit dezincification, and that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire.

RESPONSE NO. 55: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 56: Provide all records relating in any way to testing and/or examination of the system in which any Omega that did not exhibit dezincification, and that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire, was installed, and/or testing and/or examination of any other sprinkler from the same site.

RESPONSE NO. 56: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information

and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 57: Provide all records relating in any way to any and all changes listed in your response to Complaint Counsel's Interrogatory No. 47.

RESPONSE NO. 57: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 58: Provide all records relating in any way to any and all tests and/or examinations conducted to determine whether an Omega manufactured after any and all changes listed in your response to Complaint Counsel's Interrogatory No. 47 exhibits dezincification.

RESPONSE NO. 58: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 59: Provide all records relating in any way to any and all substances that you contend have been used by sprinkler installers/contractors, plumbers and/or others directly involved in installation and/or maintenance of sprinkler systems, that may cause an Omega to:

(a) leak and/or weep;
(b) activate prematurely and/or unnecessarily;
(c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or
(d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or
(e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature).

RESPONSE NO. 59: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from

discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 60: If you contend that the use of stop leak or other sealant, leakage prevention substance or pipe cement by sprinkler installers/contractors, plumbers and/or others directly involved in installation and/or maintenance of sprinkler systems may cause an Omega to:

(a) leak and/or weep;
(b) activate prematurely and/or unnecessarily;
(c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or
(d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or
(e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature), provide all records that you claim or believe support your contention.

RESPONSE NO. 60: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents

available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 61: Provide all records relating in any way to any and all Omegas that were exposed or were allegedly exposed to stop leak or any other sealant, leakage prevention substance or pipe cement.

RESPONSE NO. 61: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 62: Provide all records relating in any way to testing and/or examination of the system in which any and all Omegas that have been exposed or allegedly have been exposed to stop leak or any other sealant, leakage prevention substance or pipe cement, were installed, and/or testing and/or examination of any other sprinkler from the same site.

RESPONSE NO. 62: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing

objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 63: Provide all records relating in any way to any and all Omegas that were not exposed to stop leak or any other sealant, leakage prevention substance or pipe cement, but that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire?

RESPONSE NO. 63: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 64: Provide all records relating in any way to any and all changes listed in your response to Complaint Counsel's Interrogatory No. 51.

RESPONSE NO. 64: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks

information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 65: Provide all records relating in any way to any and all tests and/or examinations conducted to determine whether an Omega manufactured after any and all changes listed in your response to Complaint Counsel's Interrogatory No. 51 was affected by the use of stop leak or any other sealant., leakage prevention substance or pipe cement.

RESPONSE NO. 65: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 66: If you contend that the use of cutting oil or other substances used by sprinkler installers/contractors, plumbers and/or others directly involved in installation and/or maintenance of sprinkler systems to cut pipe may cause an Omega to:

(a) leak and/or weep;
(b) activate prematurely and/or unnecessarily;

(c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or
(d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or
(e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature),

provide all records that you claim or believe support your contention.

RESPONSE NO. 66: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 67: Provide all records relating in any way to any Omega that was exposed or was allegedly exposed to cutting oils or other substances used to cut pipe.

RESPONSE NO. 67: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or

work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 68: Provide all records relating in any way to testing and/or examination of the system in which any Omega that has been exposed or allegedly has been exposed to cutting oils or other substances used to cut pipe, was installed, and/or testing and/or examination of any other sprinkler from the same site.

RESPONSE NO. 68: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 69: Provide all records relating in any way to any Omega sprinkler that was not exposed to cutting oil or other substance used to cut pipe, but that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire.

RESPONSE NO. 69: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 70: Provide all records relating in any way to testing and/or examination of the system in which any Omega that was not exposed or allegedly exposed to cutting oils or other substances used to cut pipe, but that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire, was installed, and/or testing and/or examination of any other sprinkler from the same site.

RESPONSE NO. 70: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the

discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 71: Provide all records relating in any way to any and all changes listed in your response to Complaint Counsel's Interrogatory No. 55.

RESPONSE NO. 71: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 72: Provide all records relating in any way to the testing and/or examination of any Omega manufactured after any and all changes listed in your response to

Complaint Counsel's Interrogatory No. 55, to determine whether it was exposed to cutting oil or other substance used to cut pipe.

RESPONSE NO. 72: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 73: If you contend that swelling of the "o" ring in an Omega sprinkler may cause the Omega to:

(a) leak and/or weep;
(b) activate prematurely and/or unnecessarily;
(c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or
(d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or
(e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature),

provide all records that you believe or claim support your contention.

RESPONSE NO. 73: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information

and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 74: Provide all records relating in any way to any and all Omegas containing an EPDM "o" ring, from a steel piping system, that have exhibited or allegedly exhibited "o" ring swelling.

RESPONSE NO. 74: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 75: Provide all records relating in any way to testing and/or examination of the system in which any Omega containing an EPDM "o" ring, from a steel piping system, that has exhibited or allegedly exhibited "o" ring swelling, was installed, and/or testing and/or examination of any other sprinkler from the same site.

RESPONSE NO. 75: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks

information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 76: Provide all records relating in any way to any Omega containing a silicone "o" ring, from a steel piping system, that has exhibited or allegedly exhibited "o" ring swelling.

RESPONSE NO. 76: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 77: Provide all records relating in any way to testing and/or examination of the system in which any Omega containing a silicone "o" ring, from a steel

piping system, that has exhibited or allegedly exhibited "o" ring swelling, was installed, and/or testing and/or examination of any other sprinkler from the same site.

RESPONSE NO. 77: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 78: Provide all records relating in any way to any Omega from a piping system that is not steel that has exhibited or allegedly exhibited "o" ring swelling.

RESPONSE NO. 78: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 79: Provide all records relating in any way to testing and/or examination of the system in which any Omega, from a steel piping system, that has exhibited or allegedly exhibited "o" ring swelling, was installed, and/or testing and/or examination of any other sprinkler from the same site.

RESPONSE NO. 79: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it seeks information and/or documents that are not in Central's possession, are not owned by Central, and/or are equally accessible to or ascertainable by Complaint Counsel. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 80: Provide all records relating in any way to any Omega from a steel piping system that did not exhibit "o" ring swelling, but that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire.

RESPONSE NO. 80: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information

and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 81: Provide all records relating in any way to testing and/or examination of the system in which any Omega that did not exhibit "o" ring swelling, but that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire, was installed, and/or testing and/or examination of any other sprinkler from the same site.

RESPONSE NO. 81: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 82: Provide all records relating in any way to any and all changes listed in your response to Complaint Counsel's Interrogatory No. 61.

RESPONSE NO. 82: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 83: Provide all records relating in any way to the testing and/or examination of any Omega manufactured after any and all changes listed in your response to Complaint Counsel's Interrogatory No. 61, to determine whether it exhibits "o" ring swelling.

RESPONSE NO. 83: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 84: Provide all records relating in any way to the methods used by you or anyone on your behalf to determine whether an Omega has a swollen "o" ring.

RESPONSE NO. 84: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 85: If you contend that adhesion of an Omega sprinkler's "o" ring to the plunger housing or main housing of the Omega may cause the Omega to:

(a) leak and/or weep;
(b) activate prematurely and/or unnecessarily;
(c) fail to activate at 7 psig or below in testing (when the Omega is exposed to its activation/triggering temperature); and/or
(d) fail to activate in field testing (when the Omega is exposed to its activation/triggering temperature); and/or
(e) fail to activate in a fire (when the Omega is exposed to its activation/triggering temperature),

provide all records that you claim or believe support your contention.

RESPONSE NO. 85: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or

commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 86: Provide all records relating in any way to any Omega that has exhibited or allegedly exhibited "o" ring adhesion.

RESPONSE NO. 86: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 87: Provide all records relating in any way to any and all changes listed in your response to Complaint Counsel's Interrogatory No. 64.

RESPONSE NO. 87: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or

other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 88: Provide all records relating in any way to the testing and/or examination of any Omega manufactured after any and all changes listed in your response to Complaint Counsel's Interrogatory No. 64, to determine whether the Omega exhibits "o" ring adhesion.

RESPONSE NO. 88: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 89: Provide all records relating in any way to the methods used by you or anyone on your behalf to determine whether an Omega exhibits "o" ring adhesion.

RESPONSE NO. 89: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from

discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 90: Provide all records relating in any way to any and all fires in which all Omegas exposed to temperatures at or in excess of their activation/triggering temperature activated.

RESPONSE NO. 90: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 91: Provide all records relating in any way to any testing and/or examination of any Omegas from sites in which all Omegas exposed to temperatures at or in excess of their activation/triggering temperature activated.

RESPONSE NO. 91: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute

trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 92: Provide all records relating in any way to any tests and/or examinations of Omega sprinklers conducted by you or anyone on your behalf.

RESPONSE NO. 92: Central objects to this document request on the grounds and to the extent that it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 93: Provide all records relating in any way to any and all tests and/or examinations of Omega sprinklers conducted pursuant to the protocol in UL 199 or UL 1626, that one or more Omegas did not pass (according to the criteria listed in UL 199 for that test).

RESPONSE NO. 93: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or

other confidential research, development, or commercial information; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 94: Provide all records relating in any way to any testing of any Omega conducted by you or on your behalf in which the Omega that, upon being exposed to its activation/triggering temperature, did not activate within 5 seconds at a pressure at or below 7 psig pressure.

RESPONSE NO. 94: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 95: Provide all records relating in any way to any meetings, discussions and/or communications in which you were in any way involved, and/or which you have received, in which the following were discussed:

a) failure of Omega sprinklers to activate in testing or in a fire;

b) dezincification as a cause or possible cause of Omega non-activation in testing or in a fire;
c) stop leak or other leak prevention substance as a cause or possible cause of Omega non-activation in testing or in a fire;
d) "o" ring swelling as a cause or possible cause of Omega non-activation in testing or in a fire;
e) if o" ring adhesion as a cause or possible cause of Omega non-activation in testing or in a fire;
f) excessive hydrocarbons as a cause or possible cause of Omega non-activation in testing or in a fire;
g) improper system design as a cause or possible cause of Omega non-activation in testing or in a fire;
h) UL listing or certification of any Omega sprinkler or sprinkler assistive device such as the "helper spring;"
i) FM listing or certification of any Omega sprinkler or sprinkler assistive device such as the "helper spring;"
j) NFPA 13 requirements or applicability with respect to fire sprinklers or sprinkler systems;
k) NFPA 25 requirements or applicability with respect to fire sprinklers or sprinkler systems;
l) UL 199 requirements or applicability with respect to fire sprinklers or sprinkler systems;
m) UL 1626 requirements or applicability with respect to fire sprinklers or sprinkler systems.

RESPONSE NO. 95: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it calls for a legal conclusion. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will

make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 96: Provide all records relating in any way to any problem, potential problem, complaint or concern (including any reports of nonactivation or possibility of nonactivation) or which you have been notified, regarding or in any way relating to an Omega sprinkler.

RESPONSE NO. 96: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it calls for a legal conclusion. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 97: Provide all records relating in any way to your notification (or notification on your behalf) of any person and/or entity of any and all problems, potential problems, complaints or concerns (including any reports of nonactivation or possibility of nonactivation) regarding or in any way related to any Omega sprinkler.

RESPONSE NO. 97: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the

discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it calls for a legal conclusion. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 98: Provide all records relating in any way to any and all requests for information by you (or on your behalf) to any sprinkler contractor or sprinkler owner regarding any Omega sprinkler, including the sprinkler contractor or owner's response.

RESPONSE NO. 98: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 99: Provide all records relating in any way to your (or anyone on your behalf) provision (either by sale or without charge) of sprinklers to anyone to replace some or all of the Omegas installed in a particular location.

RESPONSE NO. 99: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 100: Provide all records relating in any way to the cost of replacement of any and all Omega sprinklers.

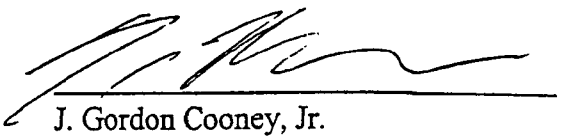
RESPONSE NO. 100: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents that are neither relevant nor reasonably calculated to lead to the discovery of admissible evidence; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; and it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information. Subject to and without waiver of the foregoing objections, Central

responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

REQUEST NO. 101: Provide all records relating in any way to your testing (or testing on your behalf) of any Omega sprinklers from any building or structure in which Omega sprinklers are/were installed.

RESPONSE NO. 101: Central objects to this document request on the grounds and to the extent that it is overly vague, unduly broad, and/or unnecessarily burdensome; it seeks information and/or documents protected from discovery by the attorney-client privilege and/or work product doctrine; it seeks information and/or documents that constitute trade secrets or other confidential research, development, or commercial information; and it is duplicative of other discovery requests. Subject to and without waiver of the foregoing objections, Central responds as follows: pursuant to 16 C.F.R. § 1025.33, Central will make responsive documents available for inspection and copying by Complaint Counsel, subject to the entry of a reasonable Confidentiality Agreement.

Dated: May 26, 1998



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Attorneys for Respondents
CENTRAL SPRINKLER CORP. and
CENTRAL SPRINKLER COMPANY

CERTIFICATE OF SERVICE

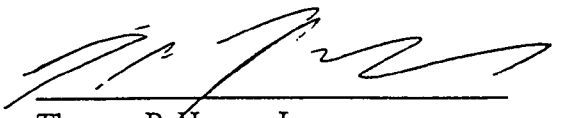
I, Thomas P. Hogan, Jr., hereby certify that on this date a true and correct copy of the foregoing Respondents' Responses and Objections to Complaint Counsel's First Requests for Production of Documents and Things was served via regular mail upon the following:

Eric H. Singer
Howard Tarnoff
Deborah S. Orlove
Complaint Counsel
U.S. Consumer Product Safety Commission
4430 East West Highway
Bethesda, MD 20814

Alan H. Schoem
Assistant Executive Director
Office of Compliance
U.S. Consumer Product Safety Commission
4430 East West Highway
Bethesda, MD 20814

The Hon. William B. Moran
United States Administrative Law Judge
Office of Administrative Law Judges
401 M Street, S.W.
Mail Code 1900L
Washington, DC 20460

Dated: May 26, 1998



Thomas P. Hogan, Jr.

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents	)	

COMPLAINT COUNSEL'S RESPONSES TO RESPONDENTS' FIRST SET OF INTERROGATORIES

Complaint Counsel hereby responds to Respondents' First Set of Interrogatories.

A. Allegations of the Complaint

1. (a) State whether CSC manufactures Omegas.

If so:

(b) identify and describe any such manufacturing;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such manufacturing;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such manufacturing; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) Based on, among other things, representations made by Central's

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Carmine Schiavone and George Meyer, and Central Sprinkler Corporation in its "Company Information" section on its web site (in which CSC describes itself as "a leading manufacturer or automatic fire sprinkler heads"), and based on statements made by Central's Counsel (as late as an April 7, 1998 letter from Kathleen Sanzo to Eric Stone, Director of Administrative Litigation, in which Ms. Sanzo states that "Central has reviewed its manufacturing records . . ."), Complaint Counsel responds that CSC manufactures Omegas.

(b) Complaint Counsel is in the process of requesting from Respondents a description of such manufacturing. This information is within Respondents' possession.

(c) Complaint Counsel is in the process of requesting from Respondents the identification of all documents describing, evidencing and referring to Respondents' manufacture of Omega sprinklers. This information is within Respondents' possession.

(d) Complaint Counsel is in the process of requesting from Respondents the identify of every person known or believed to have knowledge of the manufacture of Omega sprinklers. This information is within Respondents' possession.

(e) See response to (d), above.

2. (a) State whether CSC sells Omegas.

If so:

(b) **identify and describe any such sales;**

(c) **identify each and every document that describes, evidences, refers, or relates in any way to such sales;**

(d) **identify each and every person whom Complainant knows and/or believes to have knowledge of such sales; and**

(e) **describe in detail the substance of each such person's knowledge and/or information.**

Response: (a) Based on, among other things, representations made by Central's Carmine Schiavone and George Meyer, and Central Sprinkler Corporation in its "Company Information" section on its web site (in which CSC states that "approximately 56% of the Company's (defined as Central Sprinkler Corporation at the outset of the section) annual sales are derived from the manufacture and sale of fire sprinkler heads and valves . . . ," Complaint Counsel responds that CSC sells Omegas.

(b) Complaint Counsel is in the process of requesting from Respondents a description of such sales. This information is within Respondents' possession.

(c) Complaint Counsel is in the process of requesting from Respondents the identification of all documents describing, evidencing and referring to Respondents' sales of Omega sprinklers. This information is within Respondents' possession.

(d) Complaint Counsel is in the process of requesting from Respondents the

identify of every person known or believed to have knowledge of the sale of Omega sprinklers. This information is within Respondents' possession.

(e) See response to (d), above.

3. (a) State whether CSC markets Omegas.

If so:

(b) identify and describe any such marketing;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such marketing;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such marketing; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) Based on, among other things, representations made by Central Sprinkler Corporation in its "Company Information" section on its web site (in which CSC states that "approximately 56% of the Company's (defined as Central Sprinkler Corporation at the outset of the section), based on brochures depicting the Omega line of sprinklers, and based on statements of Central's counsel and corporate officers in submissions and meetings with CPSC staff, Complaint Counsel responds that CSC markets Omegas.

(b) Complaint Counsel is in the process of requesting from Respondents a

description of such marketing. This information is within Respondents' possession.

(c) Complaint Counsel is in the process of requesting from Respondents the identification of all documents describing, evidencing and referring to Respondents' marketing of Omega sprinklers. This information is within Respondents' possession.

(d) Complaint Counsel is in the process of requesting from Respondents the identify of every person known or believed to have knowledge of the marketing of Omega sprinklers. This information is within Respondents' possession.

(e) See response to (d), above.

4. With respect to the allegation of Paragraph 5 of the Complaint that CSC is a "manufacturer" of consumer products:

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: See Complaint Counsel's Response to Interrogatory No. 1, and Complaint Counsel's Opposition to Respondents' Motion to Dismiss.

5. (a) **State whether the C-1 model of the Omegas constitutes a "consumer product" pursuant to 15 U S.C. § 2052(a)(1).**

If so:

(b) **set forth the factual basis for this assertion;**

(c) **identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;**

(d) **identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;**

(e) **describe in detail the substance of each such person's knowledge and/or information.**

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

6. (a) **State whether the C-1 A model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).**

If so:

(b) **set forth the factual basis for this assertion;**

(c) **identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;**

(d) **identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;**

(e) **describe in detail the substance of each such person's knowledge and/or information.**

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

7. (a) **State whether the C-1A PRO model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).**

If so:

(b) **set forth the factual basis for this assertion;**

(c) **identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;**

(d) **identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;**

(e) **describe in detail the substance of each such person's knowledge and/or information.**

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

8. (a) State whether the C-lA PRO ID model of the Omegas constitutes a "consumer product" pursuant to I5 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the

exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

9. (a) State whether the EC-20 model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

10. (a) **State whether the EC-20A model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).**

If so:

(b) **set forth the factual basis for this assertion;**

(c) **identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;**

(d) **identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;**

(e) **describe in detail the substance of each such person's knowledge and/or information.**

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

11. (a) **State whether the EC-20 AID model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).**

If so:

(b) **set forth the factual basis for this assertion;**

(c) **identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;**

(d) **identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;**

(e) **describe in detail the substance of each such person's knowledge and/or information.**

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

12. (a) **State whether the HEC- 12 model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).**

If so:

(b) **set forth the factual basis for this assertion;**

(c) **identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;**

(d) **identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;**

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

13. (a) State whether the HEC-12 ID model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the

exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

14. (a) State whether the HEC-12 PRO model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

15. (a) State whether the HEC-12A PRO model of the Omegas

constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

16. (a) State whether the HEC-12 RES model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) **identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;**

(d) **identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;**

(e) **describe in detail the substance of each such person's knowledge and/or information.**

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

17. (a) **State whether the HEC-20 model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).**

If so:

(b) **set forth the factual basis for this assertion;**

(c) **identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;**

(d) **identify each and every person whom Complainant knows and/or**

believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

18. (a) State whether the HEC-20 ID model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for

a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

19. (a) State whether the R-1 model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine

Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

20. (a) State whether the R-1A model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

21. (a) State whether the R-1 M model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C.§ 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion,

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

22. (a) State whether the AC model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) **identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;**

(e) **describe in detail the substance of each such person's knowledge and/or information.**

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

23. (a) **State whether the M model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).**

If so:

(b) **set forth the factual basis for this assertion;**

(c) **identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;**

(d) **identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;**

(e) **describe in detail the substance of each such person's knowledge and/or information.**

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

24. (a) State whether the Flow Control model of the Omegas constitutes a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided

in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

25. **With respect to the allegation of Paragraph 6 of the Complaint that the Omegas are "consumer products":**

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory to the extent that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof. Further evidence is found in the records of testing provided in response to Respondents' Requests for Production, and in Respondents' files. Carmine Schiavone and George Meyer, among others at Central, have knowledge of this assertion.

26. **(a) Separately for each model of the Omegas listed in the Complaint, state whether such model is sold by Respondents directly to consumers. If so:**

(b) identify all documents which describe, evidence, refer, or relate

to any such sales;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such sales; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, the exhibits in support thereof, and the applicable statutes and case law cited therein, which indicate that sale of an article directly to consumers is not necessary for CPSC jurisdiction.

27. **(a) Separately for each model of the Omegas listed in the Complaint, state whether Respondents market such a model to consumers. If so:**

(b) identify all documents which describe, evidence, refer, or relate to any such marketing;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such marketing; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, the exhibits in support thereof, and the applicable statutes and case law cited therein, which indicate that marketing of an article directly to consumers is not necessary for CPSC jurisdiction.

28. (a) Separately for each model of the Omegas listed in the Complaint, state whether such a model is installed by consumers themselves (as opposed to professional contractors).

If so:

(b) identify all documents which describe, evidence, refer, or relate to any such installation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such installation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, the exhibits in support thereof, and the applicable statutes and case law cited therein, which indicate that installation of an article

(and other "direct interaction or manipulation" of a product) directly by consumers is not necessary for CPSC jurisdiction.

29. (a) **Separately for each model of the Omegas listed in the Complaint, state whether such a model is serviced by consumers themselves (as opposed to professional contractors).**

If so:

(b) identify all documents which describe, evidence, refer, or relate to any such servicing;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such servicing; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, the exhibits in support thereof, and the applicable statutes and case law cited therein, which indicate that servicing of an article (and other forms of "direct interaction" or "active manipulation of a product) directly by consumers is not necessary for CPSC jurisdiction.

30. (a) **Separately for each model of the Omegas listed in the**

Complaint, state whether such a model is repaired by consumers themselves (as opposed to professional contractors).

If so:

(b) identify all documents which describe, evidence, refer, or relate to any such repairs;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such repairs; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, the exhibits in support thereof, and the applicable statutes and case law cited therein, which indicate that repair of an article (and other forms of "direct interaction" or "active manipulation of a product) directly by consumers is not necessary for CPSC jurisdiction.

31. State whether Omegas installed in buildings used only as storage facilities constitute "consumer products" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it calls for a legal conclusion. Complaint Counsel further objects to this Interrogatory on the ground that it requests irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel also objects to this Interrogatory on the ground that the term "storage facility" is undefined, unclear, vague and ambiguous. If by "storage facility," Respondents intend to refer to industrial facilities, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, the exhibits in support thereof, and the applicable statutes and case law cited therein, which indicate that the CPSC has jurisdiction even over "products which are primarily or exclusively sold to industrial or institutional buyers so long as they were produced or distributed **for use of consumers.**" As stated in Complaint Counsel's Opposition, Omega sprinklers are produced and distributed for use of and enjoyment by consumers, and therefore are consumer products subject to CPSC's jurisdiction.

32. State whether Omegas installed in warehouses constitute "consumer products" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it calls for a legal conclusion. Complaint Counsel further objects to this Interrogatory on the ground that it requests irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel also objects to this Interrogatory on the ground that the term "warehouses" is undefined, unclear, vague and ambiguous. If by "warehouses," Respondents intend to refer to industrial facilities, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, the exhibits in support thereof, and the applicable statutes and case law cited therein, which indicate that the CPSC has jurisdiction even over "products which are primarily or exclusively sold to industrial or institutional buyers so long as they were produced or distributed **for use of consumers.**" As stated in Complaint Counsel's Opposition, Omega sprinklers are produced and distributed for use of and enjoyment by consumers, and therefore are consumer products subject to CPSC's jurisdiction.

33. State whether Omegas installed in factories constitute "consumer products" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it calls for a legal conclusion. Complaint Counsel further objects to this Interrogatory on the ground that it requests irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel also objects to this Interrogatory on the ground that the term "factories" is undefined, unclear, vague and ambiguous. If by "factories," Respondents intend to refer to industrial facilities, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, the exhibits in support thereof, and the applicable statutes and case law cited therein, which indicate that the CPSC has jurisdiction even over "products which are primarily or exclusively sold to industrial or institutional buyers so long as they were produced or distributed **for use of consumers**." As stated in Complaint Counsel's Opposition, Omega

sprinklers are produced and distributed for use of and enjoyment by consumers, and therefore are consumer products subject to CPSC's jurisdiction.

33. **State whether Omegas installed in computer facilities constitute "consumer products" pursuant to 15 U.S.C. § 2052(a)(1).**

If so:

(b) set forth the factual basis for this assertion;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this assertion;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this assertion;

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it calls for a legal conclusion. Complaint Counsel further objects to this Interrogatory on the ground that it requests irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel also objects to this Interrogatory on the ground that the term "computer facilities" is undefined, unclear, vague and ambiguous. If by "computer facilities," Respondents intend to refer to industrial facilities, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, the exhibits in support thereof, and the applicable statutes and case law cited therein, which indicate that the CPSC has jurisdiction even over

"products which are primarily or exclusively sold to industrial or institutional buyers so long as they were produced or distributed **for use of consumers.**" As stated in Complaint Counsel's Opposition, Omega sprinklers are produced and distributed for use of and enjoyment by consumers, and therefore are consumer products subject to CPSC's jurisdiction.

35. State whether there are any factual circumstances under which any Omegas would not constitute a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).

If so:

(b) identify and describe any such circumstances;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such circumstances;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such circumstances; and

(e) describe in detail the substance of each such person's knowledge and/or information

Response: Complaint Counsel objects to this Interrogatory on the ground that it calls for speculation. Complaint Counsel further objects to this Interrogatory requests irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel further objects to this Interrogatory on the ground that it calls for a legal conclusion. Complaint Counsel points Respondents to its Opposition to

Respondents' Motion to Dismiss this action, and the exhibits in support thereof, which demonstrate that Omegas are consumer products with CPSC's jurisdiction.

36. (a) **State whether there are any factual circumstances under which any non- Omega sprinkler heads would not constitute a "consumer product" pursuant to 15 U.S.C. § 2052(a)(1).**

If so:

(b) **identify and describe any such circumstances;**

(c) **identify each and every document that describes, evidences, refers, or relates in any way to such circumstances;**

(d) **identify each and every person whom Complainant knows and/or believes to have knowledge of such circumstances; and**

(e) **describe in detail the substance of each such person's knowledge and/or information.**

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. The jurisdictional question that Respondents have raised in this litigation is whether Omega sprinklers are consumer products. Complaint Counsel further objects to this Interrogatory on the ground that it calls for a legal conclusion. Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof, which demonstrate that Omegas are consumer products with CPSC's jurisdiction.

37. (a) **Separately for each model of the Omegas listed in the Complaint, describe any and all ways in which consumers use, consume, and/or enjoy such a model.**

(b) **identify all documents which describe, evidence, refer, or relate to any such use, consumption, or enjoyment;**

(c) **identify each and every person whom Complainant knows and/or believes to have knowledge of any such use, consumption, or enjoyment; and**

(d) **describe in detail the substance of each such person's knowledge and/or information.**

Response: Complaint Counsel objects to this Interrogatory on the ground that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel points Respondents to its Opposition to Respondents' Motion to Dismiss this action, and the exhibits in support thereof.

38. **With respect to the allegation of Paragraph 8 of the Complaint that the Omegas are "designed to perform in accordance with" NFPA Standard 13:**

(a) **identify which specific sub-sections of NFPA Standard 13, if any, address the operating water pressure at which previously installed sprinkler heads should activate when such heads are removed and tested;**

(b) **identify which specific sub-sections of NFPA Standard 13, if any, address the operating water pressure at which installed sprinkler heads should activate when such heads are still incorporated into the sprinkler system;**

(c) identify which specific sub-sections of NFPA Standard 13, if any, address the required residual water pressure at the most remote sprinkler head in a system after the other sprinkler heads are open and flowing;

(d) identify which specific sub-sections of NFPA Standard 13, if any, are applicable to the allegations of the Complaint; and

(e) describe in terms of psi (pounds per square inch) the testing standard that Complainant contends is created by NFPA Standard 13 that applies to the Omegas.

Response: Complaint Counsel objects to this Interrogatory on the ground that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel responds that the Standard speaks for itself.

39. With respect to the allegation of Paragraph 8 of the Complaint that the Omegas are "designed to perform in accordance with" UL Standard 199:

(a) identify which specific sub-sections of UL Standard 199, if any, address the operating water pressure at which previously installed sprinkler heads should activate when such heads are removed and tested;

(b) identify which specific sub-sections of UL Standard 199, if any, address the operating water pressure at which installed sprinkler heads should activate when such heads are still incorporated into the sprinkler system;

(c) identify which specific sub-sections of UL Standard 199, if any, address the required residual water pressure at the most remote sprinkler head in a

system after the other sprinkler heads are open and flowing;

(d) identify which specific sub-sections of UL Standard 199, if any, are applicable to the allegations of the Complaint; and

(e) describe in terms of psi the testing standard that Complainant contends is created by UL Standard 199 that applies to the Omegas.

Response: Complaint Counsel objects to this Interrogatory on the ground that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel responds that the Standard speaks for itself.

40. With respect to the allegation of Paragraph 8 of the Complaint that the Omegas are "designed to perform in accordance with" UL Standard 199 and NFPA Standard 13:

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it calls for a legal conclusion. Without waiving its objection, Complaint Counsel responds that the Standard speaks for itself.

41. With respect to the allegation of Paragraph 8 of the Complaint that the Omegas are designed to perform in accordance with certain standards "when exposed to certain temperatures":

(a) describe in terms of both degrees Fahrenheit and Celsius what temperatures are meant by the phrase "certain temperatures";

(b) set forth the factual basis for this allegation,

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) The temperatures referred to are the activation/triggering temperatures of the Omega sprinklers.

(b) See (a), above. UL 199, and UL correspondence and listing files for Omega sprinklers, which were received by Complaint Counsel in confidence by a third party, and will be produced to Respondents upon receipt of permission from the third party for disclosure to Respondents.

(c) See response to (b), above. Complaint Counsel has requested this information from Respondents in discovery, but expects that various

Central and UL employees will be included.

(d) Complaint Counsel has requested this information from Respondents in discovery.

(e) See (d), above.

42. (a) State whether Complainant contends that there is a single standard of water pressure (in psi) at which previously installed sprinkler heads must activate when tested to be deemed by the Complainant as not presenting any substantial risk of injury to the public and/or substantial product hazard;

If so:

(b) identify and describe any such standard;

(c) identify all documents which describe, evidence, refer, support, or relate to any such a standard;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such standard; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the grounds that it is vague, ambiguous and confusing. Complaint Counsel further objects to this Interrogatory on the ground that it is overbroad, and seeks irrelevant information pertaining to sprinklers other than Omegas. Without waiving its objections, Complaint Counsel responds that once an Omega is removed from service, it will not create the substantial risk of injury to the public of which Complainant complains. Omega sprinklers fail to activate as designed

and, in many cases, will not activate at pressures that far exceed the water pressure that may be available in the system at the time of a fire.

43. (a) State whether Complainant contends that there is a single standard of temperature at which previously installed sprinkler heads must activate when tested to be deemed by the Complainant as not presenting any substantial risk of injury to the public and/or substantial product hazard;

If so:

(b) identify and describe any such standard;

(c) identify all documents which describe, evidence, refer, support, or relate to any such standard;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such standard; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: See Response to previous Interrogatory. According to Respondents, Omega sprinklers are designed to activate at particularly defined activation/triggering temperatures, based on the temperature at which the fusible link in their heat collector is intended to convert from solid to liquid form.

44. (a) Describe the percentage of previously installed sprinkler heads that must activate at the standards described in Interrogatory Nos. 42-43 when tested in order to be deemed by the Complainant as not presenting any substantial risk of injury to public and/or substantial product hazard;

(b) identify all documents which describe, evidence, refer, support, or relate to such a percentage;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of such a percentage; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: See Response to Interrogatory Nos. 42 and 43.

45. (a) State whether Complainant contends that there is a standard of "failure" that will accurately predict whether a particular Omega will fail to activate in a fire when used in a particular building without regard to the actual hydraulic pressure that exists in the building.

If so:

(b) identify and describe any such standard;

(c) identify all documents which describe, evidence, refer, support, or relate to any such standard

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such standard; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the grounds that it is vague, ambiguous and confusing. Complaint Counsel also objects to this Interrogatory

on the ground that the terms "standard of failure" and "actual hydraulic pressure that exists in the building" are undefined, unclear, vague and ambiguous. The pressure in a building may fluctuate depending on numerous factors. Without clarification of these terms, and additional information as to those factors, Complaint Counsel is unable to respond to this Interrogatory.

46. (a) State whether Complainant contends that if a particular Omega does not activate at a minimum of 7 psi when tested, such an Omega would not activate if a fire occurred in a building where such Omega was installed.

(b) set forth the factual basis for any such contention;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that the term "activate" is undefined, unclear, vague and ambiguous. Without waiving its objection, Complaint Counsel responds that it contends that if a particular Omega does not activate, as that term is defined in Complaint Counsel's discovery requests, upon exposure to its activation/triggering temperature in testing, it would not activate when exposed to that same temperature in a fire that were to occur in a building in which it was installed.

Moreover, to the extent that Omegas have been found to fail at test pressures far in excess of 7 psig, Respondents' Interrogatory is irrelevant.

47. Describe the average static water pressure (in psi) present in the sprinkler systems of most residential buildings.

Response: Complaint Counsel objects to this Interrogatory on the ground that the terms "most residential buildings" and "average static water pressure" are undefined, unclear, vague and ambiguous. Complaint Counsel further objects to this Interrogatory on the ground that it seeks irrelevant information not likely to lead to the discovery of admissible evidence. Complaint Counsel also objects to this Interrogatory on the ground that it is confusing and ambiguous, as it fails to identify the location of the buildings, or define the other factors upon which the water pressure of a building at any given time depends. The water pressure in different areas of the country (and even in different areas of a state) is different, and the water pressure of a single building may fluctuate depending upon various factors. Without additional information as to each of those variants, a response to this question is impossible.

48. Describe the average residual water pressure (in psi) present at the most remote sprinkler head in the sprinkler systems of most residential buildings, after the system has been activated.

Response: Complaint Counsel objects to this Interrogatory on the ground that the terms "average residual water pressure," "most remote sprinkler head in the sprinkler systems," "most residential buildings" and "activated" are undefined, unclear, vague and

ambiguous. Complaint Counsel reiterates its objections and comments in response to Respondents' Interrogatory No. 47.

49. Describe the average static water pressure (in psi) present in the sprinkler systems of most commercial buildings.

Response: Complaint Counsel objects to this Interrogatory on the ground that the terms "most commercial buildings" and "average static water pressure" are undefined, unclear, vague and ambiguous. Complaint Counsel further objects to this Interrogatory on the ground that it seeks irrelevant information not likely to lead to the discovery of admissible evidence. Complaint Counsel also objects to this Interrogatory on the ground that it is confusing and ambiguous, as it fails to identify the location of the buildings, or define the other factors upon which the water pressure of a building at any given time depends. The water pressure in different areas of the country (and even in different areas of a state) is different, and the water pressure of a single building may fluctuate depending upon various factors. Without additional information as to each of those variants, a response to this question is impossible.

50. Describe the average residual water pressure (in psi) present at the most remote sprinkler head in the sprinkler systems of most commercial buildings, after the system has been activated.

Response: Complaint Counsel objects to this Interrogatory on the ground that the terms "average residual water pressure," "most remote sprinkler head in the sprinkler systems," "most commercial buildings" and "activated" are undefined, unclear, vague and

ambiguous. Complaint Counsel reiterates its objections and comments in response to Respondents' Interrogatory No. 49.

51. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas "do not and/or will not function":

(a) separately for each Omega model listed in the Complaint, describe in detail all of the causes and/or reasons that the Omegas "do not and/or will not function";

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) Complaint Counsel objects to this Interrogatory on the ground that it seeks irrelevant information not likely to lead to the discovery of admissible evidence. It is not relevant why Omegas do not and will not function -- it is relevant that they do not and will not function. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a definitive response to this Interrogatory at this time. Available information suggests that the Omega sprinkler design is inadequate for its

intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(b) The Complaint refers, relates to, and provides evidence of this allegation. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC are the basis for this allegation, as is the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test results and fire data to Respondents.

(c) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's allegation. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, and any sprinkler contractors and/or AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about the basis for this allegation. Complaint Counsel is in the process of investigating the identities of all such

persons, and has requested same from Respondents in discovery.

(d) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Complaint Counsel has insufficient information upon which to formulate a response to this Interrogatory.

52. **With respect to the allegation of Paragraph 10 of the Complaint that the Omegas do not and/or will not function in a "significant percentage" of instances:**

(a) expressed in terms of a specific percentage, describe what constitutes "a significant percentage" regarding this allegation;

(b) set forth the factual basis for this allegation;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) In the current case, CPSC's compilation of test data from various sources, including but not limited to Central, UL and FM, indicates that Omegas have an overall failure rate of approximately 40%.

(b) The factual basis for this allegation is the test data that indicates that

Omegas have an overall failure rate of approximately 40%.

(c) All non-privileged test data that forms the basis of Complaint Counsel's allegation will be produced to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's allegation. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, and any sprinkler contractors and/or AHJs who have dealt with defective Omegas, are all knowledgeable about the basis for this allegation. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Complaint Counsel has insufficient information upon which to formulate a response to this Interrogatory.

53. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the C-I model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which

it intends to produce to Respondents, that Om-gas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with

Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

54. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the C-l A model of the

Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function

in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce this evidence to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their

properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

55. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the C-1A PRO model of the

Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function

in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their

properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

56. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the C- IA PRO ID model of the

Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has

requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who

have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

57. **With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":**

(a) state whether Complainant contends that the EC-20 model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate

to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s).

Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is

overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

58. **With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":**

(a) state whether Complainant contends that the EC-20A model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate

at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers,

as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

59. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the EC-20 AID model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is

inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals

knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

60. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC-12 model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant

to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of

Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

61. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC-I 2 ID model of the

Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the

failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel

will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

62. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC- 12 PRO model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant

to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires

in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

63. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC-12A PRO model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it

intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about

Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

64. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the HEC-12 RES model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) **describe in detail the substance of each such person's knowledge and/or information about any such contention.**

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention.

Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the

knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

65. **With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":**

(a) state whether Complainant contends that the HEC-20 model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would

reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas

that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

66. **With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":**

(a) state whether Complainant contends that the HEC-20 ID model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on

these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is

overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

67. **With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":**

(a) state whether Complainant contends that the R-1 model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate

at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers,

as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

68. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

If so:

(a) state whether Complainant contends that the R-1A model of the Omegas is defective;

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is

inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals

knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

69. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the R-IM model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant

to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of

Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

70. With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":

(a) state whether Complainant contends that the AC model of the Omegas

is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the

failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel

will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

71. **With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":**

(a) state whether Complainant contends that the M model of the Omegas is defective;

If so:

(b) identify and describe any such defect:

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant

to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will

produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

72. **With respect to the allegation of Paragraph 10 of the Complaint that the**

Omegas are "defective":

(a) state whether Complainant contends that the Flow Control model of the Omegas is defective;

If so:

(b) identify and describe any such defect;

(c) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: (a) Complaint Counsel contends that all Omega sprinklers are defective pursuant to 15 U.S.C. § 2064.

(b) Complaint Counsel's allegation that Omega sprinklers are defective pursuant to 15 U.S.C. § 2064 is based upon the results of testing of approximately 6,000 Omega sprinklers, of which approximately 40% have failed to activate at or below 7 psig when exposed to their activation/triggering temperature. Omega sprinklers have also reportedly failed to activate in at least eight fires. Complaint Counsel has insufficient information at this time that would reveal why Omegas do not function in a significant percentage of instances; however, Complaint Counsel knows from the data it has, and which it intends to produce to Respondents, that Omegas do fail to function in a

significant percentage of instances. Complaint Counsel has requested information from Respondents in discovery as to the cause and nature of the failure of Omegas to activate in testing and in actual fire situations. Available information suggests that the Omega sprinkler design is inadequate for its intended use, and that Respondents' poor manufacturing and quality control procedures may have exacerbated the design problem(s). Complaint Counsel has requested further information from Respondents on these issues in discovery.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas are defective. Complaint

Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (d) is in part revealed in those documents.

73. **With respect to the allegation of Paragraph 10 of the Complaint that the Omegas are "defective":**

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel has already been asked and answered this Interrogatory. See Interrogatory No. 53, and Complaint Counsel's response thereto.

74. **State whether the failure of any Omega to function has resulted in any bodily injury or injuries.**

Response: Assuming that "failure of any Omega to function" is the failure of an Omega to activate when exposed to its activation/triggering temperature, Complaint Counsel responds that it has information at this time that would indicate that the failure of an Omega to function has resulted in injury or injuries. Complaint Counsel is continuing its investigation of this matter, and has requested this information from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding fires involving Omega sprinklers.

75. **State whether the failure of any Omega to function has resulted in any death or deaths.**

Response: Assuming that "failure of any Omega to function" is the failure of an Omega to activate when exposed to its activation/triggering temperature, Complaint Counsel responds that it has insufficient information at this time to respond to this Interrogatory. Complaint Counsel is continuing its investigation of this matter, and has requested this information from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding fires involving Omega sprinklers.

76. **With respect to the allegation of Paragraph 13 of the Complaint that "failure of the Omegas to function exposes the public to bodily injury and/or death":**

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) When an Omega sprinkler does not function in a fire situation, smoke and flames from the fire can cause injury and/or death.

(b) The Complaint refers, relates to, and provides evidence of this allegation. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC are the basis for this allegation, as is the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(c) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's allegation. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, and any sprinkler contractors and/or AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about the basis for this allegation. All persons who have knowledge of fires and/or fire behavior and/or the effects of fire on persons and property exposed to fire, have knowledge of the risk to which the public is exposed in a fire

situation. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(d) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (c) is in part revealed in those documents.

77. **With respect to the allegation of Paragraph 15 of the Complaint that the defect or the defects in the Omegas create a "substantial risk of injury to the public":**

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) When an Omega sprinkler does not function in a fire situation, smoke and flames from the fire can cause injury and/or death.

(b) The Complaint refers, relates to, and provides evidence of this allegation. Central's test results, and the results of testing of Omegas by or for UL, FM and CPSC are the basis for this allegation, as is the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged test and fire data to Respondents.

(c) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's allegation. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, and any sprinkler contractors and/or AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about the basis for this allegation. All persons who have knowledge of fires and/or fire behavior and/or the effects of fire on persons and property exposed to fire, have knowledge of the risk to which the public is exposed in a fire situation. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery. Complaint Counsel will produce all non-privileged and non-confidential documents regarding testing and fires involving Omega sprinklers, which identify the individuals knowledgeable about same.

(d) Complaint Counsel objects to this Interrogatory on the ground that it is

overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel has insufficient information upon which to formulate a response to this Interrogatory, beyond stating that the knowledge possessed by the persons identified by the documents referenced in (c) is in part revealed in those documents.

78. (a) **State whether the Complainant contends that any Omegas used with plastic piping systems installed after 1990 have ever failed to activate in a fire.**

If so:

(b) **identify and describe any such failures;**

(c) **identify each and every document that describes, evidences, refers, or relates in any way to such a contention;**

(d) **identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and**

(e) **describe in detail the substance of each such person's knowledge and/or information.**

Response: Complaint Counsel objects to this Interrogatory on the ground that it is unclear, vague and ambiguous, as it is impossible to ascertain whether the Interrogatory seeks information regarding piping systems installed after 1990, or regarding Omegas installed after 1990 (regardless of when the system was installed). Complaint Counsel further objects to this Interrogatory to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory on the ground that the term "failed to

activate" is undefined, unclear, vague and ambiguous. Complaint Counsel is unable to formulate a response to this Interrogatory without clarification of how Respondents define a failure to activate. Without waiving its objections, Complaint Counsel will provide all non-privileged information it has with respect to fires that have occurred in which Omegas reportedly did not activate, as that term is defined by Complaint Counsel in its discovery to Respondents.

79. (a) **State whether the Complainant contends that any Omegas used with plastic piping systems installed after 1990 have ever failed to activate under any type of testing.**

If so:

(b) **identify and describe any such a contention;**

(c) **identify each and every document that describes, evidences, refers, or relates in any way to such a contention;**

(d) **identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and**

(e) **describe in detail the substance of each such person's knowledge and/or information.**

Response: Complaint Counsel objects to this Interrogatory on the ground that it is unclear, vague and ambiguous, as it is impossible to ascertain whether the Interrogatory seeks information regarding piping systems installed after 1990, or regarding Omegas installed after 1990 (regardless of when the system was installed). Complaint Counsel further objects to this Interrogatory to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege.

Complaint Counsel further objects to this Interrogatory on the ground that the term "failed to activate" is undefined, unclear, vague and ambiguous. Complaint Counsel is unable to formulate a response to this Interrogatory without clarification of how Respondents define a failure to activate. Without waiving its objections, Complaint Counsel will provide all non-privileged information it has with respect to testing of Omega sprinklers.

80. (a) State whether the Complainant contends that any Omegas used with copper piping systems installed after 1990 have ever failed to activate in a fire.

If so:

(b) identify and describe any such failures;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it is unclear, vague and ambiguous, as it is impossible to ascertain whether the Interrogatory seeks information regarding piping systems installed after 1990, or regarding Omegas installed after 1990 (regardless of when the system was installed). Complaint Counsel further objects to this Interrogatory to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory on the ground that the term "failed to

activate" is undefined, unclear, vague and ambiguous. Complaint Counsel is unable to formulate a response to this Interrogatory without clarification of how Respondents define a failure to activate. Without waiving its objections, Complaint Counsel will provide all non-privileged information it has with respect to fires that have occurred in which Omegas reportedly did not activate, as that term is defined by Complaint Counsel in its discovery to Respondents.

81. (a) **State whether the Complainant contends that any Omegas used with copper piping systems installed after 1990 have ever failed to activate under any type of testing.**

If so:

(b) **identify and describe any such testing;**

(c) **identify each and every document that describes, evidences, refers, or relates in any way to such a contention;**

(d) **identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and**

(e) **describe in detail the substance of each such person's knowledge and/or information.**

Response: Complaint Counsel objects to this Interrogatory on the ground that it is unclear, vague and ambiguous, as it is impossible to ascertain whether the Interrogatory seeks information regarding piping systems installed after 1990, or regarding Omegas installed after 1990 (regardless of when the system was installed). Complaint Counsel further objects to this Interrogatory to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege.

Complaint Counsel further objects to this Interrogatory on the ground that the term "failed to activate" is undefined, unclear, vague and ambiguous. Complaint Counsel is unable to formulate a response to this Interrogatory without clarification of how Respondents define a failure to activate. Without waiving its objections, Complaint Counsel will provide all non-privileged information it has with respect to testing of Omega sprinklers.

82. (a) **State whether the Complainant contends that any Omegas manufactured from 1996 through the present and using silicone o-rings have ever failed to activate in a fire.**

If so:

(b) **identify and describe any such failures;**

(c) **identify each and every document that describes, evidences, refers, or relates in any way to such a contention;**

(d) **identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and**

(e) **describe in detail the substance of each such person's knowledge and/or information.**

Response: Complaint Counsel objects to this Interrogatory to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory on the ground that the term "failed to activate" is undefined, unclear, vague and ambiguous. Complaint Counsel is unable to formulate a response to this Interrogatory without clarification of how Respondents define a failure to activate. Without waiving its objections,

Complaint Counsel will provide all non-privileged information it has with respect to fires that have occurred in which Omegas reportedly did not activate, as that term is defined by Complaint Counsel in its discovery to Respondents.

83. (a) **State whether the Complainant contends that any Omegas manufactured from 1996 through the present and using silicone o-rings have ever failed to activate in any type of testing.**

If so:

(b) **identify and describe any such testing;**

(c) **identify each and every document that describes, evidences, refers, or relates in any way to such a contention;**

(d) **identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and**

(e) **describe in detail the substance of each such person's knowledge and/or information.**

Response: Complaint Counsel objects to this Interrogatory to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory on the ground that the term "failed to activate" is undefined, unclear, vague and ambiguous. Complaint Counsel is unable to formulate a response to this Interrogatory without clarification of how Respondents define a failure to activate. Without waiving its objections, Complaint Counsel will provide all non-privileged and non-confidential information it has with respect to testing of Omega sprinklers. Complaint Counsel adds that one of the three Omega

sprinklers it received from Respondents in February, 1998, which had just been manufactured a few weeks earlier and had never yet been installed in a sprinkler system, did not activate (as that term is defined in Complaint Counsel's discovery requests to Respondents) when exposed to its activation/triggering temperature. The sprinkler partially deployed, releasing drips of water only, and then the fusible link cold soldered, preventing activation. Complaint Counsel has shared this knowledge with respondents, and asked for an explanation of what, why and how this occurred.

84. (a) State whether the Complainant contends that any Omegas used with plastic piping systems installed after 1990 constitute a "substantial product hazard" pursuant to 15 U.S.C. § 2064(a).

If so:

(b) identify and describe any such hazards;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) Complaint Counsel objects to this Interrogatory on the ground that it is unclear, vague and ambiguous, as it is impossible to ascertain whether the Interrogatory seeks information regarding piping systems installed after 1990, or regarding Omegas installed after 1990 (regardless of when the system was installed). Without waiving its objection, Complaint Counsel

responds that it contends that all Omega sprinklers are substantial product hazards pursuant to 15 U.S.C. § 2064, regardless of the type of piping in which they may be used.

(b) Omega sprinklers are defective pursuant to 15 U.S.C. § 2064, as they may fail in a fire situation, and thus create a substantial risk of injury to the public.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for, among others, UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged and non-confidential test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas present a substantial product hazard. Complaint Counsel is in the process of investigating the identities

of all such persons, and has requested same from Respondents in discovery.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory.

85. (a) **State whether the Complainant contends that any Omegas used with copper piping systems installed after 1990 constitute a "substantial product hazard" pursuant to 15 U.S.C. § 2064(a).**

If so:

(b) **identify and describe any such hazards;**

(c) **identify each and every document that describes, evidences, refers, or relates in any way to such a contention;**

(d) **identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and**

(e) **describe in detail the substance of each such person's knowledge and/or information.**

Response: (a) Complaint Counsel objects to this Interrogatory on the ground that it is unclear, vague and ambiguous, as it is impossible to ascertain whether the Interrogatory seeks information regarding piping systems installed after 1990, or regarding Omegas installed after 1990 (regardless of when the system was installed). Without waiving its objection, Complaint Counsel responds that it contends that all Omega sprinklers are substantial product

hazards pursuant to 15 U.S.C. § 2064, regardless of the type of piping in which they may be used.

(b) Omega sprinklers are defective pursuant to 15 U.S.C. § 2064, as they may fail in a fire situation, and thus create a substantial risk of injury to the public.

(c) The Complaint refers, relates to, and provides evidence of this contention. Central's test results, and the results of testing of Omegas by or for, among others, UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged and non-confidential test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas present a substantial product hazard. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory.

86. (a) State whether Complainant contends that any Omegas manufactured using silicone o-rings constitute a "substantial product hazard" pursuant to 15 U.S.C. § 2064(a).

If so:

(b) identify and describe any such hazards;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) Complaint Counsel contends that all Omega sprinklers, including those with silicone "o" rings, are substantial product hazards pursuant to 15 U.S.C. § 2064.

(b) Omega sprinklers are defective pursuant to 15 U.S.C. § 2064, as they may fail in a fire situation, and thus create a substantial risk of injury to the public.

(c) The Complaint refers, relates to, and provides evidence of this contention.

Central's test results, and the results of testing of Omegas by or for, among others, UL, FM and CPSC support and relate to this contention, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged and non-confidential test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas present a substantial product hazard. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory.

87. (a) **State whether the Complainant contends that the performance of**

Omegas declines or deteriorates over time.

If so:

(b) identify and describe any such performance decline or deterioration;

(c) identify each and every document that describes, evidences, refers, or relates in any way to such a contention;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such a contention; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that the phrase "performance of Omegas declines or deteriorates over time" is undefined, unclear, vague and ambiguous and, without clarification of same, it is impossible to formulate a response to this Interrogatory. However, deterioration of o-ring material and corrosion, which available evidence suggest may contribute to failure of Omega sprinklers, may be progressive events.

88. With respect to the allegation of Paragraph 16 of the Complaint that the Omegas present a "substantial product hazard":

(a) set forth the factual basis for such an allegation;

(b) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(d) describe in detail the substance of each such person's knowledge and/or

information.

Response: (a) Omega sprinklers are defective pursuant to 15 U.S.C. § 2064, as they may fail in a fire situation, and thus create a substantial risk of injury to the public.

(b) The Complaint refers, relates to, and provides evidence of Complaint Counsel's allegation that Omegas present a substantial product hazard. Central's test results, and the results of testing of Omegas by or for, among others, UL, FM and CPSC support and relate to this allegation, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged and non-confidential test and fire data to Respondents.

(c) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's contention. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's contention that Omegas present a substantial product hazard. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery.

(d) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection, Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory.

89. With respect to the allegation of Paragraph 16 of the Complaint that "action under these provisions is in the public interest":

(a) identify and describe all of the public interest factors which Complainant believes favor "action under these provisions";

(b) set forth the factual basis for such an allegation;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to this allegation;

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of this allegation; and

(e) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) Preservation of life, health and public safety, and avoidance of the risk of injury and death created by Omega sprinklers, which may fail in a fire situation.

(b) Taking Omegas out of service will abolish the risk of injury and/or death they pose to the public.

(c) Complaint Counsel objects to this subpart on the ground that it is overbroad and unduly burdensome, as all documents relating to fire behavior and injury

and death caused or potentially caused by fire are responsive. Without waiving its objection, Complaint Counsel responds that the Complaint refers, relates to, and provides evidence of Complaint Counsel's allegation that action under 15 U.S.C. § 2064 is in the public interest. Central's test results, and the results of testing of Omegas by or for, among others, UL, FM and CPSC support and relate to this allegation, as does the evidence of fires in which Omegas have reportedly failed to activate. Complaint Counsel will produce all non-privileged and non-confidential test and fire data to Respondents.

(d) Respondents, CPSC, the media and the general public have knowledge of Complaint Counsel's allegation. The Complaint is a public document. Respondents, CPSC, UL, FM, and others who have tested Omega sprinklers, as well as all homeowners and building owners and/or managers who have had problems with Omega sprinklers, and/or who have experienced fires on their properties, damage to their property, or injury as a result of Omegas that have failed to function, as well as sprinkler contractors and AHJs who have dealt with defective Omega sprinklers, are all knowledgeable about Complaint Counsel's allegation that action under this section is in the public interest. Complaint Counsel is in the process of investigating the identities of all such persons, and has requested same from Respondents in discovery.

(e) Complaint Counsel objects to this Interrogatory on the ground that it is overly broad and unduly burdensome. Without waiving its objection,

Complaint Counsel responds that it has insufficient information upon which to formulate a response to this Interrogatory.

90. With respect to the allegation of Paragraph B(1) of the Complaint that Respondent give prompt "public notice of the defect in the Omegas," identify and describe the "public notice" that the Complainant seeks to impose.

Response: Complaint Counsel would seek to impose public notice pursuant to 15 U.S.C. § 2064 (c), including the following: public notice of the defect; mailing of notice to each person who is a manufacturer, distributor or retailer of Omega sprinklers; notice to every person to whom Respondents know Omega sprinklers were delivered or sold.

91. With respect to the allegation of Paragraph C(3) of the Complaint regarding repair of all Omegas so they will "perform properly," identify and describe what would constitute "performs properly" for purposes of the Complainant.

Response: Proper performance of an Omega sprinkler is full (rather than partial or no) activation of the sprinkler upon exposure to its activation/triggering temperature, as defined in Complaint Counsel's discovery to Respondents.

92. With respect to the allegation of Paragraph C(3) of the Complaint regarding the replacement of all Omegas "with a like or equivalent product which performs properly":

(a) identify and describe any and all "like or equivalent product which performs properly";

(b) state whether Complainant believes that Omegas with a silicone o-ring

qualify as a "like or equivalent product which performs properly"; and

(c) state whether Complainant believes that Omegas with a spring collar qualify as a "like or equivalent product which performs properly."

Response: (a) "Like or equivalent product which performs properly" is a fire sprinkler that, upon exposure to its activation/triggering temperature, activates fully (rather than partially or not at all).

(b) No. Complaint Counsel believes that Omegas with silicone o rings also do not or will not perform properly.

(c) No. Complaint Counsel believes that Omegas with a spring collar also do not or will not perform properly. Moreover, use of a spring collar with a sprinkler is prohibited in a number of, if not most, jurisdictions.

93. With respect to the allegation of Paragraph C(3) of the Complaint regarding a "refund to consumers [of] the purchase price of the Omegas," identify and describe how Complainant would calculate or determine a "refund to consumers [of] of the purchase price of the Omegas."

Response: Complaint Counsel has insufficient information at this time to determine how a refund of the purchase price of Omegas would be calculated. Complaint Counsel has requested from Respondents in discovery information pertaining to sale and installation prices for Omega sprinklers.

94. (a) If the Commission orders Respondents to repair some or all of the Omegas pursuant to 15 U.S.C. § 2064(d)(1), identify and describe the nature and amount of the "reasonable and foreseeable expenses" under 15 U.S.C. § 2064(e)(1) that Complainant

contends should be reimbursed to persons by Respondents.

(b) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(d) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: Complaint Counsel has insufficient information at this time to identify all reasonable and foreseeable expenses that will be incurred by people in availing themselves of any remedy provided under an order issued under 15 U.S.C. § 2064(d), pursuant to 15 U.S.C. § 2064(e). At minimum, it can be expected that consumers would face costs associated with contacting Respondents, obtaining replacement sprinklers, and installing same. The details of any such effort by Respondents will determine these and other expenses.

95. **(a) If the Commission orders Respondents to replace some or all of the Omegas pursuant to 15 U.S.C. § 2064(d)(2), identify and describe the nature and amount of the "reasonable and foreseeable expenses" under 15 U.S.C. § 2064(e)(1) that Complainant contends should be reimbursed to persons by Respondents.**

(b) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(d) describe in detail the substance of each such person's knowledge and/or

information about any such contention.

Response: Complaint Counsel has insufficient information at this time to identify all reasonable and foreseeable expenses that will be incurred by people in availing themselves of any remedy provided under an order issued under 15 U.S.C. § 2064(d), pursuant to 15 U.S.C. § 2064(e). At minimum, it can be expected that consumers would face costs associated with contacting Respondents, obtaining replacement sprinklers, and installing same. The details of any such effort by Respondents will determine these and other expenses.

96. (a) **If the Commission orders Respondents to refund some or all of the Omegas pursuant to 15 U.S.C. § 2064(d)(3), identify and describe the nature and amount of the "reasonable and foreseeable expenses" under 15 U.S.C. § 2064(e)(1) that Complainant contends should be reimbursed to persons by Respondents.**

(b) **identify all documents which describe, evidence, refer, support, or relate to any such contention;**

(c) **identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and**

(d) **describe in detail the substance of each such person's knowledge and/or information about any such contention.**

Response: Complaint Counsel has insufficient information at this time to identify all reasonable and foreseeable expenses that will be incurred by people in availing themselves of any remedy provided under an order issued under 15 U.S.C. § 2064(d), pursuant to 15 U.S.C. § 2064(e). See also response to Interrogatory No. 94.

97. (a) **If the Commission orders Respondents to repair some or all of the**

Omegas pursuant to U.S.C. § 2064(d)(1), identify and describe the nature and amount of the reimbursement to "any other person who is a manufacturer, distributor, or retailer of such product for such other person's expenses in connection with carrying out the order" that Complainant contends should be made by Respondents.

(b) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(c) identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(d) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: Complaint Counsel has insufficient information at this time to identify all expenses in connection with carrying out an order under 15 U.S.C. § 2064(c) or (d), that Respondents would have to reimburse other manufacturers, distributors or retailers of Omega sprinklers. See also response to Interrogatory No. 94.

98. (a) **If the Commission orders Respondents to replace some or all of the Omegas pursuant to U.S.C. § 2064(d)(2), identify and describe the nature and amount of the reimbursement to "any other person who is a manufacturer, distributor, or retailer of such product for such other person's expenses in connection with carrying out the order" that Complainant contends should be made by Respondents.**

(b) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(c) identify each and every person whom Complainant knows and/or

believes to have knowledge of any such contention; and

(d) describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: Complaint Counsel has insufficient information at this time to identify all expenses in connection with carrying out an order under 15 U.S.C. § 2064(c) or (d), that Respondents would have to reimburse other manufacturers, distributors or retailers of Omega sprinklers. See also response to Interrogatory No. 94.

99. (a) If the Commission orders Respondents to refund the purchase price to some or all of the Omegas pursuant to U.S.C. § 2064(d)(3), identify and describe the nature and amount of the reimbursement to "any other person who is a manufacturer, distributor, or retailer of such product for such other person's expenses in connection with carrying out the order" that Complainant contends should be made by Respondents.

(b) identify all documents which describe, evidence, refer, support, or relate to any such contention;

(d)[sic] identify each and every person whom Complainant knows and/or believes to have knowledge of any such contention; and

(e)[sic] describe in detail the substance of each such person's knowledge and/or information about any such contention.

Response: Complaint Counsel has insufficient information at this time to identify all expenses in connection with carrying out an order under 15 U.S.C. § 2064(c) or (d), that Respondents would have to reimburse other manufacturers, distributors or retailers of Omega sprinklers. See also response to Interrogatory No. 94.

B. Potential Witnesses

100. Identify all former and/or current employees of Respondents with whom Complainant has had any contact regarding the Omegas. For each such person, identify and describe:

(a) the person's name;

(b) the person's last known home and business address;

(c) the person's last known telephone number;

(d) the person's last known position with Respondents;

(e) the date of any such contacts;

(f) the nature of any such contacts (e.g., letter, telephone conversation, in-person interview);

(f)[sic] a detailed description of the subject matter of such communication; and

(g) the identity of any other persons who were present during such contacts.

Response: Complaint Counsel objects to the phrase "any contact" on the ground that it is vague and ambiguous. Complaint Counsel further objects to this Interrogatory on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel intends to submit certain information to the Presiding Officer for in camera review and determination of whether to provide the material to Respondents, and under what conditions.

101. For each and every contact describe an [sic] response to Interrogatory No. 100,

identify each and every document that describes, evidences, refers, or relates to such contacts, including without limitation any notes of such contacts, documents shown during the course of such contacts, lists of questions or answers given, or any reports of such communications.

Response: Complaint Counsel objects to the phrase "any contact" on the ground that it is vague and ambiguous. Complaint Counsel further objects to this Interrogatory on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege.

102. **Identify each and every person whom Complainant knows and/or believes to have knowledge or information concerning or related to the subject matter of the Complaint or other discoverable information. For each such person, describe:**

(a) **the person's name;**

(b) **the person's last known home and business address;**

(c) **the person's last known telephone number;**

(d) **the corporate or government affiliation of the person;**

(e) **whether the Complainant has contacted such person; and**

(f) **the specific subject matter of the person's knowledge.**

Response: Complaint Counsel objects to this Interrogatory on the ground that it is overbroad and unduly burdensome -- there are thousands of people and entities who have information concerning or related to Omega sprinklers. Complaint Counsel further objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in

anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel responds that it believes that Respondents and their current and former employees have such knowledge and information.

103. **Identify each and every fact witness that Complainant expects to testify on its behalf at the hearing in this matter. For each such fact witness, identify and describe:**

(a) the name, title, business address, and home address for each such witness; and

(b) the subject matter about which each witness is expected to testify.

Response: Complaint Counsel has not yet determined which witnesses it will call to testify at the hearing in this matter.

104. **Identify each and every expert witness whom the Complainant expects to testify on its behalf at the hearing in this matter. For each such expert, identify and describe:**

(a) the expert's name, title, home address, business address, education, employment since graduation from high school, and all publications authored or edited by the expert;

(b) the subject matter on which each expert is expected to testify;

(c) the substance and facts upon which the expert relies in forming his or her opinion;

(d) the opinions to which the expert is expected to testify;

(e) a summary of the grounds for each such opinion;

(f) and a statement and description of all information and documents upon which the expert relies or expects to rely.

Response: Complaint Counsel objects to this Interrogatory to the extent that it exceeds the requirements of 16 C.F.R. § 1026.31 regarding discovery of facts known and opinions held by experts. Without waiving its objection, Complaint Counsel responds that it has not yet determined which witnesses it will call to testify at the hearing in this matter. Complaint Counsel will supplement its response as such decisions are made.

105. Identify and describe any and all oral or written statements made by Respondents that the Complainant contends constitute an admission with reference to any of the issues raised in the Complaint. For each such statement, identify and describe:

(a) the person making the alleged statement;

(b) that person's relationship to Respondents;

(c) the content of the statement;

(d) the date, time, and place of the statement;

(e) the nature of the alleged statement (e.g., written or oral); and

(f) the identity of each person who heard the statement or otherwise has personal knowledge of the statement.

Response: Complaint Counsel objects to this Interrogatory on the ground that it calls for a legal conclusion. Complaint Counsel further objects to this Interrogatory on the ground that it is overbroad and unduly burdensome, and requests information already in Respondents' possession. Complaint Counsel further objects to this Request to the extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery

by the work product privilege. Complaint Counsel further objects to this Request on the ground that it calls for a legal conclusion. Without waiving its objections, Complaint Counsel responds that any and all statements made by Respondents may constitute an admission by Respondents in this matter.

C. Other Allegations Made By the CPSC

106. In a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo, Singer states, "based on multiple random inquiries of sprinkler contractors across the nation in the recent past, we believe that Central's proposed labor payment falls considerably short of what has been, and remains, customarily required to remove and install sprinklers ...." With respect to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify each and every document that constitutes, evidences, refers, or relates in any way to the "multiple random inquiries of sprinkler contractors";

(d) identify each and every person whom Complainant knows and/or believes to have knowledge of such "multiple random inquires of sprinkler contractors";

(e) describe in detail the substance of each such person's knowledge and/or information of such "multiple random inquiries of sprinkler contractors";

(f) identify and describe in terms of a specific monetary amount "what has been, and remains, customarily required to remove and install sprinklers";

(g) identify each and every document that constitutes, evidences, refers, or

relates in any way to "what has been, and remains, customarily required to remove and install sprinklers";

(h) identify each and every person whom Complainant knows and/or believes to have knowledge of "what has been, and remains, customarily required to remove and install sprinklers"; and

(i) describe in detail the substance of each such person's knowledge and/or information of "what has been, and remains, customarily required to remove and install sprinklers."

Response: (a) Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege and . Without waiving its objection, Complaint Counsel responds that a labor payment of $5.00 per sprinkler, as suggested by Central's George Meyer in November, 1997, is inadequate to compensate consumers for the charge of replacing their Omega sprinklers.

(b) Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege, and on the ground that it inquires into confidential settlement discussions. Without waiving its objection, Complaint Counsel responds that Complaint Counsel conducted inquiries of many sprinkler contractors as to the labor expense involved in removing and replacing sprinkler heads. In all

instances, sprinkler contractors indicated that the figure suggested by Central's President was grossly low, and that on average the cost may be three to six times that amount, depending on the facility.

(c) Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel responds that Counsel's written notes of its conversations relate to and evidence its inquiries of sprinkler contractors, as does an invoice from a sprinkler contractor relating to replacement of Omegas, which Complaint Counsel will produce to Respondents.

(d) Eric Singer has knowledge of such inquiries. To a lesser extent, Eric Stone, Catherine Anne Cumberland, Andrew Stadnik, Rohit Khanna, and Nicholas Marchica have knowledge of such inquiries.

(e) See response to (b), above.

(f) See response to (b), above. Please note that this cost does not include the cost for the replacement sprinkler, nor can it account for special reconstruction of the sprinkler system such as recutting the drop.

(g) Other than the letter to which Respondents refer, as well as notes reflecting its inquiries of sprinkler contractors, which are Complaint Counsel's work product, Complaint Counsel possesses one invoice from a sprinkler contractor relating to replacement of Omegas, which it will produce to

Respondents.

(h) Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel identifies the following individuals of whom it is aware:

1) David Dixon, Exec. V.P., David Dixon, (b) (6) (b) (6)

2) Jeffrey Larson, Viking Automatic Sprinkler Company, 3434 First Avenue South, Seattle, Washington 98134-1894

3) Fred Jackson, President, Jackson Fire Protection, 1906 Grace Ave., Ft. Myers, FL 33901

4) William L. Oliver, President, Oliver Sprinkler Co., Inc., 501 Feheley Drive, King of Prussia, PA 19046

5) John C. Livingston, Jr. Chairman and CEO, Livingston Fire Protection, Inc., 5150 Lawrence Place, Hyattsville, MD 20781

6) Peter Miller, Miller Fire Protection, 2750 Marble Ct., Forestville, MD 20747

7) Thomas E. Strange, Vice President of Operations, Worsham Sprinkler Company, 400 East Arrowhead Drive, University Trade Center, Charlotte, North Carolina, 28213

8) James Lewis, American Fire Sprinkler Corp., 210 North 28A

Highway #B, Great Bend, Kansas 67530

Complaint Counsel believes that hundreds of other sprinkler contractors have knowledge of what has been and remains customarily required [in terms of labor costs] to remove and install sprinklers. At present, Complaint Counsel has insufficient information to identify them.

(i) Complaint Counsel objects to this subpart on the ground that it overbroad and unduly burdensome, and requests information pertaining to the knowledge of persons other than the Complainant. Without waiving its objection, Complaint Counsel reiterates its response to subpart (b), and indicates that it otherwise has insufficient information with which to respond to this subpart.

107. **In a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo, Singer states, "the evidence we have gathered does not support the view that dezincification alone is the cause of above-required operating pressures in Omegas from plastic pipe ...." With regard to this statement:**

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify and describe all of the "evidence we have gathered";

(d) identify each and every document that constitutes, evidences, refers, or relates in any way to this statement;

(e) identify each and every person whom Complainant knows and/or

believes to have knowledge of this statement; and

(f) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege, and on the ground that it inquires into confidential settlement discussions. Without waiving its objection, Complaint Counsel responds that it contends that dezincification, Respondents' proposed explanation for the high activation pressures required to activate some Omegas that were installed in plastic pipe, cannot be the only explanation.

(b) Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel responds that it has evidence of at least one fire (Kent Manor Inn) in which Omega sprinklers installed in a plastic piping system that contained no copper (which Respondents claim is a prerequisite to dezincification) did not activate, and showed no signs of dezincification upon visual inspection. A number of other Omegas that have required high activation pressures in order to activate in testing have also shown no sign of dezincification, e.g., a 1992 Omega from The Fairways at Piper Glen, N.C. As well, evidence

indicating dezincification in sprinklers that have activated tends to cast doubt on the existence of a causal connection between dezincification and high activation pressures required for, or non-activation of, Omegas. In one such instance (the Madison Park Condominiums), Central itself concluded that all eight Omegas that it tested showed signs "characteristic of dezincification," yet apparently four of eight Omegas that it tested failed to activate, in part, Central claimed, as a result of swollen "o" rings. At least one forensic study of which Complaint Counsel is aware has determined that dezincification is not the cause for failure of Omegas from plastic piping systems.

(c) See response to subpart (b), above.

(d) The letter to Ms. Sanzo constitutes and evidences the statement made therein. The results of tests of Omega sprinklers relate to the contention made therein, as does the evidence of the fire at the Kent Manor Inn, both of which will be produced to Respondents. The scientific study referred to above was supplied to Complaint Counsel under a claim of confidentiality; Complaint Counsel awaits authorization from a third party to release the documents to Respondents and, if necessary, a confidentiality stipulation by Respondents and/or protective order by the Presiding Officer.

(e) The letter to Ms. Sanzo is not a public document; Complaint Counsel, other members of the CPSC staff, and Respondents have knowledge of the statement made in the letter to which Respondents refer.

(f) Complaint Counsel objects to this subpart on the ground that it is overbroad

and unduly burdensome, and requests information pertaining to the knowledge of persons other than the Complainant. Without waiving its objection, Complaint Counsel reiterates its response to subpart (b), and indicates that it otherwise has insufficient information with which to respond to this subpart.

108. In a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo, Singer states, "the evidence we have gathered does not support the view . . . that swollen o-rings due to cutting oil exposure are the exclusive cause of non-activation in Omegas manufactured before 1996." With regard to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify and describe all of the "evidence we have gathered";

(d) identify each and every document that constitutes, evidences, refers, or relates in any way to this statement;

(e) identify each and every person whom Complainant knows and/or believes to have knowledge of this statement; and

(f) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product

privilege, and on the ground that it inquires into confidential settlement discussions. Without waiving its objection, Complaint Counsel responds that it contends that swollen "o" rings due to cutting oil exposure Respondents' proposed explanation for the high activation pressures required to activate some Omegas that were installed in steel pipe) cannot be the only explanation for non-activation of Omegas.

(b) Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel responds that:

1) it had (and still has) received no evidence from Respondents that Omegas were in fact exposed to excessive hydrocarbons, or that hydrocarbons were the source of any "o" ring swelling;

2) there is evidence of Omegas that showed no "o" ring swelling that did not activate when exposed to their activation/triggering temperature in testing;

3) there are at least two studies that have attributed failure of Omegas to causes other than swollen "o" rings;

4) Central's own public statement in May, 1996, that "the presence of high concentrations of hydrocarbons (found in petroleum based cutting fluids), in conjunction with varying degrees of corrosion," (emphasis added), suggests that swelling due to excessive

hydrocarbons is not the only cause of failure in these Omegas;

5) A number of Omegas that have activated properly in testing have exhibited swollen "o" rings.

(c) See response to subpart (b), above.

(d) The letter to Ms. Sanzo constitutes and evidences the statement made therein. The results of tests of Omega sprinklers relate to the contention made therein, and will be produced to Respondents. The scientific studies referred to above were supplied to Complaint Counsel under a claim of confidentiality; Complaint Counsel awaits authorization from a third party to release the documents to Respondents, the execution of an appropriate confidentiality stipulation by Respondents, and/or a protective order from the Presiding Officer.

(e) The letter to Ms. Sanzo is not a public document; Complaint Counsel, other members of the CPSC staff, and Respondents have knowledge of the statement made in the letter to which Respondents refer.

(f) Complaint Counsel objects to this subpart on the ground that it is overbroad and unduly burdensome, and requests information pertaining to the knowledge of persons other than the Complainant. Without waiving its objection, Complaint Counsel reiterates its response to subpart (b), and indicates that it otherwise has insufficient information with which to respond to this subpart.

109. In a November 24, 1997 letter from Eric Singer of the CPSC to Kathleen Sanzo, Singer states, "rather, primarily, the data points to multiple failure modes rooted in

the design and construction of these sprinklers." With regard to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify and describe the "multiple failure modes rooted in the design and construction of these sprinklers";

(d) identify and describe "the data" referenced in the statement;

(e) identify and describe each and every document that constitutes, evidences, refers, or relates in any way to this statement;

(f) identify each and every person whom Complainant knows and/or believes to have knowledge of this statement; and

(g) describe in detail the substance of each such person's knowledge and/or information.

Response: Complaint Counsel objects to this Interrogatory on the ground that it misquotes the letter from Complaint Counsel to Counsel for Respondents. The letter states that preliminarily the data points to multiple failure modes rooted in the design and construction of these sprinklers. Complaint Counsel further objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege, and on the ground that it inquires into confidential settlement discussions. Complaint Counsel further objects to this Interrogatory on the ground that it seeks irrelevant information not reasonably calculated to lead to

the discovery of admissible evidence. Complaint Counsel's theories on the basis for the activation failure of Omega sprinklers is irrelevant, as it is the fact that the Omegas fail, and not why they fail, that is at issue herein. Without waiving its objection, Complaint Counsel responds that it contends that none of the proposed explanations that Respondents have suggested are, alone, sufficient to explain the activation failures of Omegas. See responses to Interrogatories 107 and 108 for an explanation of Complaint Counsel's position, and the bases therefor.

110. **In a February 19, 1998 letter from Eric Stone of the CPSC to Kathleen Sanzo, the CPSC refuses to accept a "testing based corrective action proposal" from Respondents. With regard to this rejection:**

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for rejecting a "testing based corrective action proposal";

(c) identify and describe any and all reasons that the CPSC believes are correct in rejecting such a proposal;

(d) identify each and every document that constitutes, evidences, refers, or relates in any way to the rejection of this proposal;

(e) identify each and every person whom Complainant knows and/or believes to have knowledge of the rejection of this proposal; and

(f) describe in detail the substance of each such person's knowledge and/or information.

Response: See Response to Interrogatory No. 114, below.

111. In a February 19, 1998 letter from Eric Stone of the CPSC to Kathleen Sanzo, the CPSC states that "Central continues to insist on selling Omega sprinklers with silicone o-rings despite serious concerns about whether they will function in the long term." With regard to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify and describe all "serious concerns" that the CPSC has regarding the functioning of Omega sprinklers with silicone o-rings;

(d) identify each and every document that constitutes, evidences, refers, or relates in any way to such "serious concerns"; and

(e) identify each and every person whom Complainant knows and/or believes to have knowledge of such "serious concerns."

Response: a) Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege, and on the ground that it inquires into confidential settlement discussions. Without waiving its objection, Complaint Counsel responds that it contends that Central continues to insist on selling Omega sprinklers with silicone o-rings, and that Complaint Counsel has serious concerns about whether those sprinklers will function both currently and in the long term.

b) Complaint Counsel has evidence that, and Respondents have admitted that Central is continuing to sell Omegas with silicone o rings. The basis for Complaint Counsel's concerns regarding silicone o ring Omegas is the same as its concern regarding other Omegas -- that they are a substantial product hazard, as they may fail in a fire situation, thus exposing the public to substantial risk of injury and/or death. Complaint Counsel points Respondents to its response to Interrogatory No. 112, below, for an explanation of the problem with a silicone o ring sprinkler manufactured in February, 1998, and tested by CPSC only a few weeks later and found not to activate properly, but instead to 'drip' and cold-solder. Complaint Counsel's concerns with respect to silicone o ring Omegas relate to the design of the sprinkler, Respondents' manufacturing (and quality control) procedures, and to the silicone material itself -- including but not limited to the possibility of adhesion, susceptibility to corrosion, inadequate or improper lubrication, inadequate clearances, and possible malfunctioning parts. Complaint Counsel has requested information from Respondents in discovery regarding each of these (and other) issues.

c) See response to subparts (a) and (b), above.

d) See responses to Interrogatories 86 and 112.

e) Complaint Counsel has insufficient information at this time to provide full identification for each person or organization whom Complaint Counsel knows or believes to know of the serious concerns that Complaint Counsel

has with respect to Omegas utilizing a silicone o-ring. Provisionally, however, in addition to Respondents, it provides the following list:

Underwriters Laboratories
333 Pfingsten Road
Northbrook, IL 60062-2096
847-272-8800

Factory Mutual Research Corporation
1151 Boston-Providence Turnpike
Norwood, MA 02062
781-762-4300

Parco, Inc.
2150 Parco Ave.
Ontario, CA 91761
909-923-0288

Loss Prevention Council
Melrose Avenue
Borehamwood
Hertfordshire WD6 2BJ
United Kingdom
011-44-0181-207-2345

112. **In a February 24, 1998 letter from Eric Stone of the CPSC to Kathleen Sanzo, Stone states, "x-ray examination of the unit showed that the internal shaft was cocked or tipped slightly and jammed in that position" and that the CPSC "plans to conduct non-destructive analysis of the unit ...." With regard to this statement:**

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify and describe any evidence that Omegas may be "cocked or tipped slightly and jammed in that position";

(d) identify each and every document that constitutes, evidences, refers, or relates in any way to the statement that Omegas are "cocked or tipped slightly and jammed in that position";

(e) identify each and every person whom Complainant knows and/or believes to have knowledge of any such problems;

(f) describe in detail the substance of each such person's knowledge and/or information; and

(g) describe any "non-destructive analysis of the unit" performed by or on behalf of the CPSC.

Response: (a) Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel responds that although it does not at this time intend to rely on a letter it wrote to Ms. Sanzo, Complaint Counsel may rely on the evidence that the letter to Ms. Sanzo discusses.

(b) The factual basis for the statement is stated in the phrase quoted by Respondents.

(c) The evidence that the Omega referred to in the letter was cocked or tipped is described in the letter -- it is the x-ray of the unit described.

(d) Complaint Counsel objects to this interrogatory on the ground that it misquotes the statement in the letter. The statement refers to a single

Omega, manufactured in February, 1998, and never installed in a sprinkler system, that, when tested by Complainant a few weeks after it was manufactured by Central, failed to activate, as that term is defined in Complaint Counsel's discovery to Respondents, when exposed to its activation/triggering temperature, and instead "leaked" or "wept," dripping water and then cold-soldering. When the sprinkler was x-rayed, it demonstrated what was described in the letter. Complaint Counsel shared this information with Respondents to demonstrate to Respondents that their various theories of what is wrong with Omegas, including the installation-based explanations that point to installer error and/or mishandling of the Omegas, cannot suffice to account for the problem with Omega sprinklers. The sprinkler that exhibited this activation failure had never been installed, nor had it ever been exposed to cutting oils, stop leak, or any other substance, by any sprinkler contractor or installer. Further, Complaint Counsel sought efforts by Respondents to ensure that the sprinklers they are currently manufacturing are safe and will function properly.

(e) Complaint Counsel objects to this subpart on the ground that it requests information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel identifies Complaint Counsel, its staff and consultants, Respondents and Counsel for Underwriters Laboratories.

(f) See (a) through (d), above.

113. In a January 6, 1998 letter from Eric Singer of the CPSC to the state attorneys general, Singer states, "this contrasts with automatic fire sprinklers' historical rate of proving 99.5 percent effective." With regard to this statement:

(a) state whether Complainant intends to rely on this contention in any way at the hearing in this matter;

(b) set forth the factual basis for this statement;

(c) identify and describe all evidence that automatic fire sprinklers have an "historical rate of proving 99.5 percent effective";

(d) identify each and every document that constitutes, evidences, refers, or relates in any way to such historical rate of effectiveness;

(e) identify each and every person whom Complainant knows and/or believes to have knowledge of such historical rate of effectiveness; and

(f) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) Complaint Counsel objects to this Interrogatory on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence in this case. The effectiveness of sprinklers other than Omegas is irrelevant herein. Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege.

(b) Complaint Counsel objects to this Interrogatory on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence in this case. Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel responds that statistics on the high reliability of other automatic fire sprinklers is in the public domain, and is available from the National Fire Protection Association and National Fire Sprinkler Association. Complaint Counsel is in the process of gathering evidence on the historical rate of effectiveness of automatic fire sprinklers, but offers the following list:

1) Rural/Metro Fire Department (Scottsdale, Arizona), Automatic Sprinklers: A 10 Year Study (1997);

2) Fire Sprinkler Advisory Board of Southern California, City of Los Angeles Civil Disturbance: Report on the Buildings Protected by Automatic Fire Sprinkler Systems and Their Performance Record (1992);

3) H.W. Marryatt, Fire: Automatic Sprinkler Performance in Australia and New Zealand, 1886-1968 (Melbourne: Australian Fire Protection Association, 1971);

4) "Sprinklers for Your Home," This Old House (magazine) (Jan./Feb.

1998);

5) Walter W. Maybee, "Sprinkler Performance Update: 1952- to 1986," Bulletin of the Society of Fire Protection Engineers (1988).

(c) See response to subpart (b).

(d) See response to subpart (b).

(e) Complaint Counsel objects to this subpart on the ground that it is overbroad and unduly burdensome. Without waiving its objection, Complaint Counsel identifies the following as having information pertaining to the high rate of effectiveness of automatic fire sprinklers:

1) Russell P. Fleming, P.E., Vice President of Engineering, National Fire Sprinkler Association, Inc., Robin Hill Corporate Park, Route 22 - P.O. Box 1000, Patterson, New York 12563;

2) John A. Viniello, President, National Fire Sprinkler Association, Inc., Robin Hill Corporate Park, Route 22- P.O. Box 1000, Paterson, New York 12563.

f) Complaint Counsel objects to this subpart on the ground that it requests information pertaining to entities other than Complainant. Without waiving its objection, Complaint Counsel responds that it has insufficient information at this time to describe in detail the complete substance of each person's knowledge and/or information on the high rate of effectiveness of automatic fire sprinklers.

114. (a) State whether Complainant deems any corrective action proposal to be

acceptable that is based in part on testing of a sample of sprinkler heads from a building and comparing the results of the sample to the hydraulically calculated operating pressure of that building.

If so:

(b) identify and describe such an acceptable corrective action proposal;

If not:

(c) identify and describe all reasons for such unacceptability;

(e)[sic] identify each and every document that constitutes, evidences, refers, or relates in any way to such unacceptability;

(f) identify each and every person whom Complainant knows and/or believes to have knowledge of such unacceptability; and

(g) describe in detail the substance of each such person's knowledge and/or information.

Response: (a) Complaint Counsel objects to this Interrogatory on the ground that the terms "hydraulically calculated operating pressure" are undefined, unclear, vague and ambiguous. Without waiving its objection, and assuming that Respondents ask whether Complainant deems acceptable any corrective action plan that would involve a one-time test of a sample of Omegas from buildings in which Omegas are installed, Complaint Counsel responds that such a corrective action plan is unacceptable to correct the substantial product hazard presented by Omegas.

(b) (inapplicable in light of response to (a); no response necessary pursuant to

instructions)

(c) Complaint Counsel incorporates its response to (a), above. Complaint Counsel further objects to this Interrogatory on the ground that it seeks privileged work product, and legal conclusions. Without waiving its objections, Complaint Counsel responds that it deems such a corrective action plan unacceptable because (1) the overall failure rate of Omegas in testing, based on thousands of samples tested to date, is so high, coupled with the fact that fires have been documented in which Omegas reportedly failed to activate, that removal of Omegas cannot be delayed; (2) testing in light of the high failure rate of Omegas to date would divert resources and time unnecessarily from correcting the hazard presented by Omegas; (3) testing in this manner has been shown to be an unreliable indicator of whether any given Omega (that was not one of the sample tested from a building) will operate when exposed to its activation/triggering temperature; (4) the water pressure in a building is not a constant - it is a variable, based on numerous factors, and therefore there is no "static pressure" that can be used as a standard; and (5) once one or more sprinklers activate in a fire situation, the water pressure "seen" by any other sprinkler will always be less than the building's water pressure prior to the opening of any sprinklers.

(d) (no subpart (d) is included in this Interrogatory)

(e) All results of tests of Omega sprinklers provide evidence of the reasons stated by Complaint Counsel in section (c), above. As well, all reports of

fires in which Omegas allegedly failed to activate support same.

(f) Complaint Counsel and its staff have knowledge of their contention that such proposed corrective action plans are unacceptable. Respondents and their attorneys also have knowledge of Complaint Counsel's position, as that position has been communicated to them.

(g) The substance of the knowledge possessed by Complaint Counsel and its staff, as well as by Respondents, regarding Complaint Counsel's position on the unacceptability of a testing-based corrective action plan is as stated in subpart (c), above.

D. CPSC Investigation

115. Identify all persons employed or otherwise retained by the CPSC who in any way participated in the CPSC's investigation of the Omegas. For each person identified, describe his or her role in the investigation.

Response: Complaint Counsel objects to this Interrogatory on the ground that the term "participated in the CPSC's investigation of the Omegas" is unclear, vague and ambiguous, as the use of the past tense indicates an intent to limit the Interrogatory to some time in the past, and the Interrogatory fails to specify the time period to which it refers. Complaint Counsel further objects to this Interrogatory on the ground that it requests information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel identifies the following staff who have participated in the CPSC's investigation of Omega sprinklers prior to the assignment of Complaint Counsel of record to the case: Catherine Cumberland, Marc

Schoem, Eric Stone, Andrew Stadnik, Rohit Khanna, Nicholas Marchica, Mark Kumagi, James Hoebel. Complaint Counsel objects to this Interrogatory to the extent that it exceeds the requirements of 16 C.F.R. § 1026.31 regarding discovery of facts known and opinions held by experts. Without waiving its objection, Complaint Counsel further responds that it has not yet determined which witnesses it will call to testify at the hearing in this matter. Complaint Counsel will supplement its response as such decisions are made.

116. Describe the circumstances surrounding, and the reasons giving rise to the CPSC's decision to investigate alleged risks associated with the Omegas. Your response should include, without limitation, the following:

(a) the date that the CPSC decided to investigate the Omegas;

(b) the identity of all persons at the CPSC involved in the decision to investigate the Omegas; and

(c) the identity of all information (including, but not limited to, any consumer complaints) available to or otherwise relied upon by the CPSC in deciding to initiate an investigation of the Omegas.

Response: Complaint Counsel objects to this Interrogatory on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Interrogatory on the ground that it requests information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory on the ground that it seek irrelevant information not reasonably calculated to lead to the discovery of admissible evidence, as the CPSC's investigation of Omega

sprinklers, and the propriety thereof and bases therefore, are not at issue in this litigation. Without waiving its objections, Complaint Counsel responds as follows:

(a) CPSC initiated its investigation of Omega sprinklers on or about May, 1996.

(b) Catherine A. Cumberland and Marc J. Schoem, in consultation with Eric L. Stone.

(c) CPSC initiated its investigation after receiving information regarding two fires in which Central Omega sprinklers reportedly failed to operate: one at a VA hospital in New York, and the other at a Marriott Hotel in Michigan.

117. **Describe in detail any investigation by the CPSC relating to consumer complaints and/or consumer reports of personal injury, property damage, non-activation, or any other problems allegedly associated with the Omegas. Your response should include, without limitation, the following:**

(a) the identity of any and all persons employed or otherwise retained by the CPSC who participated in this aspect of the investigation;

(b) the identity of all consumers with whom the CPSC communicated in connection with this aspect of the investigation;

(c) the identity of all consumers who complained of or reported an incident relating to the Omegas;

(d) the identification of any consumer questionnaires or other surveys used by the CPSC in conducting this aspect of the investigation; and

(e) the identification of any and all data, reports, survey results, or other information revealing the results of this aspect of the investigation.

Response: Complaint Counsel objects to this Interrogatory on the ground that the terms "non-activation" and "consumer complaints" are undefined, unclear, vague and ambiguous. Complaint Counsel objects to this Interrogatory on the ground that it requests information pertaining to the identity of consumers in prohibition of 15 U.S.C. § 2074(c). Complaint Counsel further objects to this Interrogatory on the ground that it requests information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence, as the CPSC's investigation of Omega sprinklers, and the propriety thereof and bases therefore, are not at issue in this litigation. Without waiving its objections, Complaint Counsel responds that it is currently investigating whether reports that it has received regarding sprinklers are "in connection with the Omegas," and whether they report property damage and/or personal injury in connection therewith. Complaint Counsel will supplement its response to this Interrogatory as additional information becomes available.

118. **Identify and describe any and all incidents known to the CPSC in which a consumer or other person has reported a fire in connection with use of the Omegas. For each such incident, state the following:**

(a) the name and address of the consumer;

(b) the date of the incident involving the fire;

(c) a description of any and all property damage, if any, caused by or associated with the fire; and

(d) a description of any and all personal injuries, if any, sustained as a

result of or associated with the fire.

Response: Complaint Counsel objects to this Interrogatory on the ground that it is vague, ambiguous, and unclear as worded. Complaint Counsel further objects to this Interrogatory on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Interrogatory on the ground that it requests information pertaining to the identity of consumers in prohibition of 15 U.S.C. § 2074(c). Complaint Counsel further objects to this Interrogatory on the ground that it requests information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, and assuming that a fire "in connection with use of the Omegas" means a fire in which one or more Omegas exposed to their activation/triggering temperature may not have activated, as that term is defined in Complaint Counsel's discovery to Respondents, Complaint Counsel identifies the following fires of which it is aware:

1. (a) Location: Marriott International, Inc., 10400 Fernwood Road, Bethesda, MD 20817

   (b) 1/26/95

   (c) damage to room

   (d) employee injured

2. (a) Department of Veteran's Affairs, Veteran's Health Administration, Washington, DC

   (b) 5/16/95

   (c) smoke and water damage

   (d) Complaint Counsel has insufficient information at this time with which to

respond to this subpart.

3. (a) Location: Uptown Manor, 1354 N. Harper, West Hollywood, CA

(b) 1/18/97

(c) damage to property and contents

(d) Complaint Counsel has insufficient information at this time with which to respond to this subpart.

4. (a) Location: Ft. Wayne Children's Home/Crossroads, 2525 Lake Avenue, Ft. Wayne, IN

(b) 4/6/97

(c) damage to bed, bedding, and room

(d) Complaint Counsel has insufficient information at this time with which to respond to this subpart.

5. (a) Location: Mel's Marina, 300 Pensacola Beach Road, Gulf Breeze, FL 32561

(b) 9/28/97

(c) property damage; contents damage; total on the order of $3 million

(d) Complaint Counsel has insufficient information at this time with which to respond to this subpart.

6. (a) Location: Kent Manor Inn, 500 Kent Manor Dr., Stevensville, MD 21666

(b) 10/27/97

(c) approx. $50,000 damage - structural and contents

(d) Complaint Counsel has insufficient information at this time with which to

respond to this subpart.

7. (a) Location: Lorene Lodge, 470 Lorene Dr., SW, Marietta, GA 30060

(b) 2/6/98

(c) damage to room and contents

(d) Complaint Counsel has insufficient information at this time with which to respond to this subpart.

8. (a) Location: Monserrat School of Art, 31 Elliott St., Beverly, MA 01915

(b) 3/1/98

(c) approx. $15,000 damage to contents and structure

(d) Complaint Counsel has insufficient information at this time with which to respond to this subpart.

Complaint Counsel is continuing its investigation into possible fires in which an Omega failed to activate, and will supplement its response to this Interrogatory as additional information becomes available. Further, Complaint Counsel has requested information responsive to this Interrogatory from Respondents in discovery.

119. To the extent not already identified in response to Interrogatory Nos. 117-118, identify and describe any and all incidents known to the CPSC in which a consumer or other person has reported any form of property damage or personal injury in connection with the Omegas. For each such incident, state the following:

(a) the name and address of the consumer;

(b) the date of the incident involving the alleged property damage and/or personal injury;

(c) a description of the type of property damage allegedly sustained; and

(d) a description of any and all personal injury allegedly sustained.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests information pertaining to the identity of consumers in prohibition of 15 U.S.C. § 2074(c). Without waiving its objections, Complaint Counsel responds that it is currently investigating whether reports that it has received regarding sprinklers are "in connection with the Omegas," and whether they report property damage and/or personal injury in connection therewith. Complaint Counsel will supplement its response to this Interrogatory as additional information becomes available.

120. **Describe in detail any and all communications between the CPSC and any dealer, retailer, or distributor in connection with the Omegas. Your response should include, without limitation, the following:**

(a) the identity of any and all persons employed or otherwise retained by the CPSC who participated in this aspect of the investigation;

(b) the identity of any and all dealers, retailers, or distributors with whom the CPSC communicated in connection with this aspect of the investigation of the Omegas;

(c) a description of the content of the CPSC's communications with each such dealer, retailer, or distributor;

(d) the identification of any questionnaires or other surveys used by the CPSC in communicating with each such dealer, retailer, or distributor; and

(e) the identification of any and all data, reports, surveys results, or other

information revealing the results of this aspect of the investigation.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests information prepared by or for Complaint Counsel in preparation for litigation, and thus protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory to the extent that it seeks information provided to CPSC by third parties who claim confidentiality or trade secret. Without waiving its objection, Complaint Counsel will provide copies of all such communications that are in the public domain.

121. Describe in detail any and all communications between the CPSC and any Authority Having Jurisdiction ("AHJ") in connection with the Omegas. Your response should include, without limitation, the following:

(a) the identity of any and all persons employed or otherwise retained by the CPSC who participated in this aspect of the investigation;

(b) the identity of any and all AHJ's with whom the CPSC communicated in connection with this aspect of the investigation;

(c) a description of the content of the CPSC's communication with each such AHJ;

(d) the identification of any questionnaires or other surveys used by the CPSC in communicating with each such AHJ; and

(e) the identification of any and all data, reports, surveys results, or other information revealing the results of this aspect of the investigation.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests information prepared by or for Complaint Counsel in preparation for litigation, and thus protected

from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory to the extent that it seeks information provided to CPSC by third parties who claim confidentiality or trade secret. Without waiving its objection, Complaint Counsel will provide copies of all such communications that are in the public domain.

122. Describe in detail any and all communications between the CPSC and any state law enforcement authorities in connection with the Omegas. Your response should include, without limitation, the following:

(a) the identity of any and all persons employed or otherwise retained by the CPSC who participated in this aspect of the investigation;

(b) the identity of any and all state law enforcement authorities with whom the CPSC communicated in connection with this aspect of the investigation of the Omegas;

(c) a description of the content of the CPSC's communications with each such state law enforcement authority;

(d) the identification of any questionnaires or other surveys used by the CPSC in communicating with each such state law enforcement authority; and

(e) the identification of any and all data, reports, surveys results, or other information revealing the results of this aspect of the investigation.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests information prepared by or for Complaint Counsel in preparation for litigation, and thus protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory to the extent that it seeks information provided to CPSC by third parties who claim confidentiality or trade secret. Without waiving its objection, Complaint Counsel will provide

copies of all such communications that are in the public domain.

123. Describe in detail any and all communications between the CPSC and any federal law enforcement authorities in connection with the Omegas. Your response should include, without limitation, the following:

(a) the identity of any and all persons employed or otherwise retained by the CPSC who participated in this aspect of the investigation;

(b) the identity of any and all federal law enforcement authorities with whom the CPSC communicated in connection with this aspect of the investigation of the Omegas;

(c) a description of the content of the CPSC's communications with each such federal law enforcement authority;

(d) the identification of any questionnaires or other surveys used by the CPSC in communicating with each such federal law enforcement authority; and

(e) the identification of any and all data, reports, surveys results, or other information revealing the results of this aspect of the investigation.

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests information prepared by or for Complaint Counsel in preparation for litigation, and thus protected from discovery by the work product privilege. Complaint Counsel further objects to this Interrogatory to the extent that it seeks information provided to CPSC by third parties who claim confidentiality or trade secret. Without waiving its objection, Complaint Counsel will provide copies of all such communications that are in the public domain.

E. Design and Testing

124. Identify and describe any and all testing of the Omegas conducted by or on behalf of the CPSC. Your response should include, without limitation, the following:

(a) a description of any testing protocols used by the CPSC in testing the Omegas;

(b) the identity of the person(s) who created or established any such testing protocols for the Omegas;

(c) a description of the methodology employed during each and every test of the Omegas;

(d) the date of each and every test of the Omegas;

(e) an identification of the person(s) who conducted, participated in, or were otherwise present during each test of the Omegas;

(f) a description of the results of each and every test of the Omegas; and

(g) the identification of any and all documents (including videotapes and audiotapes) relating to any testing of the Omegas.

Response: Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and thus protected from discovery by the work product privilege. Without waiving its objection, Complaint Counsel responds that it is currently in the process of testing Omega sprinklers, and will produce all non-privileged documents relating thereto as soon as they are available.

125. **Identify any and all outside consultants, experts, or other persons who assisted, advised, or otherwise communicated with the CPSC with respect to any testing of the Omegas. For each such person, describe his or her role in the testing, and the communications between that person and the CPSC.**

Response: Complaint Counsel objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in preparation for litigation, and therefore protected from discovery pursuant to the work product privilege. Complaint Counsel further objects to this Interrogatory to the extent that it exceeds the requirements of 16 C.F.R. § 1026.31 regarding discovery of facts known and opinions held by experts, and on the ground that it violates 16 C.F.R. 1025.31(c)(4)(ii). Without waiving its objections, Complaint Counsel will produce all non-privileged results of testing of Omega sprinklers, and will identify, in its supplemental response to Interrogatory No. 104, all experts whom it expects to call at trial in this matter, and all information required to be disclosed pursuant to 16 C.F.R. § 1025.31(c)(4), once it is determined who those experts will be.

126. **For each test of the Omegas conducted by the CPSC, describe in detail the condition and age of the specific Omegas used in the test. Your response should include, without limitation, the following:**

(a) an identification of each specific Omega by model number;

(b) a description of how and when the CPSC obtained each specific Omega used in the testing;

(c) a description of the condition of each specific Omega used in the testing (e.g., new, used, damaged, dented, etc. . .);

(d) a statement of the age of each specific Omega used in the testing;

(e) a statement of whether the CPSC has retained and the current location of each specific Omega used in the testing; and

(f) if the CPSC has since destroyed or discarded any Omegas used in its testing, a statement of the reasons for that action.

Response: See Response to Interrogatory No. 126. Complaint Counsel also objects to this interrogatory on the ground that the terms "condition" and "age" are undefined, unclear, vague and ambiguous.

127. For each test of the Omegas conducted by the CPSC, describe in detail the piping used in the sprinkler system from which the Omegas were removed. Your response should include, without limitation, the following:

(a) the material constituting the piping;

(b) the presence of any treatments or substances applied to the piping;

(c) the contents of any and all materials or substances inside the piping; and

(d) a description of the overall condition of the piping.

Response: See Response to Interrogatories 124, 125 and 126. Complaint Counsel also objects to this Interrogatory on the ground that the terms "materials or substances inside" and

"overall condition" are undefined, unclear, vague and ambiguous.

128. For the time period 1990 through the present, identify and describe any and all testing of any non-Omega sprinkler heads conducted by or on behalf of the CPSC. Your response should include, without limitation, the following:

(a) a description of any testing protocols used by the CPSC in testing the non-Omega sprinkler heads;

(b) the identity of the person(s) who created or established any such testing protocols for the non-Omega sprinkler heads;

(c) a description of the methodology employed during each and every test of the non-Omega sprinkler heads;

(d) the dates of each and every test of the non-Omega sprinkler heads;

(e) an identification of the person(s) who conducted, participated in, or were otherwise present during each test of the non-Omega sprinkler heads;

(f) a description of the results of each and every test of the non-Omega sprinkler heads; and

(g) the identification of any and all documents (including videotapes and audiotapes) relating to any testing of the non-Omega sprinkler heads.

Response: Complaint Counsel objects to this Request to the extent that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel further objects to this Request on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Request on the ground that to the

extent that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel responds that it has not at this time conducted any testing on non-Omega sprinklers.

129. To the extent that you contend, or otherwise intend to present at the hearing in this matter, the feasibility and/or propriety of any alternative design features for the Omegas, identify and describe any such proposed alternative design features. Your response should include, without limitation, a description of all data, testing, reports, or other information supporting this contention.

Response: Complaint Counsel objects to this Request on the ground that the terms "feasibility and/or propriety of" (in the context of "alternative design features for the Omegas"), and "any alternative design features for the Omegas" are undefined, unclear, vague and ambiguous, and that the question as a whole is unintelligible, and thus precludes Complaint Counsel from formulating a response without clarification of its meaning.

F. Risk Assessment

130. Set forth the factual basis of your contention in Paragraph 15 of the Complaint that the Omegas "create a substantial risk of injury to the public within the meaning of Section 15(a)(2) of the CPSA, 15 U.S.C. § 2064(a)(2)." Your response should include, without limitation, the following:

(a) a description of the specific risks of injury that you contend are presented by the Omegas;

(b) a description of the criteria or factors used by the CPSC in determining that each risk allegedly associated with the Omegas constitutes a "substantial risk" within the meaning of 15 U.S.C. § 2064(a)(2); and

(c) an identification of any and all data, survey information, or testing relating to the alleged risks associated with the Omegas.

Response: See Complaint Counsel's Response to Interrogatory No. 77.

131. Describe in detail any and all measures taken by the CPSC to determine the severity of the risk allegedly associated with the Omegas, including, without limitation:

(a) a description of how the CPSC measures the severity of the risk allegedly associated with the Omegas;

(b) a statement of whether the measurement employed by the CPSC incorporates, considers, or is in any way adjusted to reflect the number of products in use and the frequency of use of the Omegas;

(c) a description of all efforts taken by the CPSC to measure the severity of the risk or probability of injury allegedly associated with the Omegas; and

(d) an identification of all data, studies, and reports that quantify or otherwise provide an assessment of the risk or probability of injury allegedly associated with the Omegas.

Response: a) Complaint Counsel objects to this Interrogatory on the ground that the term "measures" is undefined, unclear, vague and ambiguous as used herein. Complaint Counsel also objects to this Interrogatory on the ground that it

calls for a legal conclusion. Without waiving its objection, Complaint Counsel responds that CPSC does not measure severity of the risk created by consumer products as the term "measure" is defined by Webster's Dictionary, to which Respondents point for definition of terms not otherwise defined. Without waiving its objection, Complaint Counsel responds that it determined the severity of the risk posed by Omega sprinklers according to 15 U.S.C. § 2064(a)(2) and 16 C.F.R. § 1115.12. Pursuant to 15 U.S.C. § 2064(a)(2), severity of the risk is one of the factors the staff may consider in determining whether a product defect creates a substantial risk of injury to the public. According to 16 C.F.R. § 1115.12(g)(1)(iii), a risk is severe if the injury which might occur is serious and/or if the injury is likely to occur. When a sprinkler does not activate in a fire, it cannot suppress or contain the fire, thus exposing the public to the risk of injury and/or death that are both serious and likely to occur.

b) Complaint Counsel objects to this Interrogatory on the ground that the term "measurement" is undefined, unclear, vague and ambiguous, as used herein. Without waiving its objection, and by way of clarification, Complaint Counsel responds that CPSC does not engage in a measurement of the severity of the risk created by consumer products as the term "measurement" is defined by Webster's Dictionary, to which Respondents

point for definition of terms not otherwise defined. Moreover, pursuant to 15 U.S.C. § 2064(a)(2), the number of defective products distributed in commerce is one of the factors the staff may consider in determining whether a product defect creates a substantial risk of injury to the public, and that factor is a distinct factor from the severity of the risk, pursuant to 16 C.F.R. § 1115.12(g)(1). By way of further clarification, Complaint Counsel states that one defective product can present a substantial risk of injury to the public, if the injury which might occur is serious and/or if the injury is likely to occur. 16 C.F.R. § 1115.12(g)(1)(ii).

c) Complaint Counsel reiterates its objections and responses to subparts (a) and (b) of this Interrogatory. Complaint Counsel further objects to this Interrogatory on the ground that it requests information prepared by or for Complaint Counsel in anticipation of litigation, and thus protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel responds that it reviewed Central's test results, and the results of testing of and incidents related to Omegas, by or for UL, FM and CPSC, S.E.A., Hughes Associates, BodyCote Taussig, University of Maryland, governmental entities (Office of the Maryland State Fire Marshall; Farifax County Virginia Fire Prevention Division), independent entities (NFPA) and other third parties.

d) See Response to subpart (c), above. Complaint Counsel objects to this

Interrogatory to the extent that it seeks information provided to Complaint Counsel on a confidential basis by third parties. Complaint Counsel will produce all non-privileged and non-confidential documents pertaining to the tests and fires. Complaint Counsel will produce other responsive documents received by third parties subject to a confidentiality claim upon receipt of permission by those parties, execution of an appropriate confidentiality stipulation by Respondents, and/or protective order by the Presiding Officer.

132. Describe the CPSC's preliminary determination of the alleged risks associated with the Omegas. Your response should include, without limitation, the following:

(a) the date the CPSC Staff issued its preliminary determination of the alleged risks associated with the Omegas;

(b) the identity of all persons involved in the Staff's preliminary determination;

(c) the level of hazard assigned to the Omegas in accordance with the applicable provisions of the CPSC Recall Handbook; and

(d) an identification of all data, studies, reports, and/or testing upon which CPSC relied in making its preliminary determination.

Response: Complaint Counsel objects to this Interrogatory on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of

admissible evidence. Without waiving its objection, Complaint Counsel responds as follows:

(a) 1/28/98

(b) Complaint Counsel objects to this subpart on the ground that the term "involved in the preliminary determination" is undefined, unclear, vague and ambiguous. Without waiving its objection, Complaint Counsel responds that Marc J. Schoem, Catherine A. Cumberland, and Eric H. Singer signed off on the preliminary determination. Eric Stone, Rohit Khanna, Nicholas Marchica, and Andrew Stadnik were all present for and/or contributed to the decision.

(c) Complaint Counsel objects to this subpart on the ground that it calls for a legal conclusion. Complaint Counsel further objects to this subpart on the ground that it request irrelevant information not likely to lead to the discovery of admissible evidence. Complaint Counsel further objects to this subpart on the ground that it requests confidential Agency information. The letter category of hazard classification is an internal Agency classification that is not generally publicly disclosed. Without waiving its objections, Complaint Counsel responds that Omegas were classified as a class "a" hazard.

(d) See response to (c), above.

133. **Explain the factual basis underlying the level of hazard assigned to the**

Omegas in the CPSC Staffs preliminary determination of the alleged risks associated with the Omegas. Your response should include a statement of the specific factors considered, and the data or information relied upon, by the CPSC Staff in determining the level of hazard assigned to the Omegas.

Response: Complaint Counsel objects to this Interrogatory on the ground that the terms "level of hazard assigned" are undefined, unclear, vague and ambiguous. Assuming that Respondents intend to refer to the Agency's internal hazard classification of Omega sprinklers, Complaint Counsel objects to this Interrogatory on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel further objects to this Interrogatory on the ground that it calls for a legal conclusion. Complaint Counsel further objects to this Interrogatory on the ground that it seeks information protected from discovery by the work product and/or attorney client privileges. Complaint Counsel also objects to this Interrogatory on the ground that it requests confidential Agency information. The letter category of hazard classification is an internal Agency classification that is not publicly disclosed. Without waiving its objections, Complaint Counsel responds that the basis for its hazard classification of Omega sprinklers was the results of testing by four organizations of a total of over 4,800 Omega sprinklers from sites around the nation, which yielded an approximately 40% failure rate, coupled with evidence of six fires in which Omegas reportedly failed to activate, and the fact that Omegas are designed to be a life safety device. When they do not function to suppress or contain a fire, the public is exposed to the risk of death or grievous injury.

134. State whether CPSC's preliminary determination and/or initial assignment of the level of hazard allegedly presented by the Omegas has changed over time. If so, describe any such change and the information or testing giving rise to the change.

Response: Complaint Counsel objects to this Interrogatory on the ground that the terms "initial assignment of the level of hazard" are undefined, unclear, vague and ambiguous. Assuming that Respondents intend to refer to the Agency's internal hazard classification of Omega sprinklers, Complaint Counsel objects to this Interrogatory on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel further objects to this Interrogatory on the ground that it calls for a legal conclusion. Complaint Counsel further objects to this Interrogatory on the ground that it seeks information protected from discovery by the work product and/or attorney client privileges. Complaint Counsel also objects to this Interrogatory on the ground that it requests confidential Agency information. The letter category of hazard classification is an internal Agency classification that is not generally publicly disclosed. Without waiving its objections, Complaint Counsel responds that its hazard classification for Omega sprinklers has not changed over time.

135. For the period from 1990 through the present, identify all consumer products classified by the CPSC as presenting a hazard level equal to, or greater than, the hazard level assigned to the Omegas. For example, if the Omegas have been classified as a "Class B" hazard, identify all other consumer products that have been classified as "Class B" hazards and all consumer products identified as "Class A" hazards. For each consumer

product identified in your response, you should provide the following:

(a) the identity of the consumer product by brand name or other description;

(b) the identification of the manufacturer of each such consumer product;

(c) the date of the CPSC's classification of the consumer product as presenting a hazard;

(d) the hazard level assigned each such consumer product;

(e) a description of the hazard presented by each such consumer product;

(f) for each such consumer product, the estimated total number of units manufactured as of the date the CPSC made its determination of the hazard level;

(g) for each such consumer product, the estimated total number of units in the hands of the consumers as of the date the CPSC made its determination of the hazard level;

(h) the number and severity of any and all personal injuries associated with each such consumer product;

(i) the number of deaths associated with each such consumer product; and

(j) the nature and number of property damage reports associated with each such consumer product.

Response: Complaint Counsel objects to this Interrogatory on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence.

Information pertaining to other consumer products classified by the staff as presenting a hazard priority level equal to or greater than the hazard level assigned to the Omegas will not lead to the discovery of admissible evidence regarding the hazard presented by the Omegas. Complaint Counsel further objects to this Interrogatory on the ground that it is overbroad and unduly burdensome. Complaint Counsel further objects to this Interrogatory on the ground that it seeks confidential and/or trade secret or other information whose disclosure is prohibited pursuant to 15 U.S.C. § 2074 and/or 15 U.S.C. § 2055. Plaintiffs also object to this question to the extent that it seeks information that is protected by the attorney-client and work product privileges. Without waiving its objections, Complaint Counsel will provide all non-privileged and non-confidential information pertaining to other consumer products classified at a level equal to or greater than the hazard level at which Omega sprinklers are classified.

G. Sufficiency of Corrective Action

136. **For each consumer product identified in your response to Interrogatory No. 135, describe any and all corrective action taken with respect to that product. Your response should include, without limitation, the following:**

(a) a statement of the CPSC's role in effecting the corrective action;

(b) a statement of whether the corrective action that was taken was completely voluntary on the part of the manufacturer, retailer, or distributor, was the result of a negotiated corrective action plan with the CPSC, or otherwise was compelled by the CPSC through the initiation of an adjudicative proceeding pursuant to 15 U.S.C. § 2064; and

(c) the identification of all documents evidencing the corrective action taken with respect to each such consumer product.

Response: See response to Interrogatory No. 135.

137. For each consumer product identified in your response to Interrogatory No. 135, describe the nature and extent of the public notice provided as part of the corrective action taken. Your response should include, without limitation, the following:

(a) the specific nature of the notice given (e.g., written notice to consumers and retailers, press releases, bill-boards, posters, etc. . .);

(b) a description of the media coverage associated with the corrective action (e.g., newspaper ads and reports, magazine ads and reports, wire services, other print media, television coverage, radio coverage, and/or internet exposure);

(c) a description of the extent of media coverage and exposure of the corrective action (e.g., a list of all newspapers, magazines, wire services, television stations, radio stations, and internet services that provided notice or otherwise covered the corrective action);

(d) a description of the frequency and amount of media coverage associated with the corrective action (e.g., the number of days newspapers carried a written notice, or the number of days the notice appeared on television); and

(e) a description of any and all point of purchase notification to consumers associated with the corrective action (e.g., posters and notices provided to retailers to

display at stores).

Response: See Response to Interrogatory No. 135.

138. For each consumer product identified in your response to Interrogatory No. 135, describe the nature of the recall component, if any, of the corrective action taken. Your response should include, without limitation, the following:

(a) the number of individual units recalled;

(b) the remedy options offered to consumers (e g., replacement, refund, substitute products);

(c) an assessment of consumer participation in the recall (e g, percentage of units in the hands of consumers that were actually received by the recall);

(d) identification of any and all documents revealing the level of consumer participation in the recall; and

(e) a description of any studies conducted by the manufacturer, distributor, or retailer of the consumer product, or by the CPSC, or by both, or by any other person or entity, assessing the effectiveness of the recall program.

Response: See Response to Interrogatory No. 135.

139. Explain the factual basis of your contention, if any, that the corrective action proposal of Respondents in connection with the Omegas is insufficient to protect the public or otherwise fails to provide adequate remedial measures under 15 U.S.C. § 2064.

Response: Complaint Counsel objects to this Interrogatory on the ground that it does not specify to which proposal of Respondents it refers. Without waiving its objection, and assuming

that Respondents refer to their counsel's latest proposal for a testing-based corrective action program, Complaint Counsel reiterates its explanation in Response to Interrogatory No. 114.

140. Describe in detail the public notice, recall, and/or other remedial measures that you contend are necessary with respect to the Omegas to constitute a sufficient remedy and/or corrective action proposal under 15 U.S.C. § 2064.

Response: Complaint Counsel would seek to impose public notice pursuant to 15 U.S.C. § 2064 (c), including the following: public notice of the defect, including paid advertisements, video news releases, and other necessary and/or appropriate methods under the circumstances; mailing of notice to each person who is a manufacturer, distributor or retailer of Omega sprinklers; notice to every person to whom Respondents know Omega sprinklers were delivered or sold.

141. Identify and describe all efforts taken by the CPSC (including, without limitation, consumer surveys, press surveys, and public opinion polls) to evaluate, test, or otherwise determine the sufficiency of the corrective action proposal of Respondents with respect to the Omegas.

Response: Complaint Counsel objects to this Interrogatory on the ground that it does not specify to which proposal of Respondents it refers. Complaint Counsel further objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, and assuming that Respondents refer to their counsel's latest

proposal for a testing-based corrective action program, Complaint Counsel refers Respondents to its Response to Interrogatory No. 114.

142. Identify and describe all criteria and factors considered by the CPSC in measuring the sufficiency of the corrective action proposal of Respondents with respect to the Omegas.

Response: Complaint Counsel objects to this Interrogatory on the ground that it does not specify to which proposal of Respondents it refers. Complaint Counsel further objects to this Interrogatory on the ground that it seeks information prepared by or for Complaint Counsel in anticipation of litigation, and therefore protected from discovery by the work product privilege. Without waiving its objections, Complaint Counsel refers Respondents to its Response to Interrogatory No. 114.

143. Identify all public statements, press releases, or other information released to the public by the CPSC that in any way relates to or otherwise refers to the Omegas and/or Respondents.

Response: March 3, 1998 Administrative Complaint; March 4, 1998 press release and press statement; March 4, 1998 video news release relating to Omega sprinklers; Omega Sprinkler Questionnaire on CPSC web site; Omega Sprinkler Questionnaire on CPSC fax-on-demand service.

H. Initiation of Adjudicative Proceedings

144. For the time period beginning January 1, 1982 to the present, identify all

incidents in which the CPSC has filed an administrative complaint pursuant to Section 15 of the Consumer Product Safety Act (CPSA), 15 U.S.C. § 2064. Your response should include, without limitation, the following:

(a) the date the administrative action was filed;

(b) the identity of the manufacturers, distributors, or retailers of the consumer product named as respondents in the administrative action;

(c) the identity of the consumer product at issue;

(d) a description of the alleged "substantial product hazard" at issue in each case; and

(e) a description of the outcome of the administrative action and the nature of the remedy awarded.

Response: Complaint Counsel objects to this Interrogatory on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Any other administrative litigation relating to any product other than the Omega is irrelevant to the instant action.

145. Identify all persons employed or otherwise retained by the CPSC who in any way participated in the CPSC's decision to initiate the instant adjudicative proceeding against the Respondents.

Response: Complaint Counsel objects to this Interrogatory on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence.

The propriety of the Commission's decision to initiate the instant adjudicative proceeding against Respondents is not at issue herein. Complaint Counsel further objects to this Interrogatory on the ground that it is unclear, vague and ambiguous, as it fails to define "participated." Complaint Counsel also objects to this Interrogatory on the ground that it is overbroad and unduly burdensome. Without waiving its objections, Complaint Counsel responds that the Commissioners made the decision of whether to initiate the instant adjudicative proceeding, upon consultation with and advice of their staff and the Office of the General Counsel. Alan Schoem, Eric Singer, Eric Stone, Deborah Orlove and Catherine Cumberland could all be said to have participated in the decision to initiate the adjudicative proceeding.

146. **State the date on which the CPSC authorized Complaint Counsel to initiate the instant adjudicative proceeding against the Respondents.**

Response: Complaint Counsel objects to this Interrogatory on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. The timing of the Commission's decision to initiate the instant adjudicative proceeding, in relation to the filing of same, is not at issue herein. Without waiving its objections, Complaint Counsel responds that the Commissioners voted on whether to authorize the Complaint by ballot submitted on February 18, 1998, and voted on on February 18, 1998 (Chairman Ann Brown), February 26, 1998 (Commissioner Gall) and March 2, 1998 (Commissioner Moore).

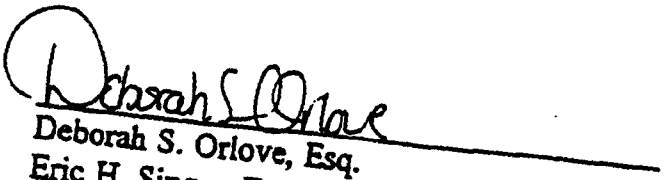
147. **Identify all communications and documents (including internal memoranda and correspondence) relating to the CPSC's decision to initiate the instant adjudicative proceeding against the Respondents.**

Response: Complaint Counsel objects to this Interrogatory on the ground that it requests irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. Complaint Counsel further objects to disclosure of such information on the ground that it seeks information protected from discovery by the work-product and attorney-client privileges.

148. State the reasons for the CPSC's authorization of, and decision to initiate, the instant adjudicative proceeding against the Respondents.

Response: Complaint Counsel objects to this Interrogatory on the ground that it seeks irrelevant information not reasonably calculated to lead to the discovery of admissible evidence. The reasons for the CPSC's authorization of, and decision to initiate, the instant adjudicative proceeding are irrelevant to this action (though the basis for the staff's recommendation of same have been indicated herein). Complaint Counsel further objects to this Interrogatory on the ground that it calls for speculation on the part of Complaint Counsel as to the thoughts of the Commissioners. Complaint Counsel is unable to speak to the reasons for the individual Commissioner's authorizations of, and decisions to initiate, the instant adjudicative proceeding and, pursuant to proper agency procedure, is prohibited from making inquiry into such matters, other than to state that the Commission authorizes the issuance of administrative complaints upon information and belief that a product or products present a substantial product hazard. Complaint Counsel further responds that the Complaint speaks for itself.

DATED: April 27, 1998



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CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, Complaint Counsel's **Responses to Respondents' First Set of Interrogatories** were deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

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A copy was also served on the Presiding Officer pursuant to 16 C.F.R. § 1025.31(h) at:

The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
1099 14th St., NW, Suite 350
Washington, DC 20005

Deborah S. Olave

Dated: April 27, 1998

certif.ser

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents	)	

COMPLAINT COUNSEL'S INDEX OF RESPONSIVE DOCUMENTS TO RESPONDENTS' FIRST INTERROGATORIES AND FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS

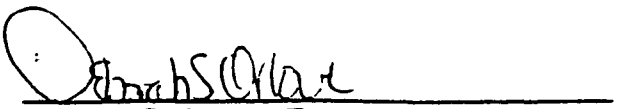
Complaint Counsel provides this list of documents produced in response to Respondents' first set of discovery requests, indicating the Requests and Interrogatories to which the documents correspond. Documents listed as responsive to particular Interrogatories and/or Requests may be responsive to other Requests and Interrogatories as well.

Request for Production	Bates Nos.
1	0001-1025; 1082-1458
	1459-1519
4	2037 - 2134
9	0001-1025; 1082-1458
15	1459-1519
16	1459-1519
17	2022-2035

22	2016
30	1991 - 1998
38	2138 - 2140
40	2135 - 2137
42	2000 - 2001
	and Video News Release (video)
43	2000 - 2015
	and Video News Release (video)

Interrogatory	Bates Nos.
51	0001-1025; 1082-1458
	1459-1519
52	0001-1025; 1082-1458
53	0001-1025; 1082-1458
	1459-1519
82	1459-1519
106	2016
131	0001-1025; 1082-1458
	1459-1519
136	1026 - 1080
143	press release

DATED: April 27, 1998



Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.

Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, Maryland 20814
301-504-0626

index.doc

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, Complaint Counsel's **INDEX OF RESPONSIVE DOCUMENTS TO RESPONDENTS' FIRST INTERROGATORIES AND FIRST REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS** was deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

J. Gordon Cooney, Jr., Esq.
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Attorneys for Central Sprinkler Corporation and Central Sprinkler Company

Responsive documents were copied by Complaint Counsel and provided to J. Gordon Cooney at the above address.

A copy was also served on the Presiding Officer pursuant to 16 C.F.R. § 1025.31(h) at:

The Honorable William B. Moran
Office of the Administrative Law Judges
Environmental Protection Agency
1099 14th St., NW, Suite 350
Washington, DC 20005

Dated: 4/27/98

In the Matter of Central Sprinkler Corp. and Central Sprinkler Co.
Complaint Counsel's Privilege Log

June 1, 1998

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1	10/25/96	Cumberland, Catherine			notes	investigation team meeting	3	WP/AC
2	11/12/96	Khanna, Rikki	Cumberland, Catherine	(through) Hobel, James	memorandum	internal agency product safety assessment	3	WP/AC
3	01/21/97	Cumberland, Catherine			notes	meeting with consultants/state law enforcement officials	4	WP/AC
4	01/22/97	Cumberland, Catherine			notes	teleconference with testing laboratory	4	WP/AC
5	02/19/97	Cumberland, Catherine			notes	meeting with testing laboratory to discuss sprinklers	1	WP/AC
6	03/12/97	Cumberland, Catherine			notes	meeting with Central	6	WP/AC
7	03/31/97	Ceaser, Valery			notes	litigation team meeting	6	WP/AC
8	03/31/97	Cumberland, Catherine			notes	meeting with UL and Central Sprinkler	7	WP/AC
9	03/31/97	Stone, Eric			notes	meeting with UL and Central Sprinkler	7	WP/AC
10	04/14/97	Cumberland, Catherine			notes	litigation team meeting	1	WP/AC
11	04/14/97	Stone, Eric	Khanna, Rohit	Marchica, Nicholas; Cumberland, Catherine	e-mail	litigation team meeting	1	WP/AC
12	04/18/97	Singer, Eric	Consumer Product Safety Commission	(through) Dunn, Sadye; Bromme, Jeffrey; Gilbert, Pamela; Schmeltzer, David; Stone, Eric	memorandum	request for Subpoena and Special Order	2	AC/WP
13	05/02/97	Cumberland, Catherine	Consultant/State Fire Marshal		letter	request for information	1	WP
14	05/15/97	Cumberland, Catherine			notes	investigation team meeting	2	WP/AC

JUN-01-1998 17:35 CPSC COMPLIANCE 301 504 0359 P.02/12

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	06/12/97	Cumberland, Catherine	file	(through) Schmeltzer, David; Schoem, Marc; CC: Cumberland, Catherine; Singer, Eric; Khanna, Rikki; Marchica, Nick; Stadnik, Andrew; Hoebel, James; Perez, Carlos	memorandum	request for closed meeting	1	WP/AC
16	06/12/97	Cumberland, Catherine	file	Cumberland, Catherine; Singer, Eric; Stone, Eric; Khanna, Rikki; Stadnik, Andrew; Hoebel, Jim; Perez, Carlos	memorandum	litigation investigation	1	WP/AC
17	06/12/97	Cumberland, Catherine			notes	meeting with state consultants/ state law enforcement officials	4	WP/AC
18	06/19/97	Cumberland, Catherine			notes	third-party subpoena	3	WP/AC
19	06/19/97	Singer, Eric	Stadnik, Andy; Marchica, Nick; Khanna, Rikki		memorandum	information for consultants review	1	WP
20	06/04/97	Cumberland, Catherine			memorandum	teleconference with fire investigation consultants	1	WP/AC
21	06/04/97	Cumberland, Catherine			memorandum	teleconference with state fire marshal's office	1	WP/AC

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
22	08/04/97	Singer, Eric	Cumberland, Catherine		memorandum, with handwritten notes of Cumberland, Catherine	Progress of follow-up investigation of sprinkler failures	5	WP/AC
23	08/05/97	Cumberland, Catherine			memorandum	teleconference with state law enforcement official and sprinkler contractor	1	WP/AC
24	08/18/97	Singer, Eric	Schoem, Alan; Stone, Eric; Schoem, Marc; Cumberland, Catherine; Stadnik, Andy; Marchica, Nick; Khanna, Rik		memorandum	case action plan	6	WP/AC
25	09/02/97	Singer, Eric	Schroeder, Tom		memorandum	litigation investigation	1	WP/AC
26	09/04/97	Singer, Eric			notes	teleconference with consultant	2	WP/AC
27	09/17/97	Cumberland, Catherine	CPSC Regional Directors, Supervisors and Investigators	(through) Schoem, Mark	memorandum	communications with state law enforcement officials	1	WP/AC
28	09/18/97	Cumberland, Catherine			notes	litigation team meeting	1	WP/AC
29	09/18/97	Singer, Eric	Khanna, Rikki		memorandum	litigation investigation	1	WP/AC
30	09/25/97	Cumberland, Catherine			notes	litigation team meeting	1	WP/AC
31	09/25/97	Singer, Eric	Schroeder, Tom	Cumberland, Catherine	memorandum	litigation investigation	1	WP/AC
32	10/16/97	Cumberland, Catherine			notes	meeting with Central counsel	1	WP/AC
33	10/23/97	Singer, Eric	Bromme, Jeffrey; Lemberg, Steve		memorandum	litigation investigation	2	WP

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TAB	DATE	AUTHOR	RECIPIENT	CC	DOCUMENT TYPE	DESCRIPTION	PAGES	BASIS
34	10/29/97	Cumberland, Catherine			notes	litigation team meeting (with consultants) regarding fire involving Omegas	1	WP/AC
35	11/13/97	Cumberland, Catherine			notes	litigation team meeting	2	WP/AC
36	11/20/97	Singer, Eric	Rumelt, Donald; Palman, Amy		memorandum	litigation investigation	1	WP/AC
37	11/21/97	Singer, Eric	Lemberg, Steve		memorandum	website questionnaire	1	WP
38	11/24/97	Cumberland, Catherine			notes	litigation team meeting	1	WP/AC
39	12/01/97	Singer, Eric	Schoem, Alan	Stone, Eric	memorandum	case status and future handling	5	WP/AC
40	12/02/97	Singer, Eric	Stone, Eric		memorandum	inter-agency information sharing; case strategy	2	WP/AC
41	12/02/97	Singer, Eric	Cohn, Murray		memorandum	website questionnaire	1	WP/AC
42	12/02/97	Singer, Eric	Allen, Richard		memorandum	website questionnaire	1	WP
43	12/02/97	Singer, Eric	Stone, Eric		memorandum	case status	1	WP/AC
44	12/03/97	Singer, Eric	Khanna, Rikki; Kumagai, Mark		memorandum	case investigation and technical issues	1	WP/AC
45	12/04/97	Stone, Eric	file	Singer, Eric; Cumberland, Catherine	notes	voice mail from Sanzo, Cathy	1	WP/AC
46	12/08/97	Singer, Eric	Schoem, Alan		memorandum	website questionnaire	1	WP/AC
47	12/10/97	Singer, Eric	Rumelt, Dan		memorandum	website questionnaire	1	WP/AC
48	12/10/97	Singer, Eric	Rumelt, Dan		memorandum	talking points for hotline staff	3	WP/AC
49	12/11/97	Cumberland, Catherine			notes	NFSA meeting	4	WP/AC
50	12/15/97	Singer, Eric	DiGrazia, James		memorandum	Central's sprinkler change-out procedure	1	WP/AC
51	12/15/97	Singer, Eric	Cumberland, Catherine		memorandum	agency sample inventory matrix	2	WP/AC
52	12/19/97	Cumberland, Catherine			notes	meeting with Central counsel on testing and recall	4	WP/AC

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53	12/22/97	Singer, Eric	Cumberland, Catherine		memorandum	inter-agency communications	2	WP/AC
54	12/22/97	Singer, Eric	file		memorandum	analysis of legal issues	9	WP/AC
55	12/31/97	Singer, Eric	Stone, Eric		memorandum	case update	1	WP/AC
56	12/31/97	Singer, Eric	Perez, Carlos		memorandum	reimbursement for Omega sprinklers	5	WP/AC
57	01/03/98	Former Central employee/consultant			audiotape	Omega design/development		WP
58	01/05/98	Cumberland, Catherine			notes	litigation team meeting	1	WP/AC
59	01/11/98	Singer, Eric	Rosenson, Sarah		memorandum	draft third-party subpoenas	2	WP
60	01/13/98	consultant	Singer, Eric; Kumagai, Mark		audiotape	Omega: Design & History		WP
61	01/14/98	Singer, Eric	Cumberland, Catherine		memorandum	third-party subpoenas and information collection	1	WP/AC
62	01/15/98	Cumberland, Catherine			notes	inter-agency teleconference	1	WP/AC
63	01/16/98	Singer, Eric	attorney for informants	Kumagai, Mark; other attorney; informants	letter	discussions with informants	1	WP
64	01/22/98	Singer, Eric	consultant		letter	meeting with consultant	2	WP
65	01/23/98	Singer, Eric	State Attorney General		letter	letter regarding state law enforcement activities	10	WP/records compiled for law enforcement activities
66	01/24/98	Singer, Eric	Stone, Eric		memorandum	case update	5	WP/AC
67	01/26/98	DiGrazia, James	Singer, Eric		memorandum, with handwritten notes of Cumberland, Catherine	Northern California Fire Prevention Officers' meeting	1	WP/AC
68	01/28/98	Singer, Eric	Stone, Eric		memorandum	briefing memorandum to commission	1	WP/AC

JUN-01-1998 17:38 CPSC COMPLIANCE 301 504 0359 P.07/12

DOC	DATE	AUTHOR	RECIPIENT	CC	TYPE	DESCRIPTION	PAGES	NOTES
69	01/26/98	Singer, Eric	Stone, Eric		memorandum	case update	1	WP/AC
70	01/27/98	Singer, Eric	State Attorney General		letter	letter regarding CPSC investigation	1	WP
71	02/02/98	Singer, Eric	Schoem, Alan		memorandum	litigation/investigation update and future handling	2	WP/AC
72	02/03/98	Marchica, Nick			notes	teleconference with technical consultant/former employee	3	WP/AC
73	02/03/98	Singer, Eric	attorney for consultant		letter	meeting with consultant	2	WP
74	02/03/98	Singer, Eric	Mitchell, Belinda		memorandum	litigation/investigation	1	WP/AC
75	02/03/98	Singer, Eric	Cumberland, Catherine		memorandum	third party testing data	1	WP/AC
76	02/05/98	Singer, Eric	State Attorney General	Assistant Attorneys General	letter	letter regarding state law enforcement activities	25	WP/records compiled for law enforcement activities
77	02/05/98	Singer, Eric	Solomon, Jennifer		memorandum	legal research assignments	1	WP/AC
78	02/10/98	Singer, Eric	Solomon, Jennifer		memorandum	legal research assignments	1	WP/AC
79	02/12/98	Singer, Eric	Schroeder, Tom	Orlove, Deborah; Stone, Eric; Stadnik, Andy	memorandum	litigation/investigation	2	WP/AC
80	02/16/98	Former Central employee/consultant	Singer, Eric		audiotape	Omega: Design & History		WP
81	02/19/98	Former Central employee/consultant	Singer, Eric		audiotape	Omega: Design & History		WP
82	02/20/98	Singer, Eric	Orlove, Deborah		memorandum	litigation/investigation	1	WP/AC
83	02/20/98	Singer, Eric	Orlove, Deborah		memorandum	regarding potential consultants	1	WP
84	03/10/98	Singer, Eric	attorney for consultant		letter	meeting with consultant	1	WP

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DOC	DATE	AUTHOR	RECIPIENT	CC	DOC TYPE	SUBJECT	PAGES	PRIV
85	03/25/98	Attorney for consultant	Singer, Eric		letter	meeting with consultant	1	WP
86	04/03/98	attorney for consultant	Singer, Eric		letter	documents responsive to request for information	1	WP
87	04/03/98	Marchica, Nick			notes	meeting with technical consultants	6	WP/AC
88	04/06/98	Singer, Eric	Attorney for consultant		letter	meeting with consultant	1	WP
89	04/10/98	Singer, Eric	Lawn, Joyce		memorandum	information regarding potential consultants	1	WP
90	04/13/98	Singer, Eric	consultants		letter	focus of discussions regarding sprinklers	1	WP
91	04/14/98	Marchica, Nick			notes	teleconference with technical consultants	6	WP/AC
92	04/14/98	Singer, Eric	Walters, Don	Cumberland, Catherine	memorandum	litigation/investigation	1	WP/AC
93	04/15/98	Singer, Eric	Former Central employee/consultant		e-mail	litigation/investigation	1	WP
94	04/16/98	Singer, Eric	attorney for consultant		letter	contact with technical consultant	1	WP
95	04/20/98	consultant	Singer, Eric		letter	search for technical consultant	1	WP
96	04/20/98	Former Central employee/consultant	Singer, Eric		e-mail	Central's knowledge of problems in plastic pipe	1	WP
97	04/20/98	Singer, Eric	Former Central employee/consultant		e-mail	litigation	1	WP
98	04/26/98	Singer, Eric	Stone, Eric; Orlove, Deborah; Tamoff, Howard		memorandum	surreply to Motion to Dismiss	2	WP/AC
99	04/29/98	Kumagai, Mark			notes	meeting with technical consultant	12	WP/AC
100	04/29/98	Marchica, Nick			notes	meeting with technical consultant/former employee	12	WP/AC

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101	05/05/98	Kumagai, Mark			notes	meeting with technical consultant	3	WP/AC
102	05/05/98	Marchica, Nick			notes	meeting with technical consultants	3	WP/AC
103	05/06/98	Singer, Eric	Central former employee/consultant		e-mail	litigation status	1	WP
104	05/13/98	Singer, Eric	consultant		letter	meeting with consultant	2	WP
105	05/14/98	Kumagai, Mark			notes	meeting with technical consultant	5	WP/AC
106	05/14/98	Singer, Eric	consultant		letter	request for information	1	WP
107	05/15/98	Singer, Eric	Cumberland, Catherine; Balazsy, Andrew	Orlove, Deborah; Tarnoff, Howard	memorandum	litigation/investigation	1	WP/AC
108	05/15/98	Singer, Eric	Cumberland, Catherine		memorandum	sample acquisition, sprinkler replacement costs	1	WP/AC
109	05/18/98	Singer, Eric	Searles, Loretta		memorandum	litigation expenditures	1	WP/AC
110	05/20/98	Kumagai, Mark			notes	meeting with technical consultant	4	WP/AC
111	05/20/98	Singer, Eric	consultant		letter	litigation investigation	1	WP
112	05/21/98	Singer, Eric	Attorney for consultant		letter	inquiry on Omega test	3	WP
113	05/21/98	Singer, Eric	Cumberland, Catherine		memorandum	litigation investigation	1	WP/AC
114	05/26/98	Singer, Eric	Caton, Thomas; Kumagai, Mark; Marchica, Nicholas		e-mail	production of documents responsive to discovery	1	WP
115	05/26/98	Singer, Eric	Cumberland, Catherine		memorandum	litigation/investigation	3	WP/AC
116	02/00/98	Teevan, Frank	Orlove, Deborah		notes	11/5/96 meeting with Central	10	WP
117	05/00/98	Hoebel, Jim			notes	1996 Fire Council notes and materials	28	WP/AC
118	undated	Cumberland, Catherine			notes	litigation meeting	4	WP/AC

JUN-01-1998 17:40 CPSC COMPLIANCE 301 504 0359 P.10/1

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, COMPLAINT COUNSEL'S PRIVILEGE LOG was filed with the Secretary of the Commission, telecopied, and deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

J. Gordon Cooney, Jr., Esq.
Thomas P. Hogan, Jr., Esq.
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Attorneys for Central Sprinkler Corporation and Central Sprinkler Company

The Honorable William B. Moran
Office of the Administrative Law Judge
Environmental Protection Agency
401 M St., S.W.
Mail Code 1900 L
Washington, DC 20460
fax (202) 565-0044

Signed: Jean Kenn

Dated: 6/1/98

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1873 1998

Thomas P. Hogan, Jr.
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May 1, 1998

VIA TELECOPIER

Deborah S. Orlove
Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4430 East West Highway
Bethesda, MD 20814

Re: In the Matter of Central Sprinkler Corp., et al. (CPSC Docket No. 98-2)

Dear Ms. Orlove:

On Wednesday, April 29, 1998, we received Complaint Counsel's written discovery responses. However, to date, we still have not received any documents. Please immediately address this matter. In addition, in the future, please arrange for prompt and reliable service of any documents and/or pleadings.

Regarding your discovery responses, a quick reading reveals that these responses are highly deficient. In essence, the Staff has failed to provide any evidence or requested information supporting the Complaint in this matter. We will provide a detailed analysis of the deficiencies in the Staff's discovery responses once we receive the documents you are producing, and hope that you will make a good faith attempt to provide meaningful supplemental responses. In the absence of such supplemental responses, we will be forced to file a motion to compel.

There are several preliminary matters regarding the Staff's discovery responses which must be addressed immediately. First, regarding all claims of documents or information allegedly protected by the attorney-client privilege or work product doctrine, please immediately produce a privilege log as required by the discovery requests and applicable practice and procedure. Given the expedited nature of these proceedings, we will expect to receive such a log no later than May 8, 1998.

Second, the Staff has delayed providing certain documents pending the entry of a Confidentiality Agreement. Unfortunately, you did not choose to raise this issue with us prior to raising such an objection, nor have you suggested any agreement. To remedy this problem, attached is a draft Confidentially Agreement. Please provide me with any comments by the end of the day on May 5, 1998. In the absence of any comments, given the expedited nature of these proceedings, we will submit the Confidentiality Agreement for Court approval.

Third, your discovery responses reveal that the CPSC has been in contact with not only former Central employees, but also current Central employees. Such ex parte contacts are a clear breach of ethical obligations and are contrary to the Staff's prior written representations that no such contacts had occurred. Please immediately produce all evidence related to such contacts, which clearly cannot be considered privileged in any manner. Under no circumstances should the Staff engage in ex parte contacts with the Court regarding these contacts, which appears to be the course of action you suggest in your discovery responses. In this regard, please immediately confirm that you will not make any ex parte submissions to Judge Moran without substantial prior notice that would give us an opportunity to object to any such one-sided factual submissions to the Court.

Regards,

Thomas P. Hogan, Jr.

TPH/lgh

Enclosure

U.S. CONSUMER PRODUCT SAFETY COMMISSION
WASHINGTON, D.C. 20207-0001

OFFICE OF COMPLIANCE
Legal Division

Deborah S. Orlove
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May 6, 1998

VIA TELECOPIER AND FIRST CLASS MAIL
(215) 963-5299
Thomas P. Hogan, Jr., Esq.
MORGAN, LEWIS & BOCKIUS LLP
2000 One Logan Square
Philadelphia, PA 19103

Re: *In the Matter of Central Sprinkler Corp. and Central Sprinkler Co.*, CPSC Docket No. 98-2
Complaint Counsel's Responses to Respondents' First Discovery Requests

Dear Mr. Hogan:

I am writing in response to your May 1, 1998 and May 4, 1998 correspondence in the above-referenced matter. As you know, I attempted to call you immediately after receiving your fax at 2:00 p.m. last Friday, in which you informed us that you had received our written discovery responses without any attached documents. As your office informed me that you had left for the day, I left you a voice mail message expressing my concern and confusion that you had received our written responses without receiving the box of documents in which they were contained. I trust from your message yesterday, and letter today, that you have the box of documents. As you may have noted, the responses and documents were sent via certified mail, return receipt, to your office on April 27. Pursuant to the applicable regulations, service via certified mail is appropriate and acceptable.

As you know, Complaint Counsel sent a box with over 2000 Bates-stamped pages of documents, as well as a videotape, to Respondents with its discovery responses. As we indicated in those responses, a number of documents that Complaint Counsel has that may be responsive to Respondents' requests were provided to Complaint Counsel by third parties. As you know, Complaint Counsel is prohibited by statute from disclosing any information received from third parties that may be confidential commercial information or trade secret. To ensure speedy disclosure of information to Respondents, and to prevent unnecessarily calling upon the Presiding Officer to resolve such issues, Complaint Counsel has attempted to negotiate with the third parties directly to obtain permission to provide all such information to Central. At this time, we have received such permission from two parties - Marriott and

Sheraton. The Marriott documents were produced in the box of documents forwarded to you last week. Having just received final permission today from counsel for Sheraton, those documents are being Bates stamped and copied at this time, and will be sent to you immediately.

We also have voluminous documents from two testing laboratories, one of which has indicated preliminarily that they will agree to production of their documents as long as there is a protective order preventing public disclosure of same; however, their counsel has requested that it be given until the middle of this week to make a final determination on disclosure. We await review of documents and responses from the other laboratory, and will prepare those documents immediately upon receipt of permission to disclose. If you would prefer a resolution of this matter before the Presiding Officer, however, we would be pleased to copy and provide the documents to him immediately.

You suggested in your letter that the CPSC has been in contact with current Central employees without the presence of Respondents' counsel. CPSC staff has not engaged in any such *ex parte* contacts. As indicated in Complaint Counsel's responses to discovery, Complaint Counsel will submit a document that may be responsive to Respondents' Request for Production #20 to the Presiding Officer for *in camera* review for a determination of whether, and to what extent, this document should be produced.

You also indicated in your correspondence your desire to obtain a copy of the data compilation prepared by Complaint Counsel with respect to Omega failures. Although Complaint Counsel has provided you with the underlying test data upon which its compilation is based, and although the compilation is continually evolving and is Complaint Counsel and its staff's work product, in the interest of full disclosure, Complaint Counsel will produce its compilation as it existed at the time the complaint was filed.

Additionally, Complaint Counsel is in the process of preparing a privilege log of documents received or created that may be responsive to Respondents' requests, and for which a claim of privilege has been made.

We appreciate and share Respondents' perspectives on the importance of full disclosure in this matter, and trust that Respondents will apply such perspectives in responding to Complaint Counsel's discovery requests.

Sincerely,

Deborah S. Orlove

Deborah S. Orlove, Esq.
Complaint Counsel

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May 7, 1998

VIA TELECOPIER & REGULAR MAIL

Deborah S. Orlove
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United States Consumer Product Safety Commission
Office of Compliance
4430 East West Highway
Bethesda, MD 20814

Re: In the Matter of Central Sprinkler Corp., et al. (CPSC Docket No. 98-2)

Dear Ms. Orlove:

This letter responds to your letter of May 6, 1998.

First, regarding the scope of discovery provided by the Staff, your letter fails to address the multiple deficiencies with the Staff's discovery responses raised in my letter of May 4. For example, you still refuse or fail to identify persons with knowledge regarding the key allegations in the Complaint. By failing to provide such information, you completely block Central's ability to take depositions of your witnesses and effectively shut down discovery. Moreover, you fail to address the large number of interrogatories and document requests for which the Staff has provided no response whatsoever. These are only two examples of your letter's failure to address the many deficiencies described in my letter of May 4. It would thus appear that the Staff is refusing to engage in any good faith attempt to resolve this discovery dispute. Therefore, in the absence of full and complete supplemental responses from the Staff as discussed in my letter of May 4, we will be forced to file a motion to compel.

Second, in your letter, you represented that the Staff will provide us with a privilege log. You have not indicated when you will provide it, however. Given the pervasive nature of your privilege objections, the timing requirements established for motions to compel by the CPSC rules of practice, and the fact that such a log already is tardy, we will expect to receive the Staff's privilege log no later than May 8, 1998, as we requested in my letter of May 4.

Your letter also represents that you will begin to provide the Staff's initial test results, but again you do not provide a set date for production. As indicated to you in my letter of May 4, we will expect to receive a full supplemental production by no later than May 8, 1998.

In addition, your letter reiterates a refusal to produce purportedly confidential documents from third parties absent a confidentiality agreement. In my letter to you of May 1, we provided you with a draft Confidentiality Agreement. Despite your stated willingness to produce the referenced documents pursuant to such an agreement, your letter does not comment on or otherwise address the proposed Confidentiality Agreement. In the absence of your comments, we will submit the Confidentiality Agreement for Court approval contemporaneously with any necessary motion to compel. Moreover, please be advised that if you refuse to produce any document for any reason, Central will oppose the admission of that document or class of documents into evidence at the trial of this matter.

Finally, we hereby reiterate our request that the Staff not attempt to engage in any ex parte contacts with the Court.

To date, the Staff has not provided any meaningful discovery to Respondents. Of the 2000 pages of documents produced, approximately 1500 consist of test results provided to you by Central, and many of the remaining 500 consist of publicly available documents. Your discovery provides no meaningful information to Central regarding the bases of your claims and substantially impairs Central's ability to prepare for trial. The Staff cannot and should not be permitted to file a public Complaint, but then refuse to provide the evidence purportedly supporting such claims. We hope that the Staff will choose to take a more reasonable and forthcoming approach going forward in this litigation.

Regards,

Thomas P. Hogan, Jr.

TPH/lgh

U.S. CONSUMER PRODUCT SAFETY COMMISSION
WASHINGTON, D.C. 20207-0001

OFFICE OF COMPLIANCE
Legal Division

Deborah S. Orlove
Trial Attorney
Tel: 301-504-0626 ext. 1347
Fax: 301-504-0359

May 8, 1998

VIA TELECOPIER AND FIRST CLASS MAIL
Thomas P. Hogan, Jr., Esq.
MORGAN, LEWIS & BOCKIUS LLP
2000 One Logan Square
Philadelphia, PA 19103
(215) 963-5299

Re: ***In the Matter of Central Sprinkler Corp. and Central Sprinkler Co.*, CPSC Docket No. 98-2**
Complaint Counsel's Responses to Respondents' First Interrogatories and Request for Production of Documents

Dear Mr. Hogan:

I am writing to confirm my receipt of the United States Certified Mail return receipt for the box of documents we forwarded to you on April 27, 1998 in response to Respondents' First Request for Production of Documents. The return receipt confirms that the documents were received by you on Friday, May 1, 1998, and not on Monday, May 4, 1998, as your May 4 correspondence claims.

I am also writing in response to your telecopy of yesterday late afternoon, May 7, 1998, which reached my desk this morning. I assume that your letter was written prior to your receipt of our supplemental discovery, which was forwarded to your office via certified mail, return receipt, yesterday.

In your May 7 letter, you indicate that Respondents are unable to take depositions of Complaint Counsel's witnesses, as Complaint Counsel has "failed to identify persons with knowledge regarding the key allegations in the Complaint." However, please note that Complaint Counsel has identified numerous persons with such knowledge, in response to Interrogatories 106, 111, 113, 115, 132, and 145. As indicated in our responses to Respondents' Interrogatories, Complaint Counsel has not yet determined who it will call as witnesses, either factual or expert, in this matter. As we determine who our witnesses will be, we will be sure to supplement our responses to identify same in accordance with the Rules of Practice.

With respect to your concern regarding *ex parte* communications, please be assured that Complaint Counsel has no intention of engaging in any prohibited communications with the Presiding Officer or anyone else. Complaint Counsel will follow all applicable procedures, and will serve upon Respondents a copy of any and all motions it files regarding discovery and other matters. As you know, Respondents may, by motion, set forth their justification for desiring access to, or disclosure of, *in camera* materials for the preparation and presentation of their case.

Additionally, you stated in your May 7, 1998 letter that my letter of the previous day promised you the Staff's test results. In my letter, I indicated that we would provide the data compilation of test results compiled by the staff -- which you requested in discovery. Although Complaint Counsel considers the compilation its work product, and has provided you with the underlying data upon which the compilation is based, we agreed to (and did, in yesterday's production) provide you with the compilation in the spirit of full and open disclosure.

With respect to your conclusion that the 2200 documents provided by Complaint Counsel in response to Respondents' First Request are not "meaningful," we invite you to again review those documents, which, along with other documents that we are attempting to obtain permission to produce, form the foundation and basis of this case, and demonstrate that the Omega is defective and poses a substantial risk of injury to the public.

Please do not hesitate to contact me if you have any further concerns. Additionally, in order to avoid crossing of correspondence, it may be more effective for all concerned if you would kindly allowing sufficient time for my response and supplement to reach you via first class mail prior to sending further correspondence on the same topic.

Sincerely,

Deborah S. Orlove

Deborah S. Orlove, Esq.
Complaint Counsel

dso/discov4.ltr

2000 One Logan Square
Philadelphia, PA 19103-6993
215-963-5000
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Morgan, Lewis
& Bockius LLP
COUNSELORS AT LAW
125 years

Thomas P. Hogan, Jr.
215-963-5253

May 13, 1998

VIA TELECOPIER & REGULAR MAIL

Deborah S. Orlove
Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4430 East West Highway
Bethesda, MD 20814

Re: In the Matter of Central Sprinkler Corp., et al. (CPSC Docket No. 98-2)

Dear Ms. Orlove:

This letter is written in response to your letter of May 8, 1998.

We have received Complaint Counsel's supplemental production of documents. This production remains deficient, as it provides little more than the naked conclusions of Complaint Counsel regarding test results. Absent the underlying data and methodology, these results provide Central with little relevant information and no opportunity to examining the validity of the results.[1/]

Nevertheless, please clarify whether it is Complaint Counsel's position that you have produced all relevant and responsive documents, including all documents currently in your possession which you intend to introduce at trial. If so, Central will begin to prepare for the trial of this matter based on the documents already produced. For example, based on the test results produced in your supplemental production, this will mean, inter alia, that Complaint Counsel has no information that indicates any failures regarding Omegas using silicone o-rings, and no

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1/ Contrary to the assertions in your letter, your discovery responses to date have not provided the underlying data supporting these test results, unless such results are compiled almost entirely from Respondents' own test results already produced to Complaint Counsel. In fact, your prior discovery responses and correspondence indicate that you have not produced the underlying data and methodology based on a claim to work product protection.

information that indicates failures in any post-1990 Omegas used in copper or plastic systems. If Complaint Counsel has not produced all relevant documents, please confirm this fact in writing by May 14, so that we can begin to prepare a motion to compel.

Regarding Complaint Counsel's identification of potential witnesses, your letter points to the fact that you have identified "numerous persons with . . . knowledge" in response to six of Respondents' interrogatories. It appears, however, that this represents a selective and incomplete disclosure of "persons with knowledge." Moreover, Complaint Counsel has not provided sufficient documents that would allow Respondents to identify other potential witnesses. If it is Complaint Counsel's position that the persons identified by Complaint Counsel in discovery responses to date represent the universe of potential fact witnesses for Complaint Counsel, please confirm this fact. On the other hand, if Complaint Counsel is aware of other "persons with knowledge" that Complaint Counsel has not disclosed, please confirm this fact in writing by May 14.

In addition, to date, Complaint Counsel continues to ignore several other pressing issues. Complaint Counsel has not addressed the multiple deficiencies in your discovery responses as described in my letters of May 4 and May 7. Moreover, Complaint Counsel has failed to produce a privilege log despite repeated requests from Respondents. Finally, despite several reminders, Complaint Counsel has neither commented on nor responded to the draft Confidentiality Agreement that Respondents sent to you two weeks ago.

Regards,

Thomas P. Hogan, Jr.

TPH/lgh

U.S. CONSUMER PRODUCT SAFETY COMMISSION
WASHINGTON, D.C. 20207-0001

OFFICE OF COMPLIANCE
Legal Division

Deborah S. Orlove
Trial Attorney
Tel: 301-504-0626 ext. 1347
Fax: 301-504-0359

May 20, 1998

VIA TELECOPIER AND FIRST CLASS MAIL
Thomas P. Hogan, Jr., Esq.
MORGAN, LEWIS & BOCKIUS LLP
2000 One Logan Square
Philadelphia, PA 19103
(215) 963-5299

Re: ***In the Matter of Central Sprinkler Corp. and Central Sprinkler Co.*, CPSC Docket No. 98-2**
Service of Documents; Complaint Counsel's Responses to Respondents' First Interrogatories and Request for Production of Documents

Dear Mr. Hogan:

I am writing to alert you that I and my co-counsel, Eric Singer and Howard Tarnoff, are the counsel of record in this matter, and that proper service of any pleadings or other documents in this matter requires service to us. As you know, I have been corresponding with you in this case for many weeks now, and have signed all motions since the Complaint issued. The pleading you telecopied only to the Director of the CPSC's Office of Compliance and to the Director of the Legal Division was not properly served, and the method by which it was transmitted cannot be relied upon to reach me and the other counsel of record in a timely manner.

Additionally, we have received conflicting requests from you and your co-counsel with respect to disclosure of our correspondence on these matters to Judge Moran. Yesterday, we received a fax from Gordon Cooney of your office requesting that we not copy the Judge on our correspondence re: discovery, nearly at the same time we received a fax from you to the Judge attaching your correspondence to us on discovery issues.

I am also writing in response to your letter dated May 13, 1998 which discusses Complaint Counsel's supplemental discovery responses. You allege in your letter that our discovery is deficient because the data compilation "provides little more than the naked conclusions of Complaint Counsel regarding test results." However, as you recall, you requested in discovery "all documents identified in the "List and Summary of Documentary Evidence" attached to the Complaint" in this matter. *See* Request No. 1, Respondents' First

Request for Production of Documents and Things. The data compilation was the first item listed by Complaint Counsel in the List and Summary of Documentary Evidence. We initially objected to production of the compilation, choosing only to produce the raw data upon which it was based, as the compilation of the data was Complaint Counsel's work product. You voiced objections, indicating that you cannot defend this case without the documents in the List and Summary. Despite the privileged nature of the compilation, we provided it to you in a supplemental response, in the spirit of full disclosure. We have provided you with what you requested.

In your May 13 letter, you now claim that "absent the underlying data and methodology," the data compilation provides Central "with little relevant information and no opportunity to examining [sic] the validity of the results." However, the test data upon which the compilation is based has been produced to you where claims of confidentiality have not been made or have been waived, and, where such claims still apply, the documents have been submitted to the Presiding Officer for *in camera* review and determination of the circumstances and extent of disclosure. You were served with Complaint Counsel's Request for that determination earlier this week.

In your letter, you also suggest that the staff has "no information that indicates any failures regarding Omegas using silicone o-rings, and no information that indicates failures in any post-1990 Omegas used in copper or plastic systems." Our Interrogatory Responses and document production, as well as the numerous letters we have written to counsel for Central on issues such as the February, 1998 Omega failure, contradict your conclusions. Regardless, we do not intend to argue the evidence in letters; all argument will occur at the appropriate time before the Presiding Officer.

With respect to persons with knowledge, as we have indicated before, all persons whose names are reflected in the documents produced, as well as persons employed by Central, either now or in the past, and all persons who own, install, inspect or otherwise deal with Omega sprinklers may be knowledgeable about the Omega problem, and may be called by Complaint Counsel as fact witnesses. Upon receipt of Central's responses to our discovery, I expect that additional witnesses will be disclosed. Once we determine who we intend to call as witnesses in this matter, both fact and expert, we will make all necessary and appropriate disclosures.

As Complaint Counsel continues its investigation and preparation of this case, we expect that additional information will come to light. We will continue to supplement our discovery responses as required by the applicable rules. To that end, we are producing today under separate cover another supplement of documents responsive to Respondents' discovery requests. Additionally, we will be filing today an amended response to Respondents' Interrogatories in light of new evidence on a significant fire that occurred just last week, and other information that has developed in this case.

Please do not hesitate to contact me should you have any additional questions.

Sincerely,

Deborah S. Orlove, Esq.
Complaint Counsel

cc: J. Gordon Cooney, Jr., Esq.
Emily J. Lawrence, Esq.
Michael F. Healy, Esq.
John C. Fenningham, Esq.

dso/discov5.ltr

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Morgan, Lewis
& Bockius LLP
COUNSELORS AT LAW
125 years
1873 1998

FAX MESSAGE

Send to:

(1) Name: Eric L. Stone, Esquire — FAX Number: 301-504-0359

Firm: CPSC — Telephone Number: 301-504-0626

(2) Name: Deborah S. Orlove, Esquire — FAX Number: 301-504-0359

Firm: CPSC — Telephone Number:

From:

Name: Kathy Sanzo — Floor: 6N — Operator Sending: Herline

Telephone Number: 202-467-7209 — Time Sent: — Date Sent: 5/27/98

Number of Pages (INCLUDING COVER PAGE): 4

Note:

THE INFORMATION CONTAINED IN THIS FAX MESSAGE IS INTENDED ONLY FOR THE PERSONAL AND CONFIDENTIAL USE OF THE RECIPIENT(S) NAMED ABOVE. THIS MESSAGE MAY BE AN ATTORNEY-CLIENT COMMUNICATION AND AS SUCH IS PRIVILEGED AND CONFIDENTIAL. IF THE READER OF THIS MESSAGE IS NOT THE INTENDED RECIPIENT OR AN AGENT RESPONSIBLE FOR DELIVERING IT TO THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT YOU HAVE RECEIVED THIS DOCUMENT IN ERROR AND THAT ANY REVIEW, DISSEMINATION, DISTRIBUTION, OR COPYING OF THIS MESSAGE IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR, PLEASE NOTIFY US IMMEDIATELY BY TELEPHONE, AND RETURN THE ORIGINAL MESSAGE TO US BY MAIL. THANK YOU.

Comments:

1800 M Street, N.W.
Washington, D.C. 20036-5869
202 467-7000
Fax: 202-467-7176

Morgan, Lewis
& Bockius LLP
COUNSELORS AT LAW

Kathleen M. Sanzo
202-467-7209

May 27, 1998

VIA TELECOPY

Eric L. Stone, Esquire
Director
Division of Administrative Litigation
Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814-4408

Re: Consumer Product Safety Commission v. Central Sprinkler Company;
CPSC Docket No. 98-2

Dear Eric:

As stated in the discovery responses of Central Sprinkler Co. and Central Sprinkler Corp. (collectively, "Central"), we have conducted, and are continuing to conduct, an exhaustive review of Central's documents, both as part of our own due diligence in this matter and in response to Complaint Counsel's Request for Production of Documents. To date, we have identified and are prepared to produce more than 100 boxes of responsive documents and estimate that additional documents encompassing at least another 300 boxes may be responsive. As soon as we complete our review of these additional documents, responsive, non-privileged documents will be produced. During the course of our recent document review and other investigation, we have identified several matters that Central wishes to bring to your attention.

1. In 1990, a patient at Jackson Memorial Hospital in Miami, Florida set fire to herself in an effort to free herself from restraints that had been placed upon her. Although the fire was brought under control, an Omega sprinkler did not activate. Some persons at Central, as well as expert witnesses, believed the non-activation was caused by the sprinkler head being plastered over. At least one Central employee, however, offered his view at the time that the non-activation was caused by exposure of the o-ring to cutting oils. After the incident, the patient who set fire to herself brought suit against the hospital, plaster contractor, sprinkler-installation contractor and Central. After some discovery, Central settled the sizeable claim for $35,000. In seeking approval of

Morgan, Lewis
& Bockius LLP

the settlement from the Court, the guardian ad litem represented that the discovery taken in the case, according to plaintiff's counsel, showed that the inoperation was caused by the presence of plaster in the sprinkler. We are investigating this matter further.

2. As you know, Central has been performing testing of samples taken from various buildings throughout the country. This testing has been performed voluntarily by Central as part of a good faith effort to directly address the concerns of building owners. As a result of this testing, Central has spent to date over $5 million in remediating a large number of buildings. During the course of our review, we have raised questions regarding the accuracy of several reported test results. Central is actively investigating this issue and will take appropriate action, if necessary.

3. As you know, the o-ring in the Flow Control sprinklers was changed from EPDM to silicone in May 1997. The Flow Control valves also contain a diaphragm made out of EPDM material. Although Central intends to change the material in the diaphragm to silicone in the near future, Central did not make that change in 1996 because its engineers did not believe that cutting oil could affect the diaphragm in the Flow Control sprinkler because of the design of that sprinkler. Central therefore determined that such a change to the diaphragm was not warranted at that time.

As we hope you can appreciate, Central, its Board of Directors, its management and all counsel are committed to an appropriate resolution of this matter, and have authorized the issuance of this letter towards that end. Non-privileged documents that are responsive to your Request for Production of Documents, including documents concerning the above matters, will be made available for inspection on a rolling-production basis at a mutually convenient time in our Washington, D.C. office. Moreover, our further investigation may reveal additional information that we may wish to bring to your attention as well.

If you have any questions, please feel free to contact either me or Gordon Cooney.

Very truly yours,

Kathy Sanzo

Kathleen M. Sanzo

Morgan, Lewis & Bockius LLP

cc: Deborah S. Orlove, Esquire (via telecopy)
John C. Fenningham, Esquire (via telecopy)
Michael F. Healy, Esquire
Mr. Winston J. Churchill (via telecopy)
Mr. George G. Meyer (via telecopy)

2000 One Logan Square
Philadelphia, PA 19103-6993
215-963-5000
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1998 JUN 18 A 10:56

Morgan, Lewis & Bockius LLP
COUNSELORS AT LAW

J. Gordon Cooney, Jr.
215-963-4806

May 29, 1998

VIA TELECOPY

Eric L. Stone, Esquire
Director
Division of Administrative Litigation
Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

Deborah S. Orlove, Esquire
Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, MD 20814

Re: Consumer Product Safety Commission v. Central Sprinkler Company; CPSC Docket No. 98-2

Dear Eric and Deborah:

Pursuant to your request and as a courtesy, attached is a copy of our index to the documents that respondents currently are able to produce. The first two pages correspond to the first 57 boxes of documents that were specifically gathered for purposes of responding to your document requests in this matter. Although there is a gap in the sequence between box 46 and box 133, the remaining boxes will be made available in the near future once they have been gathered and reviewed. Due to the extremely broad nature of your requests, copies of the documents are being produced as they are kept in the ordinary course of business, as specifically permitted by prevailing practice, including the Federal Rules of Civil Procedure. The index sets forth the department from which each box of documents was taken and also includes a Bates range for each box of documents.

The third page sets forth our index for documents that were retrieved for purposes of the Hart class action. They also are responsive to your requests. Although we believe the description of the applicable departments is reasonably accurate with this group of boxes, in all candor, there may be some errors in attribution. Obviously, if you have questions regarding the origins of documents in this group, we will endeavor to answer them to the best of our abilities.

As we stated during our telephone call yesterday, we are prepared to begin to make Central's documents available for your inspection, once we resolve issues regarding the confidentiality agreement that we forwarded on May 1, 1998.

Very truly yours,

J. Gordon Cooney, Jr.

JGC/ss

Attachment

cc: John C. Fenningham, Esquire (w/attachment)
Michael F. Healy, Esquire (w/attachment)

CURRENT PRODUCTION: IN RE CENTRAL SPRINKLER CO.

BOX #	DEPARTMENT	BATES RANGE: CS Prefix
1	Operations	001-000001 to 001-001723
2	Operations	001-001724 to 001-003870
3	Operations	001-003870 to 001-004965
4	Operations	001-004966 to 001-005514
5	Operations	001-005515 to 001-006970
6	Operations	001-006971 to 001-007389
7	Operations	001-007390 to 001-008774
8	Operations	001-008775 to 001-009618
9	Operations	001-009619 to 001-011172
10	Operations	001-011173 to 001-011767
11	Operations	001-011768 to 001-013321
12	Operations	001-013322 to 001-013635
13	Operations	001-013636 to 001-014136
14	Operations	001-014137 to 001-014652
15	Operations	001-014653 to 001-014821
16	Operations	001-014822 to 001-017117
17	Operations	001-017118 to 001-019691
18	Operations	001-019692 to 001-021368
19	Operations	001-021369 to 001-022279
20	Operations	001-022280 to 001-022706
21	Operations	001-022707 to 001-024957
22	Operations	001-024958 to 001-026449
23	Operations	001-026450 to 001-029064
24	Operations	001-029065 to 001-031035
25	Operations	001-031036 to 001-033005
26	Operations	001-033006 to 001-035628
27	Operations	001-035629 to 001-037325
28	Operations	001-037326 to 001-039867
29	Operations	001-039868 to 001-040766
30	Purchasing	002-000001 to 002-000988
31	Purchasing	002-000989 to 002-001765
32	Purchasing	003-000001 to 003-001495.1
33	Purchasing	004-000001 to 004-001680
34	Purchasing	004-001681 to 004-002826
35	Purchasing	004-002827 to 004-003513
36	Purchasing	004-003514 to 004-004893
37	Purchasing	004-004894 to 004-006001
38	Purchasing	004-006002 to 004-007166
39	Purchasing	004-007167 to 004-008970
40	Purchasing	004-008971 to 004-009775
41	Purchasing	005-000001 to 005-000174
42	Purchasing	006-000001 to 006-001392
43	Purchasing	006-001393 to 006-003706
44	Purchasing	007-000001 to 007-002226
45	Purchasing	007-002227 to 007-004899
46	Purchasing	007-004900 to 007-006474

133	Accounting	024-000001 to 024-002153
134	Accounting	024-002154 to 024-004483
135	Accounting	024-004484 to 024-006074
136	Accounting	024-006075 to 024-008245
137	Accounting	024-008246 to 024-010655
138	Accounting	024-010656 to 024-013381
139	Accounting	024-013382 to 024-016122
140	Accounting	024-016123 to 024-018743

220	Customer Service	039-000001 to 039-000136
221	Operations	040-000001 to 040-001902
222	Operations	040-001903 to 040-002888

CENTRAL SPRINKLER DOCUMENT PRODUCTION INDEX

FIRST PRODUCTION: HART ET AL. V. CENTRAL SPRINKLER CO.

BOX #	DEPARTMENT	BATES RANGE: CS Prefix
1	Customer Service	000001-000689
2	Customer Service	000690-001428
3	Customer Service	001429-002422
4	Customer Service	002423-003136
5	Customer Service	003137-004254
6	Purchasing	004255-005841
7	Purchasing	005842-008458
8	Purchasing	008459-011033
9	Customer Service	011034-011870
10	Customer Service	011871-013044
11	Customer Service	013045-014087
12	Customer Service	014088-015184
13	Customer Service	015185-016385
14	Quality Control	016386-017656
15	Quality Control	017657-019723
16	Operations	019724-020867
17	Engineering	020868-022100
18	Engineering	022101-022731
19	Technical Services	022732-024227
20A	Quality Control	024228-027458
20B	Quality Control	027459-030154
21	Quality Control	030155-032485
22	Quality Control	032486-032700
23	Quality Control	032701-034162
24	Quality Control	034163-034737
25A	Engineering	034738-036099
25B	Operations	036100-037322
26	Engineering	037323-039889
27A	Quality Control	039890-043046
27B	Quality Control	043047-043960
28	Production	043961-044374
29	Engineering	044375-045706
30	Operations	045707-047418
31	Quality Control	047419-047896
32	Engineering	047897-049176
33	Engineering	049177-051448
34	Engineering	051449-053934
35	Engineering	053935-056616
36	Engineering	056617-059036
37	Quality Control	059037-061726
38A	Quality Control	061727-061899
38B	Quality Control	061900-062059
39	Operations	062060-063765
40	Engineering	063766-064280

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1998 JUN -4 A 10:56

COPY

U.S. CONSUMER PRODUCT SAFETY COMMISSION
WASHINGTON, D.C. 20207

OFFICE OF COMPLIANCE
Legal Division
Tel: (301) 504-0626, Ex. 1350
Fax: (301) 504-0359

Eric L. Stone
Director

June 3, 1998

J. Gordon Cooney, Jr., Esquire
Morgan, Lewis & Bockius, LLP
2000 One Logan Square
Philadelphia, PA 19103

Re: First Set of Discovery Responses

Dear Mr. Cooney:

Given the strident rhetoric of Mr. Hogan's letters to Complaint Counsel regarding its responses to discovery, Respondents' first round of discovery responses were astounding. Those responses are completely inadequate and do not comport with the Commission's Rules of Practice. We request that you take immediate steps to remedy the defects enumerated below or the staff will file appropriate motions with the Presiding Officer.

Respondents' responses are inadequate

The Commission's Rules of Practice require that a party respond to each interrogatory separately and *fully*, under oath within 30 days. 16 CFR § 1025.32. The rules permit Respondent to respond by providing *specified* business records *when the burden on the parties of ascertaining the answer is the same.* 16 CFR § 1025.32(d). Respondents' response to every one of Complaint Counsels' interrogatories is incomplete and inadequate under the Commission rules as are its responses to every request for production of documents.

This letter will not discuss Respondent's litany of spurious objections. Rather, our primary concern is that Respondent did not make a complete substantive response to any one of Complaint

Counsel's interrogatories.[1] Respondents could have easily provided answers to many of our inquiries based on the personal knowledge of Mr. Schiavone, other corporate officers and officials, and counsel (particularly Mr. Fenningham). Instead, Respondents directed Complaint Counsel to a largely undefined mass of documents, placing an unnecessary--and perhaps impossible--burden on Complaint Counsel to divine the answers.

When Complaint Counsel inquired about why Respondents had not specified documents that were responsive to each of our requests for production and interrogatories, you assured us these documents were indexed. As you know the "index" you submitted provides no useful information regarding the location of responsive documents. Based on what you have provided to date, it appears that documents that might have been accessible have been agglomerated into boxes in a manner that made them as inaccessible as possible. If Respondents do not take action to immediately remedy this situation, Complaint Counsel will have no option but to seek remedies from the Presiding Officer.

Respondents' conditions for examining the documents are unacceptable

Respondents have suggested that the documents may be reviewed on a "rolling" basis, but provide no time-frame for completing its production. Respondents also have created a condition precedent for examination of its documents that is inconsistent with the Commission's rules. Essentially, Respondents have demanded that Complaint Counsel agree to maintain the confidentiality of documents that may not be confidential. Complaint Counsel cannot and will not do so.

As you know, the Commission's laws strictly forbid the release of confidential commercial information and provide procedural safeguards governing that release. This provides adequate protection for any information that deserves protection. Further, the administrative law judge has the authority to provide protection for documents that truly require such protection. 16 CFR § 1025.45. Complaint counsel has used that procedure where potential confidential information exists.

Proposed Alternative Approach

This proceeding promises to be complex and difficult. The

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[1]Although Respondents occasionally provided brief--and usually unresponsive--commercials for their positions, Respondents directed Complaint Counsel to an amorphous bulk of several hundred boxes of materials rather than answering our questions.

Complaint Counsel wishes to continue to play a constructive role in moving this litigation to a speedy conclusion. We hope you will join us in that approach. In that spirit, we offer the following suggestions.

Interrogatories--Respondents should immediately supplement its responses by providing all information readily available to Respondents and their counsel. Further, Respondents must provide all responses that are not readily ascertainable by a search of existing documents, e.g. information recalled by corporate officials and employees that was not reduced to written form.

Production of Documents--Complaint Counsel requests that Respondents provide a meaningful index to its boxes of documents. Further, Complaint Counsel requests that you immediately provide the following documents for copying (many of which the staff requested months ago and should have been reported under section 15(b) of the CPSA and 16 CFR § 1115.13(d)):[2]

(1) all engineering drawings, engineering change notices and requests for change, first article releases, and bills of materials,

(2) all return authorizations, diagnostic reports, and any other service department records regarding the failure of the sprinklers to function in overheating or fire situations,

(3) all documents regarding allegations of fire involving Central Sprinkler Omega sprinklers,

(4) all documents or records of pressure testing of Omega sprinklers, and analysis of the reasons for failure conducted since your last submission of such documents to the staff on in April 1997. Please include computerized records, if any.

Privilege index--Complaint Counsel suggests that we jointly review your privilege index in order to insure that there are no disagreements about the applicability of privileges to any

---

[2]Complaint Counsel expects Respondents to make all appropriate claims for confidentiality to protect its interests in the documents provided.

documents for which you have made claims.

We look forward to your prompt response.

Sincerely,

Eric L. Stone

cc. Mr. Hogan
Mr. Healey
Ms. Lawrence
Mr. Fenningham

2000 One Logan Square
Philadelphia, PA 19103-6993
215-963-5000
Fax: 215-963-5299

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1998 JUN 18 A 10:56

Morgan, Lewis
& Bockius LLP
COUNSELORS AT LAW
125 years
1873 1998

Thomas P. Hogan, Jr.
215-963-5253

June 8, 1998

VIA TELECOPIER AND REGULAR MAIL

Eric L. Stone, Esquire
Director
Consumer Product Safety Commission
Division of Administrative Litigation
4330 East West Highway
Bethesda, MD 20814-4408

Re: In the Matter of Central Sprinkler Corp. and Central Sprinkler Co. (Docket No. 98-2)

Dear Mr. Stone:

This letter responds to your letter of June 3, 1998.

In your letter, you raised several general complaints regarding Respondents' discovery responses. Respondents have undertaken a labor-intensive and expensive document search in response to Complaint Counsel's extremely broad discovery requests. This effort will result in Respondents' offering you access to approximately 400 boxes of documents. By way of contrast, Complaint Counsel has produced to Respondents less than one box of documents. As a result, we do not find your concerns to be compelling or appropriate. However, we will make every effort to address your concerns, and hope that Complaint Counsel will provide similarly substantive discovery in the near future.

First and foremost, you will need to provide greater precision regarding your concerns with Respondents' discovery responses. Your letter states that you "will not discuss Respondent's [sic] litany of spurious objections." This appears to be a simple attempt to avoid addressing the merits of these well-founded objections. If you have a concern about an objection, please inform us so that we may discuss it. Absent such a reasonable attempt to resolve discovery issues, we believe any motion to compel would be premature and an inappropriate burden on the Court.

As you are aware, when addressing the deficiencies with Complaint Counsel's discovery responses, Respondents provided Complaint Counsel with a detailed description of objections and responses which we viewed as problematical. See Letters of May, 1, 4, 7, and 13. Respondents explained in great detail, with supporting legal authority, the problems with Complaint Counsel's responses and objections. Without such precision, it is impossible to engage in fruitful discussions on this issue. Therefore, we respectfully suggest that you provide us with a detailed list of Respondents' responses and objections regarding which you have questions, the particular nature of the alleged problem, and any legal authority supporting your position. In the absence of such efforts, we do not believe that Complaint Counsel will have engaged in good faith discussions to resolve this discovery dispute.

Your letter complains about the fact that Respondents have provided Complaint Counsel access to approximately 400 boxes of documents, and have referred Complaint Counsel to such business records as a response to Complaint Counsel's interrogatories. As an initial matter, we do not understand how you can actually fault Respondents for taking Complaint Counsel's incredibly broad discovery requests seriously by producing responsive documents. Moreover, in providing your own discovery responses, Complaint Counsel neither responded to the majority of Respondents' interrogatories nor provided responsive documents from which such responses could be ascertained. Thus, we believe Complaint Counsel is hard-pressed to complain.

Nevertheless, we refer you to 16 C.F.R. § 1025.32(d), which clearly permits Respondents to produce business records in response to Complaint Counsel's interrogatories. Respondents obviously prefer to rely upon the hard information and facts provided by those records, which speak for themselves, rather than have a representative attempt to speculate about what might be in them.

Moreover, producing the documents as kept in the ordinary course of business is both prudent and proper.[1/] Given the large volume of documents, the tremendous number of discovery requests from Complaint Counsel, and the very short discovery deadlines contemplated by the administrative rules, it is not feasible, economical, or practical to attempt to segregate the documents or identify the documents based on specific discovery requests from Complaint Counsel. Complaint Counsel has served a total of 218 separate discovery requests, most with multiple subparts. Respondents estimate that they will be making available to Complaint

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1/ Respondents are producing the documents as they were kept in the ordinary course of business, not "agglomerated into boxes in a manner that made them as inaccessible as possible," as suggested in your letter.

Counsel approximately 450,000 pages of documents. Therefore, attempting to identify which documents might be responsive to which discovery requests would literally take months, and the burden on Complaint Counsel in doing so is no greater than the burden on Respondents. Respondents believe our efforts should be directed toward preparing for trial, not attempting to match and segregate approximately 450,000 pages of documents to correspond to each of Complaint Counsel's 218 discovery requests.

In addition, you have failed to bring to our attention and we are unaware of any CPSC rule of practice requiring Respondents to identify documents as responsive to specific discovery requests, nor did Complaint Counsel's discovery requests ask for such identification. By way of comparison, Respondents' discovery requests specifically asked for such an identification, and this instruction was not objected to by Complaint Counsel. Moreover, such an identification was rather simple for Complaint Counsel, because you produced less than one box of documents.

Your letter also complains about the fact that Respondents have conditioned production of the documents on Complaint Counsel entering into an appropriate Confidentially Agreement. As we are sure you are aware, Respondents' position is fully consistent with standard practice. Moreover, your position once again lacks credibility because Complaint Counsel demanded the same condition in its discovery responses. See, e.g., Complaint Counsel's Document Responses, Nos. 1 and 5. In addition, Respondents proposed a Confidentiality Agreement to you three weeks before serving Respondents' discovery responses, but Complaint Counsel refused to agree to or even comment on this proposal. Therefore, Respondents were forced to submit the Confidentiality Agreement to the Presiding Officer as a proposed protective order. That protective order is pending before the Presiding Officer -- Complaint Counsel can either notify the Presiding Officer that the Confidentiality Agreement is acceptable to them and begin reviewing documents immediately, or Complaint Counsel can wait for the Presiding Officer to rule.

Your letter also raises the issue of Respondents producing the documents on a "rolling basis." This procedure was necessitated by the huge volume of documents requested by Complaint Counsel's extremely broad discovery requests. Complaint Counsel should not be heard to complain that is has received what it requested.

Regarding a proposed completion date for this "rolling" production, we anticipate being able to make all responsive documents available by approximately June 24, 1998. However, given the fact that Respondents have offered to make approximately 100 boxes immediately available for review, it does not appear that Complaint Counsel is currently lacking in a sufficient number of documents to review.

Finally, your letter requests an immediate production of a more narrow range of documents than initially requested, essentially demanding that Respondents go through the approximately 400 boxes of documents again to segregate this material. Frankly, if this is the information you truly wanted, it would have been far simpler and less expensive to our client if you had made such requests at the outset. Rather than doing so, however, you made a very broad set of requests that generated a huge volume of paper. Unfortunately, the realities of a large-scale document production do not provide for this sort of ex post request. Our team already is committed to reviewing the additional 300 boxes of documents so as to produce them to you as quickly as possible. It makes no sense for Respondents to interrupt this process, re-review and segregate documents from the 100 boxes already reviewed, and create two separate files for the remaining 300 boxes. If Complaint Counsel had made narrow, particularized requests from the beginning, this problem could have been avoided. As a result of Complaint Counsel's incredibly broad requests, however, the burden is now on them to create their own working files out of the documents produced by Respondents.

In conclusion, Respondents suggest the following course of action:

(1) provide us with a detailed list of the discovery responses and objections from Respondents regarding which Complaint Counsel has any concerns, the specific nature of the concern, and any legal support for Complaint Counsel's position;

(2) notify us and the Presiding Officer whether the Confidentiality Agreement submitted by Respondents is acceptable;

(3) provide us with dates when you anticipate being able to begin inspecting the documents produced; and

(4) if you have any questions regarding Respondents' Privilege Log, notify us of and describe those questions.

Regards,

Thomas P. Hogan, Jr.

TPH/lgh

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U.S. CONSUMER PRODUCT SAFETY COMMISSION
WASHINGTON, D.C. 20207-0001

C E OF COMPLIANCE
Legal Division

Deborah S. Orlove
Trial Attorney
Tel: 301-504-0626 ext. 1347
Fax: 301-504-0359

June 12, 1998

VIA TELECOPIER AND FIRST CLASS MAIL

J. Gordon Cooney, Jr., Esq.
MORGAN, LEWIS & BOCKIUS LLP
2000 One Logan Square
Philadelphia, PA 19103
(215) 963-5299

Re: ***In the Matter of Central Sprinkler Corp. and Central Sprinkler Co.*, CPSC Docket No. 98-2**
Service of Documents; Respondents' Responses to Complaint Counsel's First Interrogatories and First Requests for Production of Documents

Dear Gordon:

I am writing in response to your letter of June 9, 1998, and Mr. Hogan's letter of June 8, 1998.

In our prior conversations, Respondents had promised to submit to Complaint Counsel an index of the documents contained in Respondents' approximately 400 boxes of documents that may be responsive to Complaint Counsel's discovery herein. Respondents forwarded an index of documents that stated merely "operations" next to Boxes 1-29 (approximately 40,000 Bates pages); "purchasing" with respect to Boxes 30 - 46 (approximately 6500 Bates pages); "accounting" for boxes 133 - 140 (and no explanation of where boxes 47 - 132 are, or what is in them); "customer service" (boxes 220; boxes 1 - 5 second set); and other such broad descriptions as "engineering," "customer service," "quality control," "production" and "operations." As I am sure you understand, these terms provide no useful information that would point Complaint Counsel to which boxes of documents, and which Bates pages, are responsive to which of Complaint Counsel's Interrogatories and Requests for Production.

As Mr. Stone highlighted in his June 3, 1998 letter to you, the rules applicable to this proceeding provide that Respondents may only submit business records in response to Interrogatories if the burden of ascertaining the answer to the interrogatory from the business record is the same for the party serving the interrogatory as for the party served. Mr. Hogan stated in his June 8 letter that Respondents have conducted a "labor-intensive" and

"expensive" document search. Your index indicates that you have Bates-stamped each of the documents in the 400 boxes at issue. Respondents have also made claims of confidentiality and trade secret for some of the documents (though without specifying to which documents these claims apply). These representations indicate that Respondents have reviewed the documents, and that the issue of equal burden is moot -- the burden of discerning the response is much greater on Complaint Counsel than on Respondents (particularly without the benefit of a proper index), as Respondents have already reviewed the documents.

Your discovery responses were due to us on May 26th. It is now June 11, and we still have not received an appropriate index of documents, much less any documents, from Respondents. Considerable time has been lost. In light of the seriousness of the issues at hand, and of the hazards associated with defective fire sprinklers, we cannot afford to take any additional time to argue with Respondents about the improprieties of their discovery techniques. Additionally, as I am sure you understand, we also cannot agree to unnecessarily overbroad confidentiality stipulations such as that which you have proposed. We are a government agency whose mandate is to protect the public. Our processes and procedures are purposefully made public, and we cannot and will not block from the public information that pertains to a product that is neither privileged nor confidential, merely because Respondents would prefer it to be so. The Commission's rules regarding confidential financial and trade secret information are clear -- if you wish documents to be kept confidential and excluded from the public record, you must submit the documents with a request to the Presiding Officer for *in camera* treatment. 16 C.F.R. § 1025.45(b).

We request that you immediately submit those documents for which you make confidentiality and trade secret claims to the Presiding Officer for determination of whether and to what extent the information should be placed in the public record. In the interim, while we await a determination by the Presiding Officer, please forward a proper index of documents, as well as all responsive documents, to us under the attached confidentiality agreement in which we agree not to disclose them, except to counsel, our employees and our consultants, pending a decision by the Presiding Officer. We would be pleased to arrange for pickup of the index and the documents from your D.C. office, where I understand they are being held, this afternoon or on Monday, June 15. Please indicate what day and time you prefer, and to whom our drivers should report for the pickup.

Until we are able to examine the documents, we cannot provide you with a detailed proposed discovery and litigation schedule. However, in the interest of cooperation, we have attached a preliminary proposed schedule for your review.

Additionally, on June 2, 1998, we received a fax copy of a letter to Ms. Sadye Dunn, Secretary of the Commission, that purported to enclose the following documents: (1) Respondents' Opposition To Complaint Counsel's Motion for Protective Order Regarding Anonymous Letter; (2) Proposed Protective Order and Opposition of Respondents to

Complaint Counsel's Submission of Documents *In Camera*; (3) Respondents' Motion to Compel Full and Complete Responses to Interrogatories and Documents Requests (which the letter indicates was served May 20, 1998); (4) Respondents' Responses and Objections to Complaint Counsel's First Request for Production of Documents and Things; (5) Respondents' Responses and Objections to Complaint Counsel's First Set of Interrogatories; and (6) Respondents' Privilege Log. Our copy of the letter came without any of the documents purportedly sent to the Secretary for filing. The letter indicates that all the documents sent to Ms. Dunn for filing were previously served upon us. We therefore assume that the Motion to Compel filed June 2 with the letter is the same Motion to Compel that was served upon Complaint Counsel on or about May 20, 1998, and that it was filed on June 2 to cure the fact that it was never filed when originally served. If, however, you intended the June 2 filing to be a "resubmission" of your Motion to Compel, as requested by the Judge during our teleconference, please advise us immediately of such intention, and properly serve us with the refiled Motion at once.

Lastly, please be advised that we have received preliminary notice that a hotel guest suffered a heart attack when the Omega sprinkler in the guest's hotel room improperly and spontaneously activated. According to the information received by the staff, Central responded to this and other incidents by sending teams of employees to inject "Locktite" into over 12,000 Omega sprinklers to prevent leakage and premature activation. We are investigating this incident and others, and intend to supplement our responses to Respondents' Interrogatories with same. We would expect Respondents to have provided this information (and copies of the complaints filed against Central relating thereto) in submissions to the staff, and in response to Complaint Counsel's Interrogatories (including, but not limited to, Nos. 26, 30, 38, 49, 66, 110, 111, 113 and 114) and Requests for Production (including, but not limited to, Nos. 2, 13, 17, 21, 22, 27, 44, 62, 96, 97, 99 and 101) in this matter. We cannot afford to lose any additional time before reviewing Respondents' documents, and request immediate responses to our Interrogatories on these and all other issues addressed.

Please contact me at your earliest convenience regarding your document production.

Sincerely,

Deborah S. Orlove

Deborah S. Orlove, Esq.
Complaint Counsel

Attachments

cc: Thomas P. Hogan, Jr., Esq.
Emily J. Lawrence, Esq.
Michael F. Healy, Esq.
John C. Fenningham, Esq.

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UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents	)	

INTERIM CONFIDENTIALITY STIPULATION

This interim confidentiality stipulation is entered into this date between Complaint Counsel for the staff of the Consumer Product Safety Commission and the undersigned counsel for Respondents, Central Sprinkler Corp. and Central Sprinkler Co.

WHEREAS the undersigned represent litigants in the action *In the Matter of Central Sprinkler Corp. and Central Sprinkler Co.*, pending before the Commission as Docket No. 98-2; and

WHEREAS Complaint Counsel served upon Respondents its First Interrogatories and First Requests for Production of Documents on April 20, 1998;

WHEREAS Respondents' responses to Complaint Counsel's First Interrogatories and First Requests for Production of Documents were due on May 26, 1998;

WHEREAS Respondents wish to provide business records in lieu of responses to Complaint Counsel's Interrogatories, and assuming that Respondents' provision of such records complies with 16 C.F.R. 1025.32(d); and

WHEREAS Respondents claim that certain documents responsive to Complaint Counsel's Interrogatories and Requests for Production contain confidential financial information and trade secret information regarding or belonging to Respondents;

THEREFORE Complaint Counsel and Respondents agree that:

1) Respondents will submit within five days of the date of this agreement all responsive documents that they claim contain confidential financial and trade secret information to the Presiding Officer for determination of whether and to what extent those documents shall be placed in the public record; and

2) Respondents will immediately provide to Complaint Counsel a proper index of all documents responsive to Complaint Counsel's Requests for Production and Interrogatories; and

3) Respondents will immediately provide to Complaint Counsel all responsive documents for which no claims of confidential financial information or trade secret are being made; and

4) Respondents will immediately provide to Complaint Counsel all responsive documents for which claims of confidential financial information or trade secret are being made, clearly indicating on those documents that such claims are made. Pending a determination on the claims by the Presiding Officer (see No. 1, above), Complaint Counsel agrees that it will not share the documents for which such claims are indicated with anyone but counsel, its employees, and consultants in this matter. Once a determination is made by the Presiding Officer as to the claims, Complaint Counsel will be bound by that determination; and

5) By signing this agreement and accepting documents from Respondents for review, Complaint Counsel does not in any way waive or limit any right it has or may have to object to any claims of confidentiality or trade secret Respondents make or may make with respect to the responsive documents. By signing this agreement and accepting documents from Respondents for review, Complaint Counsel does not in any way waive or limit any right it has or may have to move to compel Respondents to provide complete and proper responses to Complaint Counsel's discovery requests in this matter.

Dated: June 12, 1998

Deborah S. Orlove, Esq.
Eric H. Singer, Esq.
Howard N. Tarnoff, Esq.
Complaint Counsel
United States Consumer Product Safety Comm'n
Office of Compliance
4330 East West Highway
Bethesda, MD 20814
(301) 504-0626

J. Gordon Cooney, Esq.
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Philadelphia, PA 19103
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UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
CENTRAL SPRINKLER CORP.,	)	
and	)	CPSC DOCKET NO. 98-2
CENTRAL SPRINKLER CO.,	)	
Respondents	)	

COMPLAINT COUNSEL'S PRELIMINARY PROPOSED DISCOVERY AND LITIGATION SCHEDULE

Having not received any documents in discovery from Respondents, Complaint Counsel submits to Counsel for Respondents this Preliminary Proposed Discovery and Litigation Schedule:

Production of Documents by Respondents to Complaint Counsel:

immediately (by June 15, 1998)

Respondents' Submission of Complete (and Meaningful) Index of Documents to Complaint Counsel:

immediately (by June 15, 1998)

Preliminary Disclosures of Fact Witnesses:

to be exchanged 14 days after receipt of all documents by Complaint Counsel (June 29, 1998), and supplemented thereafter in accordance with the rules of discovery

Depositions of fact witnesses:

to commence 45 days after documents are produced to Complaint Counsel (July 30, 1998), and continue for 60 days thereafter (ending September 28, 1998)

Preliminary Disclosure of Expert Witnesses:

(in accordance with applicable rules) to be exchanged 75 days after documents are produced to Complaint Counsel (Sat., August 29; therefore, Monday, August 31)

Depositions of expert witnesses:

to commence the day after the period for depositions of fact witnesses expires (Sept. 29, 1998), and continue for 30 days thereafter (October 29, 1998)

Motions in Limine: Due on or before November 10, 1998

Dispositive Motions: Due on or before November 25, 1998

Exchange of Final Exhibit Lists: November 25, 1998

Exchange of Final Witness Lists: November 25, 1998

Submission of Expert Testimony to be used at Trial:

December 1, 1998

Submission of Final Pre-Hearing Briefs:

December 1, 1998

Final Pre-Hearing Conference: December 7, 1998

Trial: to commence December 14, 1998
to take place in Washington, DC

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UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

OFFICE OF THE SECRETARY
FREEDOM OF INFORMATION

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In the Matter of	:	
	:	
CENTRAL SPRINKLER CORP.	:	**CPSC DOCKET NO. 98-2**
	:	
and	:	
	:	
CENTRAL SPRINKLER CO.,	:	
	:	
Respondents	:	
	:	

ANSWER AND AFFIRMATIVE DEFENSES OF RESPONDENTS CENTRAL SPRINKLER COMPANY AND CENTRAL SPRINKLER CORPORATION

Respondents Central Sprinkler Company ("Central") and Central Sprinkler Corporation ("CSC"), through their undersigned attorneys, hereby respond to the Complaint filed in the above matter. Respondents submit this Answer pursuant to the requirements of 16 C.F.R. § 1025.12, which mandates the filing of an answer within 20 days after the service of the Complaint, and without prejudice to their Motion to Dismiss the Complaint which is being filed contemporaneously with this Answer. In response to the numbered paragraphs of the Complaint, Respondents aver as follows:

1. Admitted in part and denied in part. It is admitted only that this is an administrative proceeding pursuant to Section 15 of the Consumer Product Safety Act ("CPSA"), 15 U.S.C. § 2064, and that the proceeding is governed in part by the Rules of Practice for Adjudicative Proceedings before the Consumer Product Safety Commission, 15 C.F.R. Part 1025. The remaining allegations of this paragraph are denied.

2. Denied. Respondents specifically deny that the Consumer Product Safety Commission ("CPSC") has jurisdiction over the products at issue. To the contrary, the CPSC lacks jurisdiction over the products at issue because they are not consumer products within the meaning of the CPSA. By way of further answer, Respondents have filed simultaneously with this Answer a Motion to Dismiss the Complaint that raises the jurisdictional issues with greater specificity. Moreover, the allegations of this paragraph constitute legal conclusions to which no responsive pleading is required and they are therefore deemed denied.

3. Admitted.

4. Admitted.

5. Denied. It is specifically denied that respondent CSC manufactures any products of any kind. Moreover, although respondent Central manufactures products distributed in commerce, Respondents deny that the products at issue are consumer products within the meaning of the CPSA. By way of further answer, Respondents have filed simultaneously with this Answer a Motion to Dismiss the Complaint that raises the jurisdictional issues with greater specificity. Moreover, the allegations of this paragraph constitute legal conclusions to which no responsive pleading is required and they are therefore deemed denied.

6. Admitted in part and denied in part. It is admitted only that Central has manufactured various models of Omega-brand automatic fire sprinkler heads, including model numbers C-1; C-1A; C-1A PRO; C-1A PRO ID; EC-20; EC-20A; EC-20AID; HEC-12; HEC-12 ID; HEC-12 PRO; HEC-12A PRO; HEC-12 RES; HEC-20; HEC-20 ID; R-1; R-1A; R-1M; AC; M; and Flow Control, and that these devices are designed to be incorporated into an automatic fire-sprinkler system to suppress and/or extinguish fire. The remaining allegations of this

paragraph are denied. Moreover, the allegation that Omegas are consumer products is a legal conclusion to which no responsive pleading is required and it is therefore deemed denied.

7. Respondents incorporate paragraphs 1 through 6 of their Answer as though fully set forth at length.

8. Admitted in part and denied in part. It is admitted that Standard for Safety UL 199 has been adopted by Underwriters Laboratories, Inc. ("UL") as a standard for determining whether new, uninstalled sprinkler heads can be listed by UL for installation in automatic fire sprinkler systems, and that Omega sprinkler heads are designed to be installed in sprinkler systems that conform to, inter alia, National Fire Protection Association ("NFPA") Standard 13. It is further admitted that the Omega heads at issue have been, and continue to be, listed by UL for installation in automatic fire sprinkler systems. The remaining allegations of this paragraph are denied.

9. Denied as stated. In the Omega sprinkler heads, a fusible alloy pellet is compressed with a bearing disc into a copper housing by a ball plunger. Heat is absorbed by the heat collecting fins and conducted to the alloy pellet. At the rated temperature, the alloy melts, causing the ball plunger to drop, freeing balls from a retaining groove. This movement allows system water pressure to force the orifice sealing mechanism and deflector assembly open. Water is then discharged in a designed flow pattern.

10. Denied. Upon information and belief, the allegation that Omegas do not and will not function in a significant percentage of instances is based on a hypothetical testing standard that is not intended to and does not predict whether, in fact, the tested sprinkler heads will fail in a fire in the actual buildings from which the tested heads were taken. Moreover, the allegations

of this paragraph do not comply with 16 C.F.R. § 1025.11(b)(3), which requires a "clear and concise statement of the charges, sufficient to inform each respondent with reasonable definiteness of the factual basis or bases of the allegations of violation or hazard." By way of further answer, Respondents have filed simultaneously with this Answer a Motion to Dismiss the Complaint that raises with greater specificity the failure of the Complaint to meet the requirements of 16 C.F.R. § 1025.11(b)(3). Finally, the allegation that Omegas are defective pursuant to 15 U.S.C. § 2064(a)(2) and 16 C.F.R. § 1115.4 is a legal conclusion to which no responsive pleading is required and it is therefore deemed denied.

11. Respondents incorporate paragraphs 1 through 10 of their Answer as though fully set forth at length.

12. Denied. The allegations of this paragraph are mere speculation to which no responsive pleading is required and they are therefore deemed denied. It is true as a matter of hypothetical logic that if a single Omega sprinkler head does not activate in a fire, that head will not suppress or extinguish the fire. By way of further answer, an Omega sprinkler head may not activate because of a number of reasons that cannot plausibly be considered a "defect," including, but not limited to, because the fire was not sufficiently significant to activate the head, the head was subject to misuse and abuse, or prohibited substances were introduced into the sprinkler system. Moreover, sprinkler systems generally are designed with redundancies so that if one sprinkler head does not operate, an adjacent head may and ordinarily does suppress or extinguish a fire.

13. Denied. The allegations of this paragraph are mere speculation to which no responsive pleading is required and they are therefore deemed denied. It is true as a matter of

hypothetical logic that if an Omega sprinkler head does not function, an occupant of a building may be exposed to a fire that will not be controlled by that particular sprinkler head. Respondents deny that an Omega sprinkler head creates a substantial risk of injury to the public, and, indeed, to this date there have been absolutely no injuries to any member of the public that have been caused by an alleged failure of an Omega sprinkler head to operate. By way of further answer, Respondents incorporate paragraph 12 of their Answer as though fully set forth at length. The remaining allegations of this paragraph are denied.

14. Denied. By way of further answer, the allegations of this paragraph include legal conclusions to which no responsive pleading is required and they are therefore deemed denied.

15. Denied. By way of further answer, the allegations of this paragraph constitute legal conclusions to which no responsive pleading is required and they are therefore deemed denied.

16. Denied. By way of further answer, the allegations of this paragraph constitute legal conclusions to which no responsive pleading is required and they are therefore deemed denied.

AFFIRMATIVE DEFENSES

17. The Commission lacks jurisdiction over the products at issue in the Complaint because they are not consumer products within the definition of the CPSA.

18. Respondent CSC is not a manufacturer of the products at issue in the Complaint.

19. The Complaint fails to state a claim upon which relief may be granted.

20. Omega fire sprinkler heads do not create a substantial risk of injury to the public.

21. At all times, Omega sprinkler heads have conformed to the then-existing state of the art.

22. Basing any recall order on a standard of performance or design or knowledge that was not developed at the time of manufacture would deprive Respondents of their rights under the United States Constitution, including their rights under the due process and takings clauses of the Constitution.

23. The Complaint fails to comply with 16 C.F.R. § 1025.11(b)(3), which requires: (a) a clear and concise statement of the charges, sufficient to inform Respondents with reasonable definiteness of the factual bases of the allegations of hazard; and (b) a list and summary of the documentary evidence supporting the charges.

24. The Staff of the Commission did not act in good faith to resolve the matters alleged in the Complaint and did not make a good-faith effort to agree with Respondents to an appropriate remedy prior to the institution of this action.

25. Without conceding that any remedy is legally required, the remedial and testing program offered by Central adequately protects the public from substantial risk of harm.

26. Without conceding that any remedy is legally required, any remedy that may be imposed must reflect that purchasers may have had use and value from the products at issue for periods of time prior to the institution of this action.

27. Any actual inoperation of, or increased activation pressure by, an Omega head was caused by abuse of the sprinkler head, use of prohibited substances in the sprinkler system, or other acts committed by persons not within Respondents' control.

WHEREFORE, Respondents respectfully request that the Commission:

A. Determine that it lacks jurisdiction over the products at issue in this matter;

B. Determine that respondent Central Sprinkler Corporation is not a proper party to this action;

C. Determine that the products at issue do not present a "substantial product hazard" within the meaning of 15 U.S.C. § 2064;

D. Determine that the corrective action plan adopted by respondent Central Sprinkler Company is reasonable and satisfies 15 U.S.C. § 2064;

E. Determine that respondent Central Sprinkler Company need not cease manufacturing for sale, offering for sale or distributing in commerce Omega fire sprinkler heads;

F. Determine that the Complaint should be dismissed; and

G. Take such other and further relief in favor of Respondents as may be appropriate.

Respectfully submitted,

Dated: March 26, 1998

J. Gordon Cooney, Jr. (MFH)

J. Gordon Cooney, Jr.
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215-639-4070

Attorneys for Respondents
Central Sprinkler Company and
Central Sprinkler Corporation

CERTIFICATE OF SERVICE

I, Michael F. Healy, hereby certify that on this date a true and correct copy of the foregoing Answer and Affirmative Defenses of Respondents Central Sprinkler Company and Central Sprinkler Corporation was served by hand upon the following:

Eric L. Stone
Director
Division of Administrative Litigation
U. S. Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

Alan H. Schoem
Assistant Executive Director
Office of Compliance
U.S. Consumer Product Safety Commission
4430 East West Highway
Bethesda, MD 20814

Date: March 26, 1998

Michael F. Healy

Michael F. Healy

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

OFFICE OF THE SECRETARY
FREEDOM OF INFORMATION

1998 MAR -3 P 5:15

In the Matter of	)	
CENTRAL SPRINKLER CORP., a Corporation, 451 North Cannon Avenue Lansdale, PA 19446	)	CPSC DOCKET NO. 98- 2
and	)	
CENTRAL SPRINKLER CO., a Corporation, 451 North Cannon Avenue Lansdale, PA 19446,	)	
Respondents	)	

COMPLAINT

Nature of Proceedings

1. This is an administrative proceeding pursuant to Section 15 of the Consumer Product Safety Act (CPSA), 15 U.S.C. § 2064, for public notification and remedial action to protect the public from substantial risk of injury presented by a brand of automatic fire sprinklers. This proceeding is governed by the Rules of Practice for Adjudicative Proceedings before the Consumer Product Safety Commission, 16 C.F.R. Part 1025.

Jurisdiction

2. This proceeding is instituted pursuant to the authority contained in sections 15(c), (d), and (f) of the CPSA, 15 U.S.C. §§ 2064(c), (d), and (f).

Parties

3. Complaint Counsel is the staff of the Legal Division of the Office of Compliance of the U.S. Consumer Product Safety Commission, an independent regulatory commission established by Section 4 of the CPSA. 15 U.S.C. § 2053.

4. Respondents Central Sprinkler Corporation and Central Sprinkler Company ("the Central entities") are Pennsylvania corporations with their principal place of business located at 451 North Cannon Avenue, Lansdale, Pennsylvania 19446.

5. The Central entities are "manufacturers" of consumer products distributed in commerce pursuant to 15 U.S.C. § 2052(a)(4).

The Consumer Product

6. The "Omega" series automatic fire sprinklers ("Omega" or "Omegas") is a line of automatic fire sprinklers manufactured by the Central entities and designed to suppress and/or extinguish fire. Omegas are installed in homes, apartment buildings, schools, nursing homes, and athletic facilities, among other places. Omegas are "consumer products" under 15 U.S.C. § 2052(a)(1). There are various Omega models, including, but not limited to: C-1; C-1A; C-1A PRO; C-1A PRO ID; EC-20; EC-20A; EC-20 AID; HEC-12; HEC-12 ID; HEC-12 PRO; HEC-12A PRO; HEC-12 RES; HEC-20; HEC-20 ID; R-1; R-1A; R-1M; AC; M; and Flow Control. Approximately ten million Omegas, which Respondents have produced and sold since approximately 1982, are in service in the United States.

Defect or Defects

7. Paragraphs 1 through 6 are incorporated as though set forth in full text.

8. Omegas are designed to perform in accordance with Underwriters Laboratories, Inc.'s

Standard for Safety UL 199 ("Standard for Automatic Sprinklers for Fire Protection Service"), and National Fire Protection Association ("NFPA") Standard 13, when exposed to certain temperatures.

9. At the Omega's triggering temperature, a fusible pellet is supposed to melt, causing a plunger to release, which in turn frees several ball bearings from a retaining groove. With the aid of two springs, the plunger housing is then supposed to release. When the Omega is connected to a sprinkler system, water is then supposed to be released in a particular spray pattern. The plunger housing is sealed with an o-ring.

10. Omegas do not and will not function in a significant percentage of instances. Because of this failure to operate, Omegas are defective pursuant to 15 U.S.C. § 2064(a)(2) and 16 C.F.R. § 1115.4.

Substantial Risk of Injury

11. Paragraphs 1 through 10 are incorporated as though set forth in full text.

12. When the Omega fails to activate when exposed to heat from a fire, the sprinkler fails to suppress or extinguish the fire.

13. Failure of the Omega to function exposes the public to bodily injury and/or death.

14. All of the approximately 10 million Omegas, manufactured from 1982 through the present and sold to, used or enjoyed by the public, could fail to function as the result of the defect referenced above. Omegas are likely to fail in fire situations, and members of the public may suffer bodily injury and/or death as a result.

15. The defect or defects in the Omegas create a substantial risk of injury to the public within the meaning of section 15(a)(2) of the CPSA, 15 U.S.C. § 2064(a)(2).

16. Omegas present a substantial product hazard as described in sections 15(a)(2), (c) and (d) of the CPSA, 15 U.S.C. §§ 2064(a)(2), (c) and (d), and action under these provisions is in the public interest.

Relief Sought

Wherefore, in the public interest, Complaint Counsel requests that the Commission:

A. Determine that Respondents' Omega presents a "substantial product hazard" within the meaning of section 15 of the CPSA, 15 U.S.C. § 2064.

B. Determine that public notification under section 15(c) of the CPSA, 15 U.S.C. § 2064(c), is required in order to adequately protect the public from the substantial product hazard presented by Omegas, and order Respondents to:

(1) Give prompt public notice of the defect in the Omegas, the severe risk of injury they pose to the public, and the available remedies to remove the risk of injury;

(2) Mail notice to each person who is or has been a manufacturer, distributor or retailer of the Omega;

(3) Mail notice to every person to whom Respondents know the Omega was delivered or sold; and

(4) Include in the notice required by (1), (2) and (3) above a complete description of the hazard presented, a warning to have Omegas replaced immediately, and clear instructions for having Omegas replaced by Respondents. The form and content of the notice will be specified by the Commission;

C. Determine that action under section 15(d) of the CPSA, 15 U.S.C. § 2064(d) is in the public interest and order Respondents to:

(1) Cease immediately manufacturing for sale, offering for sale, and distributing in commerce Omega series fire sprinklers;

(2) Cease requiring "performance" testing of Omegas by all building owners as any pre-condition to remedial action;

(3) Elect to repair all Omegas so they will perform properly; to replace all Omegas with a like or equivalent product which performs properly; or to refund to consumers the purchase price of the Omegas;

(4) Make no charge to consumers and to reimburse them for any foreseeable expenses incurred in availing themselves of any remedy provided under any order issued in this matter;

(5) Reimburse distributors and sprinkler contractors for expenses in connection with carrying out any Commission Order issued in this matter, including the costs of removal and replacement;

(6) Submit a plan satisfactory to the Commission, within ten (10) days of service of the final Order, directing that actions specified in paragraphs B(1) through B(4) and C(1) through C(5) above be taken in a timely manner;

(7) Keep records of all actions taken to comply with paragraphs C(1) through C(6), above; and supply these records to the Commission, at the Commission's request, for a period of three (3) years after entry of a Final Order issued by the Commission requiring notice and remedial action, for the purpose of monitoring compliance with the Final Order;

(8) Notify the Commission at least 60 days prior to any change in its business (such as incorporation, dissolution, assignment, sale, or petition for bankruptcy) that results in, or is intended to result in, the emergence of successor ownership, the creation or dissolution of

subsidiaries, going out of business, or any other change that might affect its financial or operational ability to comply with the final Order and the corrective action plan submitted and approved pursuant to the Order; and

(9) Take such other and further actions as the Commission deems necessary to protect the public health and safety and to comply with the CPSA.

Issued by Order of the Commission.

Alan H. Schoem
Assistant Executive Director
U.S. Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, Maryland 20814
301-504-0621

DATED: March 3, 1998

central.cpt

CERTIFICATE OF SERVICE

The undersigned hereby certifies that on this date, Complaint Counsel's **Administrative Complaint** and the attached **List and Summary of Documentary Evidence** were deposited in the United States Mail, via certified delivery, postage pre-paid, addressed to the following:

Central Sprinkler Corporation
451 North Cannon Avenue
Lansdale, PA 19446
Attention: William J. Meyer, CEO

Central Sprinkler Company
451 North Cannon Avenue
Lansdale, PA 19446
Attention: George G. Meyer, CEO

Dated: 3/4/98

central.cer

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

SECRETARY
FREEDOM OF INFORMATION
1998 MAR -3 P 5:16

In the Matter of	)	
CENTRAL SPRINKLER CORP., a Corporation,	)	
and	)	CPSC DOCKET NO. 98- 2
CENTRAL SPRINKLER CO., a Corporation,	)	
Respondents	)	

LIST AND SUMMARY OF DOCUMENTARY EVIDENCE

Pursuant to 16 C.F.R. § 1025.11(b)(3) of the Commission's Rules of Practice for Adjudicative Proceedings, the following is a list and summary of documentary evidence supporting the charges in this matter. Complaint Counsel reserves the right to offer additional evidence during the course of the proceedings.

1. Data compilations depicting over 40% failure rates in testing of Central's Omega brand fire sprinklers.

2. Documents evidencing failure of Omega fire sprinklers in actual fire situations.

Respectfully submitted,

Alan H. Schoem
Assistant Executive Director
U.S. Consumer Product Safety Commission
Office of Compliance
4330 East West Highway
Bethesda, Maryland 20814
301-504-0621

DATED: March 3, 1998

central.evi

CERTIFICATE OF SERVICE

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Attention: William J. Meyer, CEO

Central Sprinkler Company
451 North Cannon Avenue
Lansdale, PA 19446
Attention: George G. Meyer, CEO

Dated: 3/4/98

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RECEIVED 7/6/98 3:16 pm

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp.	:	
	:	
and	:	CPSC Docket No. 98-2
	:	
Central Sprinkler Co.,	:	
	:	
Respondents.	:	
	:	

RESPONDENTS' OPPOSITION TO COMPLAINT COUNSEL'S MOTION TO COMPEL

I. INTRODUCTION

Presently before the Presiding Officer is Complaint Counsel's Motion To Compel Answers To Interrogatories ("Complaint Counsel's Motion"). Respondents Central Sprinkler Corporation and Central Sprinkler Company (collectively, "Central") hereby respond to and oppose Complaint Counsel's Motion.

Complaint Counsel's Motion should be denied for two principal reasons. First, the interrogatories served by Complaint Counsel on Central are improperly burdensome and overly broad. Complaint Counsel has posed a total of 1,482 questions in the form of interrogatories, most requesting extremely detailed information. There is no precedent in any court permitting such voluminous and burdensome discovery requests, particularly in a proceeding with as expeditious a discovery period as contemplated here. Under such circumstances, the Presiding

Officer should deny Complaint Counsel's Motion either by upholding Central's objections to such interrogatories or granting Central a protective order regarding such interrogatories.

Second, Complaint Counsel's Motion should be denied because the interrogatory responses provided to date by Central conform with the CPSC rules of practice. Because the burden of ascertaining responses to Complaint Counsel's voluminous interrogatories by reviewing documents is substantially equal for Complaint Counsel and Central, Central has chosen to produce business records in response to the interrogatories pursuant to 16 C.F.R. § 1025.32(d). Central has produced or is in the process of producing approximately 400 boxes of documents and a highly detailed index of those documents to Complaint Counsel. This monumental effort on behalf of Central meets and exceeds the discovery requirements of the CPSC rules of practice. Complaint Counsel does not challenge the fact that all of the information sought in their interrogatories is contained in these documents. Instead, Complaint Counsel appears to be requesting that Central do Complaint Counsel's work in putting together a case for Complaint Counsel by analyzing and compiling information from these documents. However, the rules of discovery do not permit Complaint Counsel to place such a burden on Central.

II. PROCEDURAL AND FACTUAL BACKGROUND

The procedural and factual background underlying Complaint Counsel's Motion are extremely important in understanding the nature of that motion. Therefore, Central briefly summarizes the relevant factual and procedural points below.

A. **Complaint Counsel's Interrogatories**

On April 29, 1998, Complaint Counsel served Complaint Counsel's First Set of Interrogatories to Respondents ("Complaint Counsel's Interrogatories"), attached to Complaint Counsel's Motion as Exhibit "A". Complaint Counsel's Interrogatories consisted of 117 numbered interrogatories. These 117 interrogatories included subparts that posed a total of 1,482 questions. Thus, Complaint Counsel effectively served almost 1,500 interrogatories on Central.

The subjects covered in Complaint Counsel's Interrogatories were extremely broad. Just by way of example, Complaint Counsel requested information regarding: (1) an identification and numerical breakdown of how, where, in what type of piping system, and in what type of building the alleged 10 million Omegas have been installed across the United States and the world (Interrogatory Nos. 10-12); (2) the identity, position held, term of employment, and salary of all Central employees, agents, or consultants at any time in sales, marketing, product design, engineering, customer service, public relations, product manufacturing, product sales, mergers, quality assurance, and/or any Central divisions dealing with Omegas (Interrogatory No. 15); (3) detailed financial information about Central for the past 15 years (Interrogatory No. 9); (4) the identity of all officers, directors, and shareholders in the history of Central (Interrogatory No. 3); and (5) other equally detailed, equally broad requests for information.

The level of detail requested and broad sweep of Complaint Counsel's Interrogatories can be demonstrated best simply by quoting verbatim several of these interrogatories. Indeed, Complaint Counsel's Motion seeks to have the Court ignore the actual text of their interrogatories and obtain a broad, sweeping order against Central. Significantly, in an apparent effort to obscure the incredibly oppressive and detailed nature of their interrogatories from the

Presiding Officer, Complaint Counsel's Motion failed to quote even once the entirety of any of its own interrogatories. The following sampling of Complaint Counsel's Interrogatories provides a much more accurate picture of the burdens imposed by such interrogatories:

> **INTERROGATORY NO. 109:** Indicate whether you have attended or been present at any meetings or discussions, or issued or received any communications, in which the following were discussed:
>
> a) failure of Omega sprinklers to activate in testing or in a fire;
> b) dezincification as a cause or possible cause of Omega non-activation in testing or in a fire;
> c) stop leak or other leak prevention substance as a cause or possible cause of Omega non-activation in testing or in a fire;
> d) "o" ring swelling as a cause or possible cause of Omega non-activation in testing or in a fire;
> e) "o" ring adhesion as a cause or possible cause of Omega non-activation in testing or in a fire;
> f) excessive hydrocarbons as a cause or possible cause of Omega non-activation in testing or in a fire;
> g) improper system design as a cause or possible cause of Omega non-activation in testing or in a fire;
> h) UL listing or certification of any Omega sprinkler or sprinkler assistive device such as the "helper spring;"
> i) FM listing or certification of any Omega sprinkler or sprinkler assistive device such as the "helper spring;"
> j) NFPA 13 requirements or applicability with respect to fire sprinklers or sprinkler systems;
> k) NFPA 25 requirements or applicability with respect to fire sprinklers or sprinkler systems;
> l) UL 199 requirements or applicability with respect to fire sprinklers or sprinkler systems;
> m) UL 1626 requirements or applicability with respect to fire sprinklers or sprinkler systems.
>
> If so, for each such meeting, discussion, and communication, provide:
>
> i) the date on which the meeting, discussion or communication took place;
> ii) the persons and/or entities to and from whom the communication was directed or, if a meeting or discussion, identify all persons who were present and/or participated;
> iii) the nature and content of the communication;

See Interrogatory No. 109.

INTERROGATORY NO. 15: Identify all of your employees, agents, representatives or consultants who have held a supervisory, managerial, or executive position or role in the following areas of your company at any time:

1) sales;
2) marketing;
3) product design and/or development;
4) engineering and/or technical services;
5) customer service/customer relations;
6) public and/or governmental relations;
7) product manufacturing and/or production;
8) product sales, marketing and/or distribution;
9) corporate mergers and/or acquisitions;
10) quality assurance/control;
11) any divisions, subdivisions or areas that deal or dealt with Omega automatic fire sprinklers and/or any component parts of Omega automatic fire sprinklers.

For each employee, agent, representative or consultant, please state the position(s) and title(s) of those position(s), term(s) of employment, and salary. If the person is no longer in your employ, please indicate their reason for leaving and, if known, provide their current address and telephone number.

See Interrogatory No. 15.

INTERROGATORY NO. 21: Describe in detail the procedures and specifications for the manufacture of each different make and/or model Omega sprinkler, including any changes in such procedures and/or specifications over time. Specify and describe all tools, chemicals and substances used, including when, how and in what amount they are used.

INTERROGATORY NO. 22: For each change in procedure or specification identified in your response to Interrogatory No. 21:

a) explain the differences between the procedure or specification and its predecessor(s);
b) explain the reasons for the change;
c) identify all persons and/or entities involved in bringing about the change, and explain their role in same;
d) identify all persons and/or entities who implemented the change;
e) indicate whether any tests were done on the models before or after the change occurred. If so:
    i) describe the tests and provide a detailed protocol;
    ii) identify the persons and entities involved in setting up and/or conducting the tests;
    iii) describe and explain the results of the tests, including all observations and conclusions;

iv) identify the persons and entities involved in evaluating the test results.

See Interrogatory Nos. 21-22.

INTERROGATORY NO. 46: Are you aware or have you ever been notified of an Omega sprinkler from a copper or plastic piping system that did not exhibit dezincification, and that when exposed to temperatures at and/or in excess of its activation/triggering temperature, did not activate (1) at a pressure at or below 7 psig in testing; and/or (2) in a field test; and/or (3) in a fire? If so:

a) identify the Omega;
b) describe the circumstances under which the Omega did not activate;
c) indicate at what pressure, if any, the Omega activated (or if it failed to activate altogether, indicate the highest pressure to which the Omega was subjected);
d) identify the person and/or entity (including your employees and/or consultants) who notified you of the Omega and/or its nonactivation under the circumstances above;
e) indicate how and when you became aware or received notification of the nonactivation under the circumstances described above;
f) indicate on what basis and by what criteria it was determined whether dezincification was present;
g) detail your response to the notification or awareness;
h) indicate whether you or anyone else of whom you are aware examined and/or tested the affected sprinkler and/or other sprinklers from that site. If so:
    i) identify the Omega;
    ii) describe all such tests and/or examinations, and provide a detailed protocol;
    iii) identify the persons and entities involved in setting up and/or conducting each test and/or examination;
    iv) describe and explain the results of each test and/or examination, including all observations and conclusions;
    v) identify the persons and entities involved in evaluating the test results;
i) identify and describe all communications regarding or relating in any way to the Omega and/or its nonactivation, and/or tests and/or examinations relating thereto, indicating:
    i) the date on which the communication took place;
    ii) the persons and/or entities to and from whom the communication was directed;
    iii) the nature and content of the communication;
    iv) identify all persons and/or entities present during the communication.
j) explain in full detail why the Omega did not activate.

See Interrogatory No. 46.

Thus, Complaint Counsel's Interrogatories were extremely voluminous, requested a broad scope of information, and requested an extremely detailed compilation of that information. In essence, Complaint Counsel requested all information related in any way to Omega sprinkler heads from the time the Omegas were initially conceived through the present, and Complaint Counsel requested that Central assess that information, evaluate over half a million pages of documents, conduct employee interviews, and provide detailed textual responses regarding literally thousands of questions.

B. Central's Efforts To Respond To Complaint Counsel's Interrogatories

In order to respond to Complaint Counsel's discovery requests, Central has engaged in an enormous amount of labor and incurred tremendous expenses. Central gathered responsive documents from 127 Central employees, 17 different departments within Central, and six different storage facilities. See Declaration of Stephanie A. Graboyes, attached hereto as Exhibit "A". Because of the broad scope of Complaint Counsel's discovery requests, Central gathered a broad collection of all documents that refer or relate to the Omega line of sprinklers. Id. This document sweep resulted in a compilation of more than 600,000 pages of documents.[1/] Id. This initial effort took a total of 1,490 hours of work by Central's counsel and employees. Id.

Central then reviewed these documents for privileged information and confidential documents. Id. Central also has been creating a privilege log for these documents. Id. The responsive documents, totaling approximately 600,000 pages in 400 boxes, were then Bates-

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1/ Because of the enormous expense involved, only one copy of the documents was made. Id. The copying costs for this single set has exceeded $100,000. Id. The original documents, many of which are used on a daily basis by Central employees, were returned to the employees or departments from which they were gathered. Id.

labeled. Id. In order to complete this task in a timely fashion, Central was forced to use 16 lawyers, who have worked a total of 1,346 hours on this phase of the document production.

In addition, pursuant to the order of the Presiding Officer, Central has begun to prepare a detailed index of the documents for Complaint Counsel. Id. Central has completed this index for the first 100 boxes of documents. Id. In one week, this effort has required 19 attorneys and a corresponding number of support staff to work in excess of 1000 hours. Id. Preparation of the remaining portions of the index will be correspondingly labor-intensive.

Thus, to date, approximately 20 lawyers and over 20 administrative staff members have expended over 3,700 hours gathering information in an attempt to satisfy Complaint Counsel's discovery requests. Moreover, Central's efforts have not yet concluded, as it still must complete the index required by the Presiding Officer.

C. Central's Responses To Complaint Counsel's Interrogatories

On May 26, 1998, Central served Respondents' Responses And Objections To Complaint Counsel's First Set of Interrogatories ("Central's Interrogatory Responses"), attached to Complaint Counsel's Motion at Exhibit "D." Central objected both generally and specifically to the majority of the interrogatories on the ground that Complaint Counsel's Interrogatories were overly broad and unduly burdensome.

Nevertheless, Central made every effort to provide meaningful responses. Where reasonably possible, Central provided narrative textual responses. See, e.g., Central's Interrogatory Responses, Nos. 1, 2, 4, 5, 6. However, given the broad scope and detailed nature of the information requested, Central relied extensively on referring Complaint Counsel to the business records to be produced by Central, pursuant to 16 C.F.R. 1025.32(d). Because Central

was producing approximately 400 boxes containing approximately 600,000 documents, Central believed that it was providing all responsive information requested by Complaint Counsel. Where possible, Central referred to specific types of documents as responsive to particular interrogatories. See, e.g., Central's Interrogatory Responses, Nos. 22, 26, 61. Complaint Counsel concedes that Central made such specific references to 88 out 117 of the separately numbered interrogatories. See Complaint Counsel's Motion, p. 2.

In addition, as ordered by the Presiding Officer, Central has been compiling a highly detailed index of the 600,000 documents produced. See Phase I and II of Central's Index, attached hereto as Exhibits "B" and "C".[2/] For each of the approximately 400 boxes produced, the index has identified or will identify the box and breaks down the contents of the box into groups of documents. Id. For each of these groups, the index provides specific information regarding the Bates range of the documents described, the source of the documents (i.e., the employee who was in possession of the documents), the department from which the documents originated, and a detailed description of each discrete group of documents. Id. The descriptions of the documents can be matched to the specific types of documents identified by Central in response to separate interrogatories.

D. Complaint Counsel's Motion

Despite the extensive and highly detailed efforts of Central to provide meaningful discovery to Complaint Counsel, Complaint Counsel decided to file a motion to attempt to compel even further discovery responses. Complaint Counsel's Motion argues that Central has

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2/ Exhibits "B" and "C" represent the first two installments of this index, which is still being created as further documents are reviewed and produced.

not sufficiently answered the interrogatories because Central allegedly improperly relies on the option to produce business records pursuant to 16 C.F.R. § 1025.32(d). See Complaint Counsel's Motion, pp. 4-15. Complaint Counsel also alleges that Central's objections are "overly general and unsupported." Id. at pp. 15-16.[3/]

III. ARGUMENT

Complaint Counsel's Motion should be denied for either of two reasons:

- Complaint Counsel's 1,482 interrogatories, requesting compilations of highly detailed information, are improperly burdensome and unduly broad.
- Pursuant to 16 C.F.R. § 1025.32(d), Central has adequately responded to Complaint Counsel's Interrogatories by producing approximately 600,000 business records, referencing specific categories of documents in response to particular interrogatories, and providing Complaint Counsel with a highly detailed index to interpret the business records.

Each of these reasons is discussed at greater length below.

A. Complaint Counsel's Interrogatories Are Overly Burdensome And Unduly Broad.

> [I]nterrogatories are not to be used in an oppressive manner. An adverse party should not be required to perform burdensome labor or to execute difficult and expensive tasks, in searching for facts and classifying and

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3/ Complaint Counsel's Motion also appends Central's Responses to Complaint Counsel's Document Requests (at Exhibit "C") and Central's Privilege Log (at Exhibit "E"), but then does not discuss these aspects of Central's discovery responses in the substance of Complaint Counsel's Motion.

> compiling data. A litigant may not compel his adversary to go to work for him.

Aktiebolaget Vargos v. Clark, 8 F.R.D. 635, 636 (D.D.C. 1949).

In the instant case, Complaint Counsel has served 1,482 questions via interrogatories on Central. These interrogatories cover an extremely broad scope, require a fact-intensive analysis and compilation of information, and many are of extremely marginal relevance. Such interrogatories are overly burdensome and unduly broad. Therefore, the Court should deny Complaint Counsel's Motion to compel responses to these interrogatories, either by upholding Central's burdensomeness objections to the interrogatories or by granting a protective order to Central pursuant to 16 C.F.R. § 1025.31(d)(1).[4/]

A party is not required to answer interrogatories that are unduly burdensome, unreasonable, or oppressive. See In Re U.S. Financial Securities Litigation, 74 F.R.D. 497, 498 (S.D. Cal. 1975); Breeland v. Yale and Towne Manuf. Co., 26 F.R.D. 119, 121 (E.D.N.Y. 1960). Interrogatories should be "relatively few and limited to important facts rather than numerous and concerned with minor evidentiary details." Krantz v. United States, 56 F.R.D. 555, 558 (W.D. Va. 1972). "Excessively long interrogatories have been ruled an undue burden and abuse of the discovery process." In Re U. S. Financial, 74 F.R.D. at 498 (collecting cases). Where excessively burdensome interrogatories have been served, a court may relieve the interrogated party from providing responses either by upholding burdensomeness objections to the interrogatories or by granting a protective order regarding the discovery. See, e.g., Riss & Co. v.

4/ 16 C.F.R. § 1025.31(d)(1) permits the Presiding Officer to order that "discovery shall not be had" where such discovery would cause, inter alia, "oppression, or undue burden or expense."

Assoc. of American Railroads, 23 F.R.D. 211, 213, (D.D.C. 1959) (upholding burdensomeness objections); Krantz, 56 F.R.D. at 558 (granting protective order).

In the instant case, Complaint Counsel's interrogatories are patently objectionable. Complaint Counsel has served 1,482 interrogatory questions regarding a broad scope of subjects covering a period of more than 15 years. This approach is simply oppressive. Accordingly, Central has objected to Complaint Counsel's Interrogatories as being unduly broad and overly burdensome.

The Presiding Officer has stated that he will turn to the Federal Rules of Civil Procedure for guidance in this case. By way of comparison to Complaint Counsel's almost 1,500 interrogatories, the Federal Rules of Civil Procedure now set a presumptive limit of 25 interrogatories, including subparts. See Fed. R. Civ. P. 33(a), Subdivision (a). The stated reason for this limitation is that "experience . . . has confirmed that limitations on the number of interrogatories are useful and manageable . . . . because the device can be costly and used as a means of harassment." See Advisory Committee Notes to Rule 33, 1993 Amendments. Indeed, there are certain of Complaint Counsel's numbered interrogatories that exceed the limitations of Fed. R. Civ. P. 33 in "one" interrogatory. See, e.g., Complaint Counsel's Interrogatory No. 35 (consisting of 35 separate subparts).

Relevant precedent makes clear that Complaint Counsel's 1,482 interrogatories are excessive. Even prior to the limitations created by Fed. R. Civ. P. 33(a), courts consistently held that interrogatories in excess of 200 are unreasonable and overly burdensome. See, e.g., Breeland, 26 F.R.D. at 121 (party not required to answer 200 plus interrogatories); Frost v. Williams, 46 F.R.D. 484, 485 (D. Md. 1969) (200 plus interrogatories are unreasonable, party

not required to answer); Krantz, 56 F.R.D. at 558 (1500 discovery requests are "unreasonable, harsh, oppressive and unnecessary"); United States v. Proctor & Gamble Co., 25 F.R.D. 252, 254 (D.N.J. 1960) (even in antitrust case, requiring party to respond to 2,500 interrogatories would be unduly burdensome and unnecessary). In fact, at least one court has held sua sponte that excessively numerous interrogatories are "unduly burdensome and oppressive," and thus need not be answered. See In Re U.S. Financial, 74 F.R.D. at 498 (2,736 interrogatories).

Complaint Counsel's almost 1,500 interrogatories fall squarely within the definition of unduly burdensome, oppressive, and abusive. This huge number of interrogatories is extremely disproportionate to the time allotted to discovery in this case. Therefore, Central respectfully requests that the Presiding Officer uphold Central's burdensomeness objections to the interrogatories or grant an appropriate protective order pursuant to 16 C.F.R. § 1025.31(d)(1).

In addition to the sheer volume of Complaint Counsel's Interrogatories, such interrogatories are objectionable because of the excessive level of detail that they are seeking. As pointed out supra, Complaint Counsel has attempted to mask the incredibly detailed nature of their interrogatories by not even once quoting the full length of a single interrogatory in the course of Complaint Counsel's Motion. Nevertheless, even a cursory review of Complaint Counsel's interrogatories reveals that they would require Central to go to enormous lengths at tremendous costs in order to attempt to reconstruct events or compile evidence entirely for Complaint Counsel's benefit.

For instance, Interrogatory No. 15 requests that Central identify all employees in the history of the company who have held a supervisory or management position in 11 different areas, and for each of those employees to provide their position/title, term of employment, salary,

reason for leaving, current address, and telephone number. Interrogatory No. 109 purports to require a detailed description of every communication during the history of Central concerning almost anything to do with Omegas or fire sprinklers in general, including the date of all such communications, all persons present, and the exact content of the communications.

In order to respond to such interrogatories, Central would be required literally to interview every employee who ever worked at Central and to transcribe potentially millions of pages of half-recalled discussions. Moreover, for each separate interrogatory, Central would be required to review all 600,000 pages of documents produced and compile information out of those documents that Complaint Counsel is seeking to support its own case. Providing detailed responses to such interrogatories would probably take a team of five or six lawyers at least one year of intensive labor.

In such circumstances, courts have repeatedly held that parties are not required to respond to such excessively detailed interrogatory requests, especially where the interrogating party is seeking to have an adverse party do such work for the interrogator's benefit. See Halder v. Int'l Telephone and Telegraph Co., 75 F.R.D. 657, 658 (E.D.N.Y. 1977) (party not required to answer interrogatories identifying and describing all applicants and employees in particular area over eight year period); Riss, 23 F.R.D. at 213 (party not required to answer interrogatories that would necessitate analysis of 5,000,000 documents to compile detailed information for benefit of adversary). As the Riss court succinctly stated, "[T]he court should not require an interrogated party to search its own records in order to compile and correlate information for the benefit of its adversary where the adversary has the right to inspect the records themselves." 23 F.R.D. at 213;

see also Proctor & Gamble, 25 F.R.D. at 255 (party not required to respond to highly detailed interrogatories where opposing party can glean details from documents already produced).

Finally, the Court should not require Central to provide further responses to Complaint Counsel's Interrogatories because many of such interrogatories simply have no or very little relevance to the instant dispute. For instance, one interrogatory requests an identification of all shareholders, officers, or directors of Central at any time. See Interrogatory No. 3. It is difficult to comprehend what purpose, besides creating work for Central, providing such an historical list of shareholders, directors, and officers would serve. Similarly, requiring extensive and detailed lists and background descriptions of nearly all of Central's current and former employees (Interrogatory No. 15) is of dubious relevance at best.

In short, Complaint Counsel's Interrogatories are plainly burdensome and oppressive. The interrogatories are excessively long, seek overly detailed compilations of information, and request irrelevant information. If Complaint Counsel wanted to make constructive use of the opportunity to ask interrogatories, they should have propounded a few, highly focused questions. Instead, Complaint Counsel propounded 1,482 questions, seeking an enormous amount of highly detailed information. Under such circumstances, Central should not be required to provide further responses to Complaint Counsel's Interrogatories; Complaint Counsel's Motion should be denied. Therefore, Central respectfully requests that the Court uphold Central's objections to Complaint Counsel's interrogatories, and/or grant an appropriate protective order pursuant to 16 C.F.R. § 1025.31(d)(1).

B. Central's Discovery Responses Are Appropriate And Exceed The Requirements Of the CPSC Rules of Practice.

Even if Complaint Counsel had served acceptable, non-burdensome interrogatories, Central's responses to the interrogatories are sufficient to satisfy the CPSC rules of practice. Because Complaint Counsel served incredibly voluminous interrogatories seeking highly detailed information, Central invoked 16 C.F.R. § 1025.32 to refer Complaint Counsel to business records produced by Central as containing the detailed information responsive to Complaint Counsel's Interrogatories. Moreover, Central specified in 88 out of 117 numbered interrogatories particular types or categories of documents that were responsive to the individual interrogatory. Finally, Central is providing Complaint Counsel with a detailed index of the documents produced, giving Complaint Counsel a "road map" to determine where information responsive to their interrogatories can be found in Central's documents. Thus, Central has far exceeded the requirements of the CPSC rules of practice in responding to Complaint Counsel's Interrogatories.

Because of the incredibly detailed nature and broad scope of the requests for information contained in Complaint Counsel's Interrogatories, it was literally not possible to provide narrative answers to many of the interrogatories. Any individual attempting to provide such answers would have been making, at best, an educated guess regarding the information sought. Under such circumstances, the interrogatory responses could not have been verified under oath by anybody.

Therefore, for certain interrogatories, pursuant to 16 C.F.R. § 1025.32(d), Central referred Complaint Counsel to the business records produced by Central, from which such responsive

information could be derived. For example, in Interrogatory No. 66, Complaint Counsel requested as follows:

> **INTERROGATORY NO. 66:** Identify and describe all tests and/or examinations conducted by you or anyone on your behalf of Omega sprinklers. For each test:
> a) identify the sprinklers tested;
> b) describe the tests and provide a detailed protocol and the date on which each test was conducted;
> c) identify the persons and entities involved in:
> i) drafting and/or conceiving the protocol;
> ii) setting up and/or conducting the tests;
> d) describe and explain the results of the tests, including all observations and conclusions;
> e) identify the persons and entities involved in evaluating the test results;
> f) identify and describe all communications relating in any way to any such tests and/or test results, indicating:
> i) the date on which the communication took place;
> ii) the persons and/or entities to and from which the communications was directed;
> iii) the nature and content of the communication;
> iv) identify all persons and/or entities present during the communication.

See Interrogatory No. 66.

As Complaint Counsel is well aware, Central has tested thousands of Omega sprinklers and the burden of providing the detailed textual answers sought by Complaint Counsel with respect to each test would be overwhelming. Accordingly, pursuant to 16 C.F.R. § 1025.32(d), Central's Interrogatory Response No. 66 appropriately referred Complaint Counsel to: "quality control manuals and reports, testing and diagnostic reports, [and] engineering reports," which can be located readily using the detailed index being supplied to Complaint Counsel by Central. Requiring Central to analyze, synthesize, and provide detailed information regarding thousands of test results which are already available in documentary form is precisely the sort of burden that the rules permitting the option of producing business records was drafted to avoid. As

demonstrated by this example, Central also specified, where possible, particular categories of documents that would contain responsive information.[5/] Complaint Counsel now argues that Central's reliance on 16 C.F.R. § 1025.32 was inappropriate, and that Central must provide further interrogatory responses. See Complaint Counsel's Motion, pp. 4-15.

Section 1025.32(d) of the CPSC rules of practice provides:

> Where the answer to an interrogatory may be derived or ascertained from the business records of the party upon whom the interrogatory has been served, or from an examination, audit, or inspection of such business records or from a compilation, abstract, or summary of those records, and the burden of deriving the answer is substantially the same for the party serving the interrogatory as for the party served, it is a sufficient answer to the interrogatory to specify the records from which the answer may be derived or ascertained and to afford to the party serving the interrogatory reasonable opportunity to examine, audit, or inspect such records and to make copies, compilations, abstracts, or summaries.

16 C.F.R. § 125.32(d). This provision is modeled on Fed. R. Civ. P. 33(d). Such provisions were created in order to give "the party an option to make the records available and place the burden of research [on] the party who seeks the information . . . [thereby placing] the burden of discovery upon its potential benefitee." See Advisory Committee Notes to Fed. R. Civ. P. 33, 1970 Amendments, Subdivision (c) [now (d)] (internal quotations omitted).

There should be little doubt that Central's Interrogatory Responses meet the requirements of Section 1025.32(d). As an initial matter, the documents provided to Complaint Counsel do provide the information sought by Complaint Counsel's Interrogatories. Complaint Counsel's Motion does not contest this basic point. Thus, at the most fundamental level, the purpose of

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5/ Central only made such a reference where responsive documents actually exist; contrary to the suggestion of Complaint Counsel's Motion, Central did not simply indicate that responsive documents "might" exist. See Complaint Counsel's Motion, p. 11 n.1.

Section 1025.32(d) has been satisfied -- Central has provided Complaint Counsel with the necessary documents to respond to the interrogatories, and now the burden is on Complaint Counsel to do the research in order to segregate out the information they seek. See, e.g., Halder, 75 F.R.D. at 658 (when highly detailed interrogatories are served and plaintiff can ascertain responses from documents produced, plaintiff must "assume burden of locating and assimilating the information he desires"); Broadway Delivery Corp. v. United Parcel Service of America, Inc., 27 Fed. R. Serv. 2d 622, 625 (S.D.N.Y. 1979) (same); Concept Industries, Inc. v. Carpet Factory, Inc., 59 F.R.D. 546, 548-50 (E.D. Wis. 1973) (same); Triangle Mfg. Co. v. Paramount Bay Mfg. Co., 35 F.R.D. 540, 543 (E.D.N.Y 1964) (same).

Moreover, the "burden of deriving the answer" from the documents produced is substantially the same in the instant case for Central and Complaint Counsel. Regarding this issue, Complaint Counsel has the burden of proof to demonstrate that Central might have a lesser burden to ascertain answers in the instant case, otherwise a court must hold that the requirements of Section 1025.32(d) have been met. See Petroleum Ins. Agency, Inc. v. Hartford Accident and Indem. Co., 11 F.R.D. 318, 320-21 (D. Mass. 1983). In the instant case, Complaint Counsel has produced no "evidence" of Central having a lesser burden, whether by affidavit or otherwise, only unsubstantiated arguments. Therefore, Complaint Counsel has not carried its burden of challenging Central's use of 16 C.F.R. § 1025.32(d). Id.

Central, on the other hand, can easily demonstrate that the burdens are "substantially the same." Central's documents are not ordinarily kept in any type of organizational order by overall subject matter that correspond to Complaint Counsel's discovery requests; the documents generally are kept by individual employees or departments, and divided up according to subject

matter by each employee and/or department. See Declaration of Stephanie A. Graboyes, Exhibit "A". Nor does Central customarily keep an overall index of all of these documents in the ordinary course of business. Id. Finally, in reviewing the 400 boxes of documents currently produced, Central did not (and given the time constraints in this matter could not) segregate the documents according to the nearly 1,500 subject matters in Complaint Counsel's interrogatories. Instead, Central properly focused its efforts on gathering together all documents related to the Omegas so that they could be produced to Complaint Counsel as expeditiously as possible. Id. Thus, rather than having the comprehensive understanding of the half a million pages of documents suggested by Complaint Counsel, Central's document review process focused on ensuring that responsive documents had been gathered and privileged documents were not being produced.[6/]

Thus, Complaint Counsel and Central would have to perform the exact same tasks to extract precise responsive information from the documents produced. Either party would be

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6/ Complaint Counsel argues that the burden would be less for Central because the documents originally came from Central, and thus Central is more familiar with them. See Complaint Counsel's Motion, pp. 12-13. This argument is both circular and unsupported. First, if a party was viewed as having greater familiarity with the details of its documents merely because that party originally produced the documents, then Section 1025.32(d) never could be invoked. Moreover, because the focus of the review conducted by Central was to ascertain whether documents were privileged and/or were "documents regarding or referring to Omegas," the mere fact that Central initially reviewed the documents does not evidence the degree of familiarity with the detailed contents of the documents as they relate to Complaint Counsel's Interrogatories that would warrant imposing this burden on Respondents. Indeed, because Complaint Counsel is more familiar with the specific subjects in which they are most interested, it would be substantially easier for Complaint Counsel to derive that information from Central's documents.

required to painstakingly go over all of the documents for each interrogatory, attempting to match specific data contained in the documents to particular subparts of each interrogatory.

It is correct that this will be a difficult and time-consuming prospect. However, the mere fact that it will take Complaint Counsel a long time to compile the information from the documents does not change the analysis. See Mid-America Facilities, Inc. v. Argonaut Ins. Co., 78 F.R.D. 497, 498 (E.D. Wis. 1978) (reference to business records appropriate even where it would take plaintiff a lengthy period of time to find relevant information, where burden is same for both parties).

There are three simple responses to Complaint Counsel's lament that ascertaining all of the information requested will be difficult and time consuming. First, the burden is substantially similar for either party. Second, it was Complaint Counsel who propounded such expansive, voluminous, and detailed interrogatories; Complaint Counsel's own burden would be less if they instead had served more narrow and focused interrogatories.[7/] Third, since the compilations of information requested in Complaint Counsel's Interrogatories are for the purpose of advancing Complaint Counsel's own case, it makes sense the Complaint Counsel bear the burden of research to determine the information. See Halder, 75 F.R.D. at 658; Broadway Delivery, 27 Fed. R. Serv. 2d at 625. Indeed, this was the very reason that the provision permitting the option to produce business records was created. See Advisory Committee Notes to Fed. R. Civ. P. 33, 1970 Amendments, Subdivision (c).

7/ Indeed, one suspects that when Complaint Counsel is faced with the burden they currently are attempting to impose on Central, Complaint Counsel will substantially narrow and focus the scope of its inquiry regarding the documents produced.

In fact, one of the cases cited by Complaint Counsel in support of their position speaks plainly and eloquently to the instant case. See Petroleum Ins. Agency, Inc. v. Hartford Accident and Indem. Co., 111 F.R.D. 318 (D. Mass. 1983) (cited in Complaint Counsel's Motion, at p. 13). In Petroleum Ins., plaintiffs moved to compel textual responses to interrogatories after defendant elected to produce business records. The court held:

> The bottom line, as I see it, is that the plaintiffs want this discovery but do not want to expend the effort and expense in procuring it. *But the stated purpose of the Rule is to require the party seeking the discovery to expend the effort and expense to procure it.* See Advisory Committee Note to 1970 Amendment, quoted supra. What plaintiffs are saying is that they do not like the Rule; however, like it or not, it was enacted, and the Court is duty bound to follow it.

111 F.R.D. at 320 (emphasis in original).

Complaint Counsel has cited numerous cases allegedly in support of their arguments. However, all of these cases are distinguishable on one plain point -- Complaint Counsel's cases discuss responses to just a few interrogatories, a relatively simple matter. See Sabel v. Mead Johnson and Co., 110 F.R.D. 553 (D. Mass. 1986) (10 interrogatories); Wilbur v. Arkuszewski, 52 F.R.D. 291 (M.D. Alabama 1971) (31 interrogatories); Pascale v. G.D. Searle & Co., 90 F.R.D. 55 (D.R.I. 1981) (43 interrogatory responses challenged); T.N. Taube Corp. v. Maine Midland Mort. Corp., 136 F.R.D. 449 (W.D.N.C. 1991) (5 interrogatory responses challenged).[8/] By contrast, in the instant case, Complaint Counsel is seeking detailed responses to almost 1,500

8/ In the only other case cited in support by Complaint Counsel, Rainbow Pioneer No. 44-18-04A v. Hawaii-Nevada Investment Corp., 711 F.2d 902 (9th Cir. 1983), the opposing party never ever produced the documents to permit an inspection.

interrogatories. Central respectfully submits that the only accurate and truthful manner to respond to such a detailed request is by reference to documents.

The final aspect of Section 1025.32(d) that must be satisfied in producing records is to "specify the records from which the answer may be derived." 16 C.F.R. § 1025.32(d). The responding party is not required to specify particular pages, just to describe the responsive documents. See Milsen Co. v. Southland Corp., 16 Fed. R. Serv. 2d 116, 117 (N.D. Ill. 1972) (forcing defendant to specify pages would create an undue burden).

In the instant case, Central has gone to great lengths to identify responsive documents for Complaint Counsel. As conceded by Complaint Counsel, Central has provided specific descriptions of responsive documents in 88 out of the 117 individually numbered interrogatories. See Complaint Counsel's Motion, p. 2. In response to specific interrogatories, Central has identified specific categories of documents, such as product catalogues, engineering drawings, test results, cut sheets, sales reports, price books, annual reports, employees status reports, bills of material, sub-assembly drawings, work instructions, etc. . . . See, e.g., Interrogatory Nos. 5, 6, 8, 9, 15, 17. All of these categories of documents are easily identifiable by Complaint Counsel upon reviewing the documents produced by Central. Thus, Central's Interrogatory Responses satisfy the "specificity" requirement of Section 1025.32(d).

Moreover, pursuant to the order of the Presiding Officer, Central has significantly exceeded the "specificity" requirement of Section 1025.32(d) in the instant case by producing a highly detailed index of the documents produced by Central. See Exhibits "B" and "C".[9/]

9/ Central has produced the first two volumes of the Index to Complaint Counsel. The (continued...)

Although such an index is not required by any rule, regulation, law, or even Complaint Counsel's discovery requests, Central has been creating and providing to Complaint Counsel a detailed description of all of the documents produced. As detailed in the Declaration of Ms. Graboyes, the creation of this index has been tremendously time-consuming and expensive. See Exhibit "A". For each box produced, this index provides the Bates-number range of each discrete set of documents within each box, the employee who is the source of the documents, the department relevant to such documents, and a detailed description of the documents. See Exhibits "B" and "C". These descriptions not only correspond to the categories of documents described in Central's Interrogatory Responses, they provide even more detail regarding the enclosed documents. Thus, Central has provided Complaint Counsel with a veritable "road map" to describe the documents produced and the manner in which they are responsive to Complaint Counsel's Interrogatories. There should be little doubt that this index satisfies the requirement to "specify the documents" included in Section 1025.32(d).[10/]

9/(...continued)
remaining volumes are still being created and will be produced shortly.

10/ Moreover, to the extent that Complaint Counsel now wants Central to engage in yet further efforts to assemble data or compile information, the Court should reject the request because it would unfairly divert Central from preparing its defense. Although Central believes that the burden should be on Complaint Counsel to review the documents for this information, if the Court were somehow inclined to impose this burden on Central, Complaint Counsel should be required to reimburse Central for the expenses incurred in such efforts. Where a party invokes the right to produce business records in response to interrogatories, a court has the power "in appropriate cases, to require that the interrogating party reimburse the respondent for the expense of assembling his records and making them intelligible." Advisory Committee Notes to Fed. R. Civ. P. 33, 1970 Amendments, Subdivision (c); see also Concept Industries, Inc. v. Carpet Factory, Inc., 59 F.R.D. 546, 549-50 (E.D. Wis. 1973) (requiring interrogating (continued...)

Under all of these circumstances, Central has appropriately and properly invoked 16 C.F.R. § 1025.32(d) in responding to Complaint Counsel's Interrogatories. The documents provided by Central contain the highly detailed information sought by Complaint Counsel. The burden of ascertaining such information from the documents is substantially similar for both parties, and thus is properly borne by the party seeking the information and benefits thereof -- Complaint Counsel. Finally, by both identifying specific categories of responsive documents in the interrogatory responses and providing a detailed index of the documents produced to Complaint Counsel, Central has met and exceeded the specificity requirements of 16 C.F.R. § 1025.32(d). Therefore, Complaint Counsel's Motion is without merit, and should be denied by the Presiding Officer.[11/]

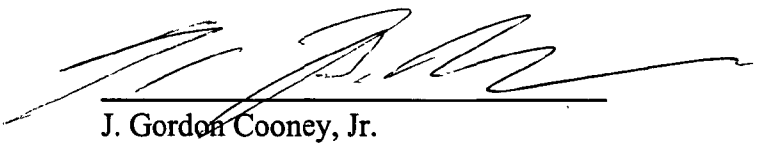
10/(...continued)
party to post $10,000 bond if requesting that respondent assemble data out of documents already produced). Central already has expended well in excess of $200,000 in making the current discovery available to Complaint Counsel. See Declaration of Stephanie A. Graboyes, Exhibit "A". As a result of such expenses incurred in the current litigation and business concerns related to this litigation, Central is suffering potentially dire financial problems. Under such circumstances, as permitted by the rule creating the option to produce business records, the equities demand that Complaint Counsel pay Central for any reasonable expenses incurred in producing any further interrogatory responses to Central. If Complaint Counsel is willing to review the documents and assemble the data to support their case on their own, such expenses will not be incurred. On the other hand, if Central is required to review 600,000 documents in order to compile information and provide full narrative responses to all of Complaint Counsel's 1,482 interrogatories, an extremely conservative estimate of the expenses to be incurred by Central is $100,000. Therefore, if Complaint Counsel wishes Central to engage in such efforts, the Presiding Officer should require Complaint Counsel to post a bond in that amount. See Concept Industries, 59 F.R.D. at 549-50.

11/ Complaint Counsel also has included a half-hearted attack regarding all of Central's objections, claiming such objections are "overly general and unsupported." See
(continued...)

IV. CONCLUSION

For all of the foregoing reasons, Central respectfully requests that Complaint Counsel's Motion be denied.

Respectfully submitted,



Dated: July 1, 1998

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CENTRAL SPRINKLER COMPANY

11/(...continued)

Complaint Counsel's Motion, pp. 15-16. However, a detailed review of Central's responses reveals that the objections vary specifically to fit the particular interrogatory. Moreover, Complaint Counsel has failed to explain why any specific objection to any particular discovery response is improper. In the absence of such specific explanations and criticisms, such as those provided in Respondents' Renewed Motion to Compel Full And Complete Responses To Interrogatories And Document Requests, such an argument cannot be sustained.

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp.	:	
	:	
and	:	**CPSC Docket No. 98-2**
	:	
Central Sprinkler Co.,	:	
	:	
Respondents.	:	
	:	

ORDER

AND NOW, this ___ day of _____, 1998, upon consideration of Complaint Counsel's Motion to Compel Answers to Interrogatories, Respondents' Opposition to Complaint Counsel's Motion to Compel, and all other evidence before this tribunal, it is hereby ORDERED that Complaint Counsel's Motion is DENIED.

BY THE PRESIDING OFFICER:

_____
The Hon. William B. Moran
U.S. Administrative Law Judge

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UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp.	:	
	:	
and	:	**CPSC Docket No. 98-2**
	:	
Central Sprinkler Co.,	:	
	:	
Respondents.	:	
	:	

DECLARATION OF STEPHANIE A. GRABOYES

I, Stephanie A. Graboyes, hereby execute this declaration in support of Respondent's Opposition To Complaint Counsel's Motion To Compel. In support thereof, I hereby swear and affirm as follows:

1. I am an associate with the law firm of Morgan, Lewis & Bockius, LLP, located at 2000 One Logan Square, Philadelphia, PA 19103. My telephone number is 215-963-5000.

2. On behalf of Respondents Central Sprinkler Corporation and Central Sprinkler Company (collectively "Central"), I have been extensively involved in gathering, reviewing, and organizing documents, and providing discovery responses in the above-captioned matter. I have personal knowledge of all of the facts described in this declaration.

3. In order to respond to Complaint Counsel's discovery requests, Central conducted an initial document sweep. In this initial sweep, Central attempted to gather all documents that might relate or refer to the Omega line of sprinkler heads.

4. The initial document sweep was conducted by counsel, legal staff members, and Central employees. Documents were gathered from 127 different Central employees, 17 departments within Central, and six separate storage facilities.

5. The initial document sweep gathered in excess of 600,000 documents.

6. Central made one copy of the documents gathered in the initial document sweep. The originals were returned to Central employees or the departments from which they were gathered for the ordinary operations of Central's business. The total cost of copying for this set of documents exceeded $100,000.

7. The initial document sweep required a total of 1,490 hours of work by Central's counsel and employees.

8. After the initial document sweep, Central's counsel reviewed the compiled documents for privilege information and confidential documents. The privileged documents were removed and a privilege log was created for such documents. The confidential documents were designated, in order to be stamped "Confidential" at a later date. The responsive documents were then Bates-labeled.

9. Central has produced or is producing approximately 600,000 pages of documents to Complaint Counsel, contained in approximately 400 boxes.

10. In order to complete this second phase of responding to Complaint Counsel's discovery requests, Central used 16 lawyers, who worked a total of 1,346 hours.

11. Pursuant to the order to the Presiding Officer, Central has begun to prepare an index of the responsive documents. For the first 100 boxes of documents, compiling this index has required 19 attorneys and over 20 legal staff members to work approximately 1,000 hours.

12. In the ordinary course of its business, Central does not organize and maintain its documents by subject matter. Documents are kept by individual employees.

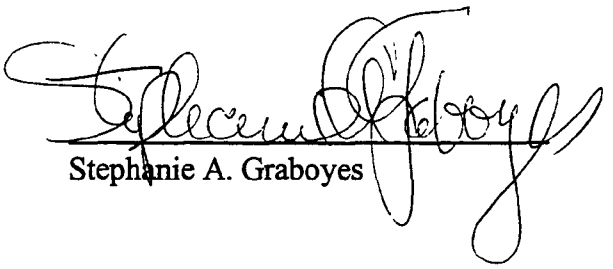
13. In the ordinary course of its business, Central does not keep an overall index of documents that it has retained.

14. In order to produce the 600,000 pages of documents to Complaint Counsel as expeditiously as possible, while creating a privilege log and index, Central has not attempted to segregate the documents according to specific discovery requests from Complaint Counsel.

15. To date, Central has expended in excess of $200,000 to assemble and make documents available to Complaint Counsel.

The foregoing information is true and correct, to the best of my knowledge, information and belief.

Date: July 1, 1998



Stephanie A. Graboyes

In re Central Sprinkler Co. - Document Index - Phase I

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
1	William Pardue	Operations	CS000001-CS000006	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Anaheim Warehouse
1	William Pardue	Operations	CS000007-CS000022	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: City of Los Angeles Fire Department
1	William Pardue	Operations	CS000023-CS000037	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Anchor Fire
1	William Pardue	Operations	CS000038-CS000049	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Anchor Fire

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
1	William Pardue	Operations	CS000050-CS000066	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Allstate
1	William Pardue	Operations	CS000067-CS000077	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Architect of the Capitol
1	William Pardue	Operations	CS000078-CS000090	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Aqua+ R Walhof
1	William Pardue	Operations	CS000091-CS000104	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Aquamatic

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
1	William Pardue	Operations	CS000105-CS000119	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Architect of the Capitol
1	William Pardue	Operations	CS000120-CS000123	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Malcolm Arnold
1	William Pardue	Operations	CS000124-CS000126	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Arrow Automatic
1	William Pardue	Operations	CS000127-CS000132	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Aspen, Colorodo Fire Department

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
1	William Pardue	Operations	CS000133-CS000152	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Associated Fire Protection
1	William Pardue	Operations	CS000153-CS000165	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Astra Sprinkler
1	William Pardue	Operations	CS000166-CS000182	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Atlantic American
1	William Pardue	Operations	CS000183-CS000233	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Au's Plumbing

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
1	William Pardue	Operations	CS000234-CS000253	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Automatic Sprinkler Corp. of America
1	William Pardue	Operations	CS000254-CS000533	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Automatic Fire Sprinklers
1	William Pardue	Operations	CS000534-CS000543	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Avon Warehouse
1	William Pardue	Operations	CS000544-CS000554	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Aware Fire Protection

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
1	William Pardue	Operations	CS000555-CS000573	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Ayoob & Perry Plumbing Company
1	William Pardue	Operations	CS000574-CS000689	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: California Hall, Berkley
2	William Pardue	Operations	CS000690-CS000703	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: B & L Automatic Sprinkler
2	William Pardue	Operations	CS000704-CS000714	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Baffico Systems

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
2	William Pardue	Operations	CS000715-CS000817	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Baker
2	William Pardue	Operations	CS000818-CS000821	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Big Sky Fire Protection
2	William Pardue	Operations	CS000822-CS000842	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Jim Blake Consulting Company
2	William Pardue	Operations	CS000843-CS000869	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Boulder, Colorodo, Fire Department

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
2	William Pardue	Operations	CS000870-CS000872	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Bradshaw Engineering Company
2	William Pardue	Operations	CS000873-CS000875	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Bradshaw Engineering Company
2	William Pardue	Operations	CS000876-CS000885	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Branchville Mechanical
2	William Pardue	Operations	CS000886-CS000896	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Brewer and Company

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
2	William Pardue	Operations	CS000897-CS000906	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Brown Automatic Sprinkler
2	William Pardue	Operations	CS000907-CS000923	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Bruni & Compisi
2	William Pardue	Operations	CS000924-CS000944	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Burkell Plumbing
2	William Pardue	Operations	CS000945-CS000950	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: California Sprinkler Advisory Board

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
2	William Pardue	Operations	CS000951-CS000963	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Carlon Fire
2	William Pardue	Operations	CS000964-CS000969	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Carlon Fire
2	William Pardue	Operations	CS000970-CS000984	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: J.M. Carden
2	William Pardue	Operations	CS000985-CS001002	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Cascade Fire

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
2	William Pardue	Operations	CS001003-CS001009	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Cascade Fire Protection
2	William Pardue	Operations	CS001010-CS001017	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Castle Fire Protection
2	William Pardue	Operations	CS001018-CS001039	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: CCI Fire Protection
2	William Pardue	Operations	CS001040-CS001047	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Lamaconnerie Condominiums

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
2	William Pardue	Operations	CS001048-CS001063	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Lamaconnerie Condominiums
2	William Pardue	Operations	CS001064-CS001072	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Central Missouri
2	William Pardue	Operations	CS001073-CS001080	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Challenge Fire Protection
2	William Pardue	Operations	CS001081-CS001135	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Chief Fire Protection

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
2	William Pardue	Operations	CS001136-CS001142	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: City of Los Angeles Fire Department
2	William Pardue	Operations	CS001143-CS001146	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: City of Los Angeles Fire Department
2	William Pardue	Operations	CS001147-CS001157	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: City of Newport News
2	William Pardue	Operations	CS001158-CS001168	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: City of Port Angeles

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
2	William Pardue	Operations	CS001169-CS001182	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Clinton Mechanical
2	William Pardue	Operations	CS001183-CS001197	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Cobb County Fire Department
2	William Pardue	Operations	CS001198-CS001201	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Cobb County Fire Department
2	William Pardue	Operations	CS001202-CS001216	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Cobb County Fire Department

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
2	William Pardue	Operations	CS001217-CS001224	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Columbia Fire Systems
2	William Pardue	Operations	CS001225-CS001247	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Columbia Fire Systems
2	William Pardue	Operations	CS001248-CS001260	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Compactor Company
2	William Pardue	Operations	CS001261-CS001264	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Consolidated Automatic Sprinkler

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
2	William Pardue	Operations	CS001265-CS001283	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Cosco Fire Protection
2	William Pardue	Operations	CS001284-CS001292	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Cosco Fire Protection
2	William Pardue	Operations	CS001293-CS001309	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Crawford & Company
2	William Pardue	Operations	CS001310-CS001314	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Crystal Point Condos

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
2	William Pardue	Operations	CS001315-CS001353	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Central Sprinker Company, Anaheim Warehouse
2	William Pardue	Operations	CS001354-CS001362	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Central Sprinkler Company, Irving, Texas Warehouse
2	William Pardue	Operations	CS001363-CS001373	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Central Sprinkler Company, Irving, Texas Warehouse

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
2	William Pardue	Operations	CS001374-CS001378	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Central Sprinkler Company, Jessup, Maryland Warehouse
2	William Pardue	Operations	CS001379-CS001380	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Culligan Fire Protection
2	William Pardue	Operations	CS001381-CS001384	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: TS Curran Fire Protection
2	William Pardue	Operations	CS001385-CS001402	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Curry Contracting

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
2	William Pardue	Operations	CS001403-CS001414	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Daynite
2	William Pardue	Operations	CS001415-CS001421	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: DeCamara Fire Protection Products, Inc.
2	William Pardue	Operations	CS001422-CS001428	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Delta Fire, Inc.
3	William Pardue	Operations	CS001429-CS001439	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Dennis Fire

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
3	William Pardue	Operations	CS001440-CS001453	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Dependable Sprinkler
3	William Pardue	Operations	CS001454-CS001458	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Department of Administration, General Services Division
3	William Pardue	Operations	CS001459-CS001464	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Department of Administration, General Services Division
3	William Pardue	Operations	CS001465-CS001474	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Department of the Navy

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
3	William Pardue	Operations	CS001475-CS001484	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Earl's Plumbing
3	William Pardue	Operations	CS001485-CS001501	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Plummer Realty Trust
3	William Pardue	Operations	CS001502-CS001515	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Eckert Fire Protection
3	William Pardue	Operations	CS001516-CS001533	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Eckert Fire Protection

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
3	William Pardue	Operations	CS001534-CS001544	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Embassy Suites
3	William Pardue	Operations	CS001545-CS001550	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Empire Fire Protection
3	William Pardue	Operations	CS001551-CS001560	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Central Fire Protection
3	William Pardue	Operations	CS001561-CS001606	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Federal Correctional Institute, Three Rivers, Texas

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
3	William Pardue	Operations	CS001607-CS001615	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Federal Goverment Agencies
3	William Pardue	Operations	CS001616-CS001620	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Fire Chief, Inc.
3	William Pardue	Operations	CS001621-CS001634	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Fire Chief, Inc.
3	William Pardue	Operations	CS001635-CS001638	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Fire Chief, Inc.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
3	William Pardue	Operations	CS001639-CS001645	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Fire Chief, Inc.
3	William Pardue	Operations	CS001646-CS001650	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Fire Chief, Inc.
3	William Pardue	Operations	CS001651-CS001655	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Fire Chief, Inc.
3	William Pardue	Operations	CS001656-CS001664	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Fire Chief, Inc.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
3	William Pardue	Operations	CS001665-CS001679	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Fire Chief, Inc.
3	William Pardue	Operations	CS001680-CS001684	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Fire Chief, Inc.
3	William Pardue	Operations	CS001685-CS001691	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Fire Chief, Inc.
3	William Pardue	Operations	CS001692-CS001696	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Fire Chief, Inc.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
3	William Pardue	Operations	CS001697-CS001700	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Fire Chief, Inc.
3	William Pardue	Operations	CS001701-CS001705	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Fire Chief, Inc.
3	William Pardue	Operations	CS001706-CS001709	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Fire Chief, Inc.
3	William Pardue	Operations	CS001710-CS001717	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Fire Chief, Inc.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
3	William Pardue	Operations	CS001718-CS001729	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Fire Chief, Inc.
3	William Pardue	Operations	CS001730-CS001744	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Fire Chief, Inc.
3	William Pardue	Operations	CS001745-CS001758	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Fire Chief, Inc.
3	William Pardue	Operations	CS001759-CS001768	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Fire Chief, Inc.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
3	William Pardue	Operations	CS001769-CS001781	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Fire Chief, Inc.
3	William Pardue	Operations	CS001782-CS001788	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Fire Chief, Inc.
3	William Pardue	Operations	CS001789-CS001797	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Fire Chief, Inc.
3	William Pardue	Operations	CS001798-CS001802	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Fire Engineering Company

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
3	William Pardue	Operations	CS001803-CS001812	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Fire Protection Supply
3	William Pardue	Operations	CS001813-CS001819	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Fire Safety
3	William Pardue	Operations	CS001820-CS001831	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Fire Sprinkler Limited
3	William Pardue	Operations	CS001832-CS001851	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Fire Sprinkler Systems

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
3	William Pardue	Operations	CS001852-CS001858	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Fire Systems
3	William Pardue	Operations	CS001859-CS001890	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Fireguard
3	William Pardue	Operations	CS001891-CS001911	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Fireguard
3	William Pardue	Operations	CS001912-CS001918	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Fireguard Life Safety

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
3	William Pardue	Operations	CS001919-CS001927	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Fireguard Sprinkler Systems
3	William Pardue	Operations	CS001928-CS001940	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Firetrol
3	William Pardue	Operations	CS001941-CS001951	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: First Coast Fire
3	William Pardue	Operations	CS001952-CS001958	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Florida Marketing

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
3	William Pardue	Operations	CS001959-CS001964	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Florida Marketing
3	William Pardue	Operations	CS001965-CS001982	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: NSA
3	William Pardue	Operations	CS001983-CS002031	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: NSA
3	William Pardue	Operations	CS002032-CS002037	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: FRG Management, Inc.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
3	William Pardue	Operations	CS002038-CS002047	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Garvin Fire
3	William Pardue	Operations	CS002048-CS002057	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: General Fire Protection
3	William Pardue	Operations	CS002058-CS002073	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Genesis Fire
3	William Pardue	Operations	CS002074-CS002080	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: G&G, Inc.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
3	William Pardue	Operations	CS002081-CS002117	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Glow Fire
3	William Pardue	Operations	CS002118-CS002128	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Gold Coast Fire Protection
3	William Pardue	Operations	CS002129-CS002137	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Golden West Plumbing
3	William Pardue	Operations	CS002138-CS002143	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Grantham Fire Protection

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
3	William Pardue	Operations	CS002144-CS002161	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Great Lakes
3	William Pardue	Operations	CS002162-CS002172	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Great Lakes
3	William Pardue	Operations	CS002173-CS002183	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Grif Fab
3	William Pardue	Operations	CS002184-CS002210	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Grif Fab

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
3	William Pardue	Operations	CS002211-CS002226	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Grif Fab
3	William Pardue	Operations	CS002227-CS002235	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Grif Fab
3	William Pardue	Operations	CS002236-CS002247	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Grinnell Fire Protection
3	William Pardue	Operations	CS002248-CS002256	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Grinnell Fire Protection

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
3	William Pardue	Operations	CS002257-CS002261	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Grinnell Fire Protection
3	William Pardue	Operations	CS002262-CS002273	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Grinnell Fire Protection
3	William Pardue	Operations	CS002274-CS002351	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Hibernia National Bank
3	William Pardue	Operations	CS002352-CS002398	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Guillot-Vogt

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
3	William Pardue	Operations	CS002399-CS002417	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Guillot-Vogt
3	William Pardue	Operations	CS002418-CS002422	Claims file, including Claimant return inspection summary, internal movement cards, return authorizations, diagnostic reports, technical service requests, invoices, and correspondence to and from the Claimant. Claimant: Guillot-Vogt

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
4	William Pardue	Operations	CS002423-CS002434	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Hammer Associated Services
4	William Pardue	Operations	CS002435-CS002447	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Hammer Associated Services
4	William Pardue	Operations	CS002448-CS002457	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: HAS Protection
4	William Pardue	Operations	CS002458-CS002460	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: HAS Protection
4	William Pardue	Operations	CS002461-CS002464	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: HAS Protection
4	William Pardue	Operations	CS002465-CS002468	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: HAS Protection

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
4	William Pardue	Operations	CS002469-CS002472	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: T.J. Hayes
4	William Pardue	Operations	CS002473-CS002480	Claimant claims files, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Calsteem Hayward Warehouse
4	William Pardue	Operations	CS002481-CS002494	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: HFP Sprinkler
4	William Pardue	Operations	CS002495-CS002504	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Hyatt Regency
4	William Pardue	Operations	CS002505-CS002518	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Hydro Fire
4	William Pardue	Operations	CS002519-CS002527	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Independent

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
4	William Pardue	Operations	CS002528-CS002535	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Inhouse Plumbing
4	William Pardue	Operations	CS002536-CS002546	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: J.B.T. Home
4	William Pardue	Operations	CS002547-CS002549	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Jack Frost Fire Protection
4	William Pardue	Operations	CS002550-CS002560	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Jacobs Fire Protection
4	William Pardue	Operations	CS002561-CS002564	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Kamelhair and Rouhi
4	William Pardue	Operations	CS002565-CS002568	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Real Mendelson Limited

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
4	William Pardue	Operations	CS002569-CS002576	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Kayco Fire Protection
4	William Pardue	Operations	CS002577-CS002596	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Kaufman Fire Protection
4	William Pardue	Operations	CS002597-CS002627	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Kaufman Fire Protection
4	William Pardue	Operations	CS002628-CS002638	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Kazal Fire Protection
4	William Pardue	Operations	CS002639-CS002643	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: K/C West Realty
4	William Pardue	Operations	CS002644-CS002649	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Kilian Fire Protection

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
4	William Pardue	Operations	CS002650-CS002655	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Adjusting Services Unlimited
4	William Pardue	Operations	CS002656-CS002663	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: L&C Contracting Inc.
4	William Pardue	Operations	CS002664-CS002673	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: L&D Construction Marion Prock Association
4	William Pardue	Operations	CS002674	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: La Maconnerie Homeowners
4	William Pardue	Operations	CS002675-CS002681	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: PJ Labrie & Sons
4	William Pardue	Operations	CS002682-CS002685	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Lake Havasu City Fire Department

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
4	William Pardue	Operations	CS002686-CS002700	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Lake Havasu Plumbing and Fire Protection
4	William Pardue	Operations	CS002701-CS002711	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Lake Havasu Plumbing and Fire Protection
4	William Pardue	Operations	CS002712-CS002718	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Lansdale Services
4	William Pardue	Operations	CS002719-CS002733	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Lansdale Services
4	William Pardue	Operations	CS002734-CS002754	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Lansdale Services
4	William Pardue	Operations	CS002755-CS002768	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Lansdale Services

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
4	William Pardue	Operations	CS002769-CS002777	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: A.L. Lease Company
4	William Pardue	Operations	CS002778-CS002782	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Life Safety
4	William Pardue	Operations	CS002783-CS002788	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Livermore Fire Department
4	William Pardue	Operations	CS002789-CS002795	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant L&W Fire Protection
4	William Pardue	Operations	CS002796-CS002800	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: MacDonald Inc.
4	William Pardue	Operations	CS002801-CS002829	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Macera Construction

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
4	William Pardue	Operations	CS002830-CS002835	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: R.A. Marshall
4	William Pardue	Operations	CS002836-CS002840	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Marriott Hotel
4	William Pardue	Operations	CS002841-CS002846	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Martin Fire Protection
4	William Pardue	Operations	CS002847-CS002887	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Maryland Casualty
4	William Pardue	Operations	CS002888-CS002897	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Mastros Inc.
4	William Pardue	Operations	CS002898-CS002910	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Meadowlands Fire

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
4	William Pardue	Operations	CS002911-CS002923	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Metro Fire
4	William Pardue	Operations	CS002924-CS002939	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Michael Mirabella
4	William Pardue	Operations	CS002940-CS002941	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Minneapolis Boys Club
4	William Pardue	Operations	CS002942-CS002961	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Mid South
4	William Pardue	Operations	CS002962-CS002969	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Miller Fire Protection
4	William Pardue	Operations	CS002970-CS002985	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Miller Fire Protection

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
4	William Pardue	Operations	CS002986-CS003009	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Montana Historical Society
4	William Pardue	Operations	CS003010-CS003024	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Moore Pipe
4	William Pardue	Operations	CS003025-CS003029	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Moraga Fire District
4	William Pardue	Operations	CS003030-CS003043	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Franko Morelli
4	William Pardue	Operations	CS003044-CS003057	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Motorola
4	William Pardue	Operations	CS003058-CS003078	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Motorola Inc. Strategic Electronics Division

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
4	William Pardue	Operations	CS003079-CS003092	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Mutual Sprinkler
4	William Pardue	Operations	CS003093-CS003110	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Life Safety
4	William Pardue	Operations	CS003111-CS003118	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Morristown Automatic Sprinkler Company
4	William Pardue	Operations	CS003119-CS003136	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Morristown Automatic Sprinkler Company
5	William Pardue	Operations	CS003137-CS003141	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Stop Fire Inc.
5	William Pardue	Operations	CS003142-CS003147	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Stop Fire Inc.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
5	William Pardue	Operations	CS003148-CS003155	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Stop Fire, Inc.
5	William Pardue	Operations	CS003156-CS003165	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Stop Fire, Inc.
5	William Pardue	Operations	CS003166-CS003189	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Strickland Fire Protection
5	William Pardue	Operations	CS003190-CS003201	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Strickland Fire Protection
5	William Pardue	Operations	CS003202-CS003211	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Strickland Fire Protection
5	William Pardue	Operations	CS003212-CS003223	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Strickland Fire Protection

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
5	William Pardue	Operations	CS003224-CS003236	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Strickland Fire Protection
5	William Pardue	Operations	CS003237-CS003249	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Strickland Fire Protection
5	William Pardue	Operations	CS003250-CS003259	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Strickland Fire Protection
5	William Pardue	Operations	CS003260-CS003271	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Strickland Fire Protection
5	William Pardue	Operations	CS003272-CS003282	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Summitt Fire
5	William Pardue	Operations	CS003283-CS003290	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Summit West Corporation

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
5	William Pardue	Operations	CS003291-CS003304	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Sunland
5	William Pardue	Operations	CS003305-CS003318	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Sun Plumbing and Mechanical
5	William Pardue	Operations	CS003319-CS003328	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Superior Automatic Sprinkler
5	William Pardue	Operations	CS003329-CS003345	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Missing Bates No. CS003355. Claimant: Superior Automatic Sprinkler
5	William Pardue	Operations	CS003346-CS003392	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Superior Mechanical
5	William Pardue	Operations	CS003393-CS003398	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Taylor Manor Hospital

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
5	William Pardue	Operations	CS003399-CS003426	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: The Fire Works Inc.
5	William Pardue	Operations	CS003427-CS003435	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: The Fire Works Inc.
5	William Pardue	Operations	CS003436-CS003442	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Thomas Sprinkler
5	William Pardue	Operations	CS003443-CS003462	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Total Fire Sprinkler
5	William Pardue	Operations	CS003463-CS003473	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Townhouse Sprinkler
5	William Pardue	Operations	CS003474-CS003484	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Trade Fire Protection

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
5	William Pardue	Operations	CS003485-CS003490	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Transwest
5	William Pardue	Operations	CS003491-CS003496	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Victoria Place Condos/Transwest Supply
5	William Pardue	Operations	CS003497-CS003507	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Treasure Valley
5	William Pardue	Operations	CS003508-CS003518	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Treasure Valley
5	William Pardue	Operations	CS003519-CS003529	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Triangle Fire Protection of Maryland, Inc.
5	William Pardue	Operations	CS003530-CS003538	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Triangle Fire Protection of Maryland, Inc.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
5	William Pardue	Operations	CS003539-CS003555	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Triangle Fire Protection of Maryland, Inc.
5	William Pardue	Operations	CS003556-CS003562	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Triple V Enterprises
5	William Pardue	Operations	CS003563-CS003577	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Tumatsa
5	William Pardue	Operations	CS003578-CS003579	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Underwriter's Laboratories
5	William Pardue	Operations	CS003580-CS003583	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Universal Supply Company Limited
5	William Pardue	Operations	CS003584-CS003595	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: University of Maryland College Park

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
5	William Pardue	Operations	CS003596-CS003602	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. CS003600 is missing. Claimant: U.S. Inc.
5	William Pardue	Operations	CS003603-CS003609	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: U.S. Fire Protection Inc.
5	William Pardue	Operations	CS003610-CS003618	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: VSC Corporation
5	William Pardue	Operations	CS003619-CS003623	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Vaca Fire
5	William Pardue	Operations	CS003624-CS003627	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Valley Fire Protection/Boigen Residence
5	William Pardue	Operations	CS003628-CS003631	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Valley Fire Protection

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
5	William Pardue	Operations	CS003632-CS003635	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Valley Fire Protection Regency Apartments
5	William Pardue	Operations	CS003636-CS003641	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Valley Fire Protection Chang Lot #20
5	William Pardue	Operations	CS003642-CS003645	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Valley Fire Protection Chang Lot #36
5	William Pardue	Operations	CS003646-CS003656	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Valley Fire Protection
5	William Pardue	Operations	CS003657-CS003692	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Valley Fire Protection
5	William Pardue	Operations	CS003693-CS003696	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Valley Fire Protection Adamick Residence

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
5	William Pardue	Operations	CS003697-CS003700	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Valley Fire Protection Lycon #2
5	William Pardue	Operations	CS003701-CS003704	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Valley Fire Protection Northrop Residence
5	William Pardue	Operations	CS003705-CS003708	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Valley Fire Protection Tunney Residence
5	William Pardue	Operations	CS003709-CS003713	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Valley Fire Protection
5	William Pardue	Operations	CS003714-CS003719	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Valley Fire Protection
5	William Pardue	Operations	CS003720-CS003730	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Valley Fire Protection

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
5	William Pardue	Operations	CS003731-CS003748	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Valley Fire Protection
5	William Pardue	Operations	CS003749-CS003757	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Valley Fire Protection
5	William Pardue	Operations	CS003758-CS003774	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Valley Fire Protection
5	William Pardue	Operations	CS003775-CS003786	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Vanguard Fire Protection
5	William Pardue	Operations	CS003787-CS003797	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Vanguard Fire Protection
5	William Pardue	Operations	CS003798-CS003811	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Viking Fire Protection

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
5	William Pardue	Operations	CS003812-CS003817	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Villa Vex De Apartment
5	William Pardue	Operations	CS003818-CS003833	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Vipond Automatic
5	William Pardue	Operations	CS003834-CS003844	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Vipond Automatic Sprinkler
5	William Pardue	Operations	CS003845-CS003852	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Virginia Sprinkler
5	William Pardue	Operations	CS003853-CS004015	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Virginia Sprinkler
5	William Pardue	Operations	CS004016-CS004021	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Vista Fire Department

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
5	William Pardue	Operations	CS004022-CS004031	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Vista Fire Department
5	William Pardue	Operations	CS004032-CS004036	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Vista Fire Department
5	William Pardue	Operations	CS004037-CS004051	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Vista Fire
5	William Pardue	Operations	CS004052-CS004062	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: W&M Engineering & Consulting
5	William Pardue	Operations	CS004063-CS004067	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Walnut Mews
5	William Pardue	Operations	CS004068-CS004085	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Walschone Fire Protection

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
5	William Pardue	Operations	CS004086-CS004090	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Wayman Fire
5	William Pardue	Operations	CS004091-CS004136	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Rumberger, Kirk, Caldwel, Wayne Automatic Fire Sprinkler
5	William Pardue	Operations	CS004137-CS004172	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Wenninger Company Economy Insurance
5	William Pardue	Operations	CS004173-CS004203	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Wescott Sales Limited
5	William Pardue	Operations	CS004204-CS004213	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Wescott Sales Limited
5	William Pardue	Operations	CS004214-CS004226	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Wescott Sales Limited

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
5	William Pardue	Operations	CS004227-CS004231	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Wescott Sales Limited
5	William Pardue	Operations	CS004232-CS004237	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Wescott Sales Limited
5	William Pardue	Operations	CS004238-CS004250	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: Western States Fire Protection
5	William Pardue	Operations	CS004251-CS004254	Claim file, including Claimant return inspection reports, correspondence, invoices, and supporting documentation. Claimant: White Brothers

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
6	Central Files	Purchasing	CS004255-CS004334	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article report, certificates of compliance Part No. 159-057
6	Central Files	Purchasing	CS004335-CS004396	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 159-06
6	Central Files	Purchasing	CS004397-CS004405	Part file: engineering change notices, quotation invoices, engineering drawings, article inspection reports Part No. 159-07000
6	Central Files	Purchasing	CS004406-CS004433	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 159-08

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
6	Central Files	Purchasing	CS004434-CS004482	Part file: engineering change notices, correspondence to and from vendors, requests for quotations, proposals, non-conformance reports, first article reports, certificate of compliance Part No. 159-
6	Central Files	Purchasing	CS004483-CS004506	Part file: engineering change notices and engineering drawings Part No. 159-30
6	Central Files	Purchasing	CS004507-CS004546	Part file: non-conformance reports, engineering drawings, correspondence to and from vendor, first article inspection reports, quotations Part No. 159-32
6	Central Files	Purchasing	CS004547-CS004561	Part file: engineering drawings, non-conformance report, correspondence to and from vendors Part No. 159-33
6	Central Files	Purchasing	CS004562-CS004575	Part file: first article inspection reports, non-conformance reports, engineering change notices, engineering drawings Part No. 159-34

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
6	Central Files	Purchasing	CS004576-CS004591	Part file: engineering drawings, purchase orders, invoice, requisition of work location Part No. 159-40, 41
6	Central Files	Purchasing	CS004592-CS004746	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 159-427
6	Central Files	Purchasing	CS004747-CS004873	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 160-05-08
6	Central Files	Purchasing	CS004874-CS004912	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 161-04

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
6	Central Files	Purchasing	CS004913-CS005084	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 162-05
6	Central Files	Purchasing	CS005085-CS005194	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 162-08
6	Central Files	Purchasing	CS005195-CS005200	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 162-09
6	Central Files	Purchasing	CS005201-CS005257	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 162-015

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
6	Central Files	Purchasing	CS005058-CS005275	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 162-016
6	Central Files	Purchasing	CS005276-CS005338	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 162-01600
6	Central Files	Purchasing	CS005339-CS005399	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 162-095
6	Central Files	Purchasing	CS005400-CS005428	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 164-05

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
6	Central Files	Purchasing	CS005429-CS005548	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 164-16
6	Central Files	Purchasing	CS005549-CS005562	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 164-17
6	Central Files	Purchasing	CS005563-CS005578	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 164-20
6	Central Files	Purchasing	CS005579-CS005595	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 165-01

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
6	Central Files	Purchasing	CS005596-CS005688	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 165-03
6	Central Files	Purchasing	CS005689-CS005712	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 165-04
6	Central Files	Purchasing	CS005713-CS005841	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 165-05
7	Central Files	Purchasing	CS005842-CS005887	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-116

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
7	Central Files	Purchasing	CS005888-CS005889	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-98
7	Central Files	Purchasing	CS005891-CS005900	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-94
7	Central Files	Purchasing	CS005901-CS005925	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-93
7	Central Files	Purchasing	CS005926-CS005948	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-91

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
7	Central Files	Purchasing	CS005949-CS006006	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-84
7	Central Files	Purchasing	CS006007-CS006019	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-88
7	Central Files	Purchasing	CS006020-CS006030	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-78
7	Central Files	Purchasing	CS006031-CS006052	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-76

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
7	Central Files	Purchasing	CS006053-CS006058	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-73
7	Central Files	Purchasing	CS006059-CS006099	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-14
7	Central Files	Purchasing	CS006100-CS006128	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-41
7	Central Files	Purchasing	CS006129-CS006131	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-20

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
7	Central Files	Purchasing	CS006132-CS006214	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-17
7	Central Files	Purchasing	CS006215-CS006221	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-15
7	Central Files	Purchasing	CS006222-CS006271	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-128
7	Central Files	Purchasing	CS006272-CS006293	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-128

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
7	Central Files	Purchasing	CS006294-CS006303	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-125
7	Central Files	Purchasing	CS006304-CS006335	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-125 Revision-1
7	Central Files	Purchasing	CS006336-CS006345	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-12-200
7	Central Files	Purchasing	CS006346-CS006365	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-121

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
7	Central Files	Purchasing	CS006366-CS006382	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-13
7	Central Files	Purchasing	CS006383-CS006390	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-11
7	Central Files	Purchasing	CS006391-CS006536	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-101
7	Central Files	Purchasing	CS006537-CS006573	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-09

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
7	Central Files	Purchasing	CS006574-CS006665	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-06
7	Central Files	Purchasing	CS006666-CS006743	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-05
7	Central Files	Purchasing	CS006744-CS006805	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-04
7	Central Files	Purchasing	CS006806-CS006830	Engineering Drawings
7	Central Files	Purchasing	CS006831-CS007022	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-118

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
7	Central Files	Purchasing	CS007023-CS007160	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-129
7	Central Files	Purchasing	CS007161-CS007222	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-134
7	Central Files	Purchasing	CS007223-CS007279	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-136
7	Central Files	Purchasing	CS007280-CS007308	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-151

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
7	Central Files	Purchasing	CS007309-CS007336	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-152
7	Central Files	Purchasing	CS007337-CS007351	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-153
7	Central Files	Purchasing	CS007352-CS007363	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-154
7	Central Files	Purchasing	CS007364-CS007377	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-155

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
7	Central Files	Purchasing	CS007378-CS007389	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-15600
7	Central Files	Purchasing	CS007390-CS007399	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. XP155-1211
7	Central Files	Purchasing	CS007400-CS007435	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 155-29
7	Central Files	Purchasing	CS007436-CS007438	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. XP136-133

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
7	Central Files	Purchasing	CS007439-CS007458	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. CIAPRO B/M
7	Central Files	Purchasing	CS007459-CS007489	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 156-02
7	Central Files	Purchasing	CS007490-CS007497	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 15606900
7	Central Files	Purchasing	CS007498-CS007522	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 156-01

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
7	Central Files	Purchasing	CS007523-CS007689	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 156-12
7	Central Files	Purchasing	CS007690-CS007741	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 156-21
7	Central Files	Purchasing	CS007742-CS007806	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 156-22
7	Central Files	Purchasing	CS007807-CS007884	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 156-23

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
7	Central Files	Purchasing	CS007885-CS007983	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 156-24
7	Central Files	Purchasing	CS007984-CS008101	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 156-25
7	Central Files	Purchasing	CS008102-CS008124	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 156-33
7	Central Files	Purchasing	CS008125-CS008158	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 156-34

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
7	Central Files	Purchasing	CS008159-CS008215	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 156-35
7	Central Files	Purchasing	CS008216-CS008316	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 156-36000
7	Central Files	Purchasing	CS008317-CS008327	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 156-70
7	Central Files	Purchasing	CS008328-CS008337	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 156-73

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
7	Central Files	Purchasing	CS008338-CS008386	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 156-74
7	Central Files	Purchasing	CS008387-CS008415	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 156-74 161-30
7	Central Files	Purchasing	CS008416-CS008458	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 156-93
8	Central Files	Purchasing	CS008459-CS008648	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 156-351

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
8	Central Files	Purchasing	CS008649-CS008729	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 156-204
8	Central Files	Purchasing	CS008730-CS008752	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 156-205
8	Central Files	Purchasing	CS008753-CS008950	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 156-309
8	Central Files	Purchasing	CS008951-CS009067	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 156-310

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
8	Central Files	Purchasing	CS009068-CS009183	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 156-315
8	Central Files	Purchasing	CS009184-CS009188	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 156-321
8	Central Files	Purchasing	CS009189-CS009191	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 156-99A
8	Central Files	Purchasing	CS009192-CS009307	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 156-10200

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
8	Central Files	Purchasing	CS009308-CS009331	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 156-353
8	Central Files	Purchasing	CS009332-CS009349	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 156-354
8	Central Files	Purchasing	CS009350-CS009375	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 156-355
8	Central Files	Purchasing	CS009376-CS009469	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 156-807-809

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
8	Central Files	Purchasing	CS009470-CS009492	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 157-039
8	Central Files	Purchasing	CS009493-CS009533	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 157-24200
8	Central Files	Purchasing	CS009534-CS009548	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 157-100
8	Central Files	Purchasing	CS009549-CS009569	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 157-109, 110

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
8	Central Files	Purchasing	CS009570-CS009602	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 157-12100
8	Central Files	Purchasing	CS009603-CS009605	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 157-11-4
8	Central Files	Purchasing	CS009606-CS009609	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 157-13-100
8	Central Files	Purchasing	CS009610-CS009700	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 157-143

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
8	Central Files	Purchasing	CS009701-CS009703	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 157-151
8	Central Files	Purchasing	CS009704-CS009720	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 157-201
8	Central Files	Purchasing	CS009721-CS009762	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 157-215
8	Central Files	Purchasing	CS009763-CS009841	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 157-220

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
8	Central Files	Purchasing	CS009842-CS009845	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 157-221
8	Central Files	Purchasing	CS009846-CS009865	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 157-23000
8	Central Files	Purchasing	CS009866-CS009892	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 157-23700
8	Central Files	Purchasing	CS009893-CS010008	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 157-240

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
8	Central Files	Purchasing	CS010009-CS010051	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 157-24100
8	Central Files	Purchasing	CS010052-CS010065	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 157-24200
8	Central Files	Purchasing	CS010066-CS010222	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 157-41
8	Central Files	Purchasing	CS010223-CS010291	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 157-42

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
8	Central Files	Purchasing	CS010292-CS010344	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 157-44
8	Central Files	Purchasing	CS010345-CS010401	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 157-45
8	Central Files	Purchasing	CS010402-CS010502	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 157-47
8	Central Files	Purchasing	CS010503-CS010510	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 157-503

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
8	Central Files	Purchasing	CS010511-CS010570	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 157-90
8	Central Files	Purchasing	CS010571-CS010631	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 157-92
8	Central Files	Purchasing	CS010632-CS010662	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 157-93
8	Central Files	Purchasing	CS010663-CS010707	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 157-94

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
8	Central Files	Purchasing	CS010708-CS010714	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 157-98
8	Central Files	Purchasing	CS010715-CS010782	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 158-02
8	Central Files	Purchasing	CS010783-CS010819	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 158-03
8	Central Files	Purchasing	CS010820-CS010854	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 159-02

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
8	Central Files	Purchasing	CS010855-CS010946	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 159-03
8	Central Files	Purchasing	CS010947-CS010985	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 159-013
8	Central Files	Purchasing	CS010986-CS010990	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. HER-12
8	Central Files	Purchasing	CS010991-CS011033	Part file: engineering change notices, engineering drawings, correspondence to and from vendors, non-conformance reports, packing lists, first article reports, certificate of compliance Part No. 159-014

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
9	Carmine Schiavone	Customer Service	CS011034-CS011302	Claim file for The Embarcadero Center: File includes installer agreement, correspondence to and from counsel for Claimant and Central Sprinkler Co., insurance certificates, sprinkler replacement agreement between The Embarcadero Center and Central Sprinkler Co., correspondence to and from building management and Central Sprinkler Co., test results for Embarcadero Center sprinkler system, water analysis report, engineering diagnostic report, changeout procedures, sprinkler count per floor.
9	Carmine Schiavone	Customer Service	CS011303-CS011401	Claim file for John Buck Co.: File includes reinstallation agreement, correspondence to and from Central Sprinkler Co. and the John Buck Co., cut sheets for Central Sprinkler Co. replacement parts, test results, engineering diagnostic reports, water analysis, return authorizations.
9	Carmine Schiavone	Customer Service	CS011402-CS011462	Claim file for ANA Building: File includes correspondence to and from Central Sprinkler Co. and building owner, certificate of insurance, reinstallation agreement, cut sheets for Central Sprinkler Co. replacement parts, test results, engineering diagnostic reports, water analysis, sprinkler head diagnostic summary.
9	Carmine Schiavone	Customer Service	CS011463-CS011502	Claim file for Hallmark Cards: File includes correspondence to and from building owner and Central Sprinkler Co., engineering diagnostic report, test results, water analysis.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
9	Carmine Schiavone	Customer Service	CS011503-CS011870	Claim file for Marriott Corporation: File includes correspondence to and from counsel for Marriott and Central Sprinkler Co., correspondence from Marriott International claims adjustor, engineering drawings for Central Sprinkler Co. replacement parts, memoranda regarding sprinkler replacement procedures, sprinkler head testing summaries, water analysis, letter agreement between Central Sprinkler Co. and Marriott International, correspondence to and from Analytical Labs and Central Sprinkler Co., Marriott test protocol, return authorizations, invoices, engineering diagnostic reports.
10	Carmine Schiavone	Customer Service	CS011871-CS011873	Memorandum regarding Factory Mutual Engineering Bulletin.
10	Carmine Schiavone	Customer Service	CS011874-CS012107	Omega diagnostic reports prepared by Dr. Victor Greenhut.
10	Carmine Schiavone	Customer Service	CS012108-CS012123	Correspondence and test results for various sites including Fairfax County, Insignia Commercial Group, National Fire Protection, Inc. and Virginia Sprinkler.
10	Carmine Schiavone	Customer Service	CS012124-CS012144	Correspondence to and from National Fire Protection regarding Omega remediation program.
10	Carmine Schiavone	Customer Service	CS012145-CS012150	Correspondence to Miller Fire Protection Inc. regarding Omega remediation program.
10	Carmine Schiavone	Customer Service	CS012151-CS012152	Correspondence to Central Sprinkler Co. from Hughes Associates regarding Omega remediation plan for Sheraton Hotels.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
10	Carmine Schiavone	Customer Service	CS012153	Correspondence to Shambaugh and Sons, Inc. regarding request for deviation.
10	Carmine Schiavone	Customer Service	CS012154-CS012157	Correspondence to insurance adjuster regarding Omega remediation.
10	Carmine Schiavone	Customer Service	CS012158-CS012175	Correspondence to Redlands Fire Prevention regarding Central Sprinkler Co. Omega products.
10	Carmine Schiavone	Customer Service	CS012176-CS012181	Correspondence to counsel for Chartwell Leisure regarding claim for sprinkler head replacement.
10	Carmine Schiavone	Customer Service	CS012182-CS012209	Correspondence from New York State Office of Mental Health to Central Sprinkler Co. regarding testing and remediation of sites with Omega sprinkler heads.
10	Carmine Schiavone	Customer Service	CS012210-CS012211	Correspondence to Central Sprinkler Co. from Chartwell Leisure regarding claim for sprinkler head replacement.
10	Carmine Schiavone	Customer Service	CS012212	Interoffice memorandum regarding Omega replacement parts
10	Carmine Schiavone	Customer Service	CS012213	Correspondence to Lincoln Properties from Central Sprinkler Co. regarding Omega test results.
10	Carmine Schiavone	Customer Service	CS012214-CS012215	Omega changeout audit
10	Carmine Schiavone	Customer Service	CS012216-CS012220	Correspondence and memoranda regarding testing and remediation of VA hospitals

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
10	Carmine Schiavone	Customer Service	CS012221-CS012247	Correspondence to and from Worsham Sprinkler Co. and Central Sprinkler Co. regarding Omega remediation program, identification of sites with Omega sprinkler heads, and Omega sprinkler data sheets.
10	Carmine Schiavone	Customer Service	CS012248-CS012257	Underwriter's Laboratories test report.
10	Carmine Schiavone	Customer Service	CS012258-CS012265	Marriott test results and engineering diagnostic report.
10	Carmine Schiavone	Customer Service	CS012266-CS012272	Articles regarding the Omega sprinkler head.
10	Carmine Schiavone	Customer Service	CS012273-CS012275	Test results for the First Market Tower.
10	Carmine Schiavone	Customer Service	CS012276-CS012277	Article regarding Omega sprinkler head.
10	Carmine Schiavone	Customer Service	CS012278-CS012279	Test results from Underwriter's Laboratories.
10	Carmine Schiavone	Customer Service	CS012280-CS012282	Correspondence from Factory Mutual regarding Omega sprinkler head.
10	Carmine Schiavone	Customer Service	CS012283-CS012284	Correspondence from Sheraton to Central Sprinkler Co. regarding remediation of Sheraton Hotels.
10	Carmine Schiavone	Customer Service	CS012285-CS012294	Employee requisition sheets.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
10	Carmine Schiavone	Customer Service	CS012295-CS012296	Correspondence to Central Sprinkler Co. from Central Sprinkler Co. warehouse regarding draft letter to customers.
10	Carmine Schiavone	Customer Service	CS012297	Correspondence to Central Sprinkler Co. from Kerry Bell of Underwriter's Laboratories.
10	Carmine Schiavone	Customer Service	CS012298-CS012304	Spreadsheet regarding identification of sites with Omega Sprinkler heads.
10	Carmine Schiavone	Customer Service	CS012305-CS012308	Summary of Omega sales.
10	Carmine Schiavone	Customer Service	CS012309-CS012310	Correspondence from Dr. Victor Greenhut to Central Sprinkler Co. regarding Omega testing.
10	Carmine Schiavone	Customer Service	CS012311-CS012313	Diagnostic report prepared by Dr. Victor Greenhut for Federal Correctional Institute at Three Rivers, Texas.
10	Carmine Schiavone	Customer Service	CS012314-CS012334	Underwriter's Laboratories test reports.
10	Carmine Schiavone	Customer Service	CS012335-CS012347	Diagnostic reports prepared by Dr. Victor Greenhut for the Hallmark Westin Hotel.
10	Carmine Schiavone	Customer Service	CS012348	Ledger of sales of Omega heads.
10	Carmine Schiavone	Customer Service	CS012349	Omega test data template.
10	Carmine Schiavone	Customer Service	CS012350-CS012351	Draft letter regarding Omega Sprinkler line.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
10	Carmine Schiavone	Customer Service	CS012352-CS012354	Test data regarding Omega o-rings.
10	Carmine Schiavone	Customer Service	CS012355-CS012364	Diagnostic report prepared by Dr. Victor Greenhut.
10	Carmine Schiavone	Customer Service	CS012365-CS012428	File of miscellaneous letters to and from customers regarding Omega Sprinkler heads in steel pipe systems, reported o-ring problems, UL and FM certification of Omega sprinkler heads, Omega testing, Omega work crews.
10	Carmine Schiavone	Customer Service	CS012429	Article regarding Omega sprinkler heads.
10	Carmine Schiavone	Customer Service	CS012430	Fax of letter regarding Omega Sprinkler heads.
10	Carmine Schiavone	Customer Service	CS012431-CS012433	Draft letter to customers regarding Omega Sprinkler heads in steel pipe syems with Omega Sprinkler data sheet attached.
10	Carmine Schiavone	Customer Service	CS012434-CS012437	Omega activity report week ending 7/11/97.
10	Carmine Schiavone	Customer Service	CS012438-CS012531	Correspondence and test results regarding testing of water samples by Atlantic Analytical Laboratories.
10	Carmine Schiavone	Customer Service	CS012532-CS012539	Correspondence from Alexander & Alexander regarding replacement of Omega Sprinkler heads.
10	Carmine Schiavone	Customer Service	CS012540-CS012541	Correspondence to Eastman Chemical Company from Central Sprinkler Co. regarding Omega sprinkler heads.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
10	Carmine Schiavone	Customer Service	CS012542-CS012546	Test results regarding Intel properties.
10	Carmine Schiavone	Customer Service	CS012547-CS012562	Test results prepared by UL.
10	Carmine Schiavone	Customer Service	CS012563-CS012569	Spreadsheet of sites containing Omega sprinkler heads
10	Carmine Schiavone	Customer Service	CS012570-CS012571	Memoranda regarding Omega o-ring change.
10	Carmine Schiavone	Customer Service	CS012572-CS012575	Correspondence from Industrial Risk Insurers regarding Omega sprinkler heads.
10	Carmine Schiavone	Customer Service	CS012576-CS012578	Miscellaneous document regarding Fire Prevention Association meeting.
10	Carmine Schiavone	Customer Service	CS012579-CS012582	Summaries of Omega sprinkler test results.
10	Carmine Schiavone	Customer Service	CS012583-CS012591	Memorandum, test results and drawings regarding Omega o-ring change.
10	Carmine Schiavone	Customer Service	CS012592-CS012598	Spreadsheet summarizing test data of Omega sprinkler heads.
10	Carmine Schiavone	Customer Service	CS012599-CS012664	Memoranda, test data, drawings and cut sheets regarding Omega o-ring swell study.
10	Carmine Schiavone	Customer Service	CS012665-CS012669	Memoranda regarding analysis of Omega heads from Marriott Hotels.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
10	Carmine Schiavone	Customer Service	CS012670-CS012671	E-mail regarding Omega sprinkler heads.
10	Carmine Schiavone	Customer Service	CS012672	Technical Service Request regarding testing of Omega sprinkler heads.
10	Carmine Schiavone	Customer Service	CS012673-CS012675	Correspondence regarding Omega recurrence testing.
10	Carmine Schiavone	Customer Service	CS012676	Notes regarding o-ring adhesion.
10	Carmine Schiavone	Customer Service	CS012677-CS012725	"Letters faxed" file. File contains fax cover sheets and correspondence regarding dissemination of contractor letter regarding Omegas in steel pipe systems.
10	Carmine Schiavone	Customer Service	CS012726-CS012762	"Stop Leak" file. File contains correspondence, notes, articles and memoranda regarding the use of stop leak in sprinkler systems.
10	Carmine Schiavone	Customer Service	CS012763-CS012774	Omega form letters, test procedures and data sheets.
10	Carmine Schiavone	Customer Service	CS012775-CS012781	Notices prepared by third parties regarding Omega sprinklers.
10	Carmine Schiavone	Customer Service	CS012782-CS012807	Correspondence with attached diagnostic reports and test data regarding VA hospitals.
10	Carmine Schiavone	Customer Service	CS012808-CS012948	Correspondence to and from building owners and contractors in response to requests for information, providing test results, and preparing for remediation of affected properties.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
10	Carmine Schiavone	Customer Service	CS012949-CS012962	Correspondence with attached test results from UL.
10	Carmine Schiavone	Customer Service	CS012963-CS012964	Correspondence regarding Glumac correspondence to biuilding owners.
10	Carmine Schiavone	Customer Service	CS012965-CS012972	Correspondence from UL regarding Code Authority newsletter.
10	Carmine Schiavone	Customer Service	CS012973-CS012981	Correspondence to customers regarding Omega sprinkler heads.
10	Carmine Schiavone	Customer Service	CS012982-CS013001	Diagnostic report prepared by Dr. Victor Greenhut regarding Omega sprinkler heads at Grand Floridian Hotel.
10	Carmine Schiavone	Customer Service	CS013002-CS013013	Correspondence to and from building owners and contractors regarding Omega sprinklers.
10	Carmine Schiavone	Customer Service	CS013014-CS013016	Correspondence from UL regarding UL press release about Omega sprinklers.
10	Carmine Schiavone	Customer Service	CS013017-CS013044	Correspondence to and from building owners, sprinkler contractors, American Fire Sprinkler Association and National Fire Protection, Inc. regarding Omega sprinklers.
11	Carmine Schiavone	Customer Service	CS013045-CS013050	Georgetown Village file: this file contains correspondence and engineering diagnostic report regarding Omega sprinkler heads.
11	Carmine Schiavone	Customer Service	CS013051-CS013052	Glumac International file: this file contains correspondence to Glumac regarding Omega sprinklers.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
11	Carmine Schiavone	Customer Service	CS013053-CS013065	Hallmark Westin file: this file contains correspondence to and from UL, FM, Central Sprinkler Co. and the building owner.
11	Carmine Schiavone	Customer Service	CS013066-CS013068	Hotel Nikko file: this file contains correspondence to and from the Hotel Nikko and Central Sprinkler Co.
11	Carmine Schiavone	Customer Service	CS013069-CS013070	Levi Strauss & Co. file: this file contains correspondence from Levi's to Central Sprinkler Co. regarding the Omega sprinklers in Levi's building.
11	Carmine Schiavone	Customer Service	CS013071-CS013085	Summaries of test data regarding Omega Marriott sprinkler testing.
11	Carmine Schiavone	Customer Service	CS013086-CS013088	Correspondence from FEA, Inc. to Marriott summarizing test data.
11	Carmine Schiavone	Customer Service	CS013089-CS013093	Test data and correspondence regarding Rowes Wharf project.
11	Carmine Schiavone	Customer Service	CS013094-CS013145	Correspondence, test data and summaries regarding VA hospital, Factory Mutual report regarding VA hospital Omega replacement program.
11	Carmine Schiavone	Customer Service	CS013146-CS013213	Correspondence and memoranda regarding Marriott Omega sprinkler testing and remediation program.
11	Carmine Schiavone	Customer Service	CS013214-CS013215	Penn State file: the file contains correspondence from the College of Medicine to Central Sprinkler Co.
11	Carmine Schiavone	Customer Service	CS013216-CS013217	Correspondence from UL to Central Sprinkler Co. regarding Omega sprinkler heads.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
11	Carmine Schiavone	Customer Service	CS013218-CS013247	Grinnell/Rowes Wharf file: this file contains correspondence to and from the property owner, contractor and Central Sprinkler Co. regarding the testing and remediation of the Rowes Wharf building.
11	Carmine Schiavone	Customer Service	CS013248-CS013284	VA Hospital file: this file includes correspondence to and from the Dept. of Veteran Affairs, the sprinkler contractor and Central Sprinkler Co. regarding testing and remediation of the VA Hospital network.
11	Carmine Schiavone	Customer Service	CS013285-CS013358	Factory Mutual file: this file contains correspondence to and from Factory Mutual and Central Sprinkler Co. regarding information, testing and remediation of buildings with Omega sprinkler heads.
11	Carmine Schiavone	Customer Service	CS013359-CS013363	Installer agreement.
11	Carmine Schiavone	Customer Service	CS013364	Fax letter from Central Sprinkler Co. regarding Omega sprinklers in steel pipe systems.
11	Carmine Schiavone	Customer Service	CS013365-CS013401	Correspondence to and from Central Sprinkler Co., building owners and contractors regarding request for information on Omega sprinkler testing and remediation.
11	Carmine Schiavone	Customer Service	CS013402-CS013415	Outline of presentation to the North American Fire Marshalls Association.
11	Carmine Schiavone	Customer Service	CS013416-CS013424	Correspondence and responses to request for information from the Associated Press.
11	Carmine Schiavone	Customer Service	CS013425-CS013428	Correspondence from Fairfax County to George Meyer, President and CEO of Central Sprinkler Co.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
11	Carmine Schiavone	Customer Service	CS013429-CS013444	Proposal from UL Industry Advisory Conference.
11	Carmine Schiavone	Customer Service	CS013445-CS013451	Memoranda and articles to sprinkler industry regarding Omega sprinkler heads.
11	Carmine Schiavone	Customer Service	CS013452-CS013453	Omega Activity Report, week ending 6/20/97.
11	Carmine Schiavone	Customer Service	CS013454-CS013505	Correspondence to Fire Chief Inc. with attached sprinkler head testing report prepared by Rothfuss Engineering Co.
11	Carmine Schiavone	Customer Service	CS013506	Correspondence to engineer for National Institutes of Health regarding Omega sprinkler spring collar test results.
11	Carmine Schiavone	Customer Service	CS013507	Omega Activity Report, week ending 6/6/97.
11	Carmine Schiavone	Customer Service	CS013508-CS013556	Omega sprinkler data sheets.
11	Carmine Schiavone	Customer Service	CS013557-CS013565	Newspapers articles regarding Omega sprinkler heads.
11	Carmine Schiavone	Customer Service	CS013566-CS013616	Sprinkler head testing report prepared by Rothfuss Engineering Co.
11	Carmine Schiavone	Customer Service	CS013617-CS013618	Spreadsheet of properties to be remediated.
11	Carmine Schiavone	Customer Service	CS013619-CS013622	Omega test results prepared by UL for the Sheraton Hotels.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
11	Carmine Schiavone	Customer Service	CS013623-CS013627	Underwriter's Laboratories Reports on o-ring re-design.
11	Carmine Schiavone	Customer Service	CS013628-CS013637	Underwriter's Laboratories Report on EC-20 sprinkler head.
11	Carmine Schiavone	Customer Service	CS013638-CS013669	Underwriter's Laboratories Report on C-1 sprinkler head.
11	Carmine Schiavone	Customer Service	CS013670-CS013720	Underwriter's Laboratories Reports on the R-1 sprinkler head.
11	Carmine Schiavone	Customer Service	CS013721-CS013804	Correspondence from Hughes Associates with attached report provided to the Consumer Products Safety Commission regarding requests for ITT Sheraton test data.
11	Carmine Schiavone	Customer Service	CS013805-CS013957	Test results compiled and summarized by UL.
11	Carmine Schiavone	Customer Service	CS013958-CS013998	First Interstate Tower file: this file includes correspondence to and from Central Sprinkler Co. and Director of Engineering for First Interstate Tower, Sprinkler Head Replacement Agreement, Engineering Diagnostic Report and test data for the First Interstate Tower.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
11	Carmine Schiavone	Customer Service	CS013999-CS014060	100 Pine Street file: this file includes report, test data, analysis of Dr. Victor Greenhut, and correspondence to and from Central Sprinkler Co., the building owner, and counsel for the building owner regarding testing and remediation of building containing Omega sprinkler heads.
11	Carmine Schiavone	Customer Service	CS014061-CS014087	Omega articles.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
12	Carmine Schiavone	Customer Service	CS014088-CS014282	West Wacker Volume Two File: this file contains memoranda for Omega changeout, audit ledger, invoices, correspondence to and from Central Sprinkler's insurance adjusters, correspondence to and from The Prime Group, Inc., managers of the West Wacker building and Central Sprinkler Co., correspondence to and from the Sprinkler Fitters Apprentices Union and the building owner and Central Sprinkler, correspondence to and from Great Lakes Plumbing and Central Sprinkler regarding testing and remediation of the West Wacker building.
12	Carmine Schiavone	Customer Service	CS014283-CS014536	Omega literature file: this file contains cut sheets for models in the Omega sprinkler line.
12	Carmine Schiavone	Customer Service	CS014537-CS014719	77 West Wacker Drive file: this file contains certificates of insurance, correspondence to and from The Prime Group, Inc. and Central Sprinkler regarding testing and remediation of the West Wacker building, the installer agreement with Great Lakes Plumbing, correspondence to and from Great Lakes Plumbing and Central Sprinkler regarding testing and remediation of the sprinkler system at 77 West Wacker Drive.
12	Carmine Schiavone	Customer Service	CS014720-CS014973	Omega literature file: this file contains cut sheets for models for the Omega sprinkler line.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
12	Carmine Schiavone	Customer Service	CS014974-CS015184	Correspondence to and from The Prime Group, Inc. and Central Sprinkler regarding testing and remediation of 77 West Wacker Drive; correspondence to and from Great Lakes Plumbing and Central Sprinkler regarding testing and remediation of 77 West Wacker Drive, diagnostic report prepared by Dr. Victor Greenhut for buildings remediated by Great Lakes Plumbing.
13	Carmine Schiavone	Customer Service	CS015185-CS015219	Hotel Nikko file: this file includes correspondence to the Controller for the Hotel Nikko, test results prepared by Underwriter's Laboratories, installation proposal from sprinkler contractor, diagnostic report prepared by Dr. Victor Greenhut, water analysis report prepared by Atlantic Analytical Labs.
13	Carmine Schiavone	Customer Service	CS015220-CS015329	VA Medical Center's file: this file contains correspondence to and from the Dept. of Veterans Affairs and Central Sprinkler, phone message slips, test result summaries, correspondence to and from sprinkler contractors, Factory Mutual's report regarding Omega sprinkler heads in VA hospitals, diagnostic reports of Dr. Victor Greenhut for various VA medical centers, and water analysis prepared by Lozier Labs.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
13	Carmine Schiavone	Customer Service	CS015330-CS015780	Marriott file Volume Two: this file contains interoffice memoranda, test protocols, test results, summaries, correspondence to Marriott International regarding progress of remediation, memoranda regarding replacement sprinklers, Omega "to-do" lists, correspondence to sprinkler contractors for Omega remediation program, spreadsheet of Marriott properties to be remediated, installer agreement between Central Sprinkler and installing contractors, letter agreement between Marriott and Central Sprinkler Co., diagnostic reports prepared by Dr. Greenhut for various Marriott Hotels, water analysis report prepared by Atlantic Analytical.
13	Carmine Schiavone	Customer Service	CS015781-CS016026	ITT Sheraton file: this file contains correspondence to and from Hughes Associates and Central Sprinkler Corp., water analysis reports prepared by Atlantic Analytical Labs, UL reports, correspondence to and from the Director of Environmental Safety for ITT Sheraton and Central Sprinkler, test results and engineering diagnostic reports for sprinklers removed from Sheraton Hotels, diagnostic reports prepared by Dr. Victor Greenhut on sprinkler heads removed from Sheraton Hotels, test result summaries from various Sheraton Hotels.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
13	Carmine Schiavone	Customer Service	CS016027-CS016385	Rowes Wharf/Beacon Management file: this file contains the reinstallation agreement for Polk & Taylor buildings, correspondence from UL to Central Sprinkler regarding the model C-1A sprinkler, agreement between owner and contractor, construction rules and regulations, handwritten notes, diagnostic reports prepared by Dr. Victor Greenhut on Polk & Taylor properties, correspondence to and from Central Sprinkler and Beacon Management Co., engineering diagnostic report, test results summaries, return authorizations and invoices for Polk & Taylor properties, water analysis prepared by Atlantic Analytical Labs, Inc., copy of UL 199 and correspondence from Grinnell Corp. to and from Central Sprinkler Co.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
14	Central Files	Quality Control	CS016386-CS016394	Part file: including Non-Conformance Reports and Receiving Report for Part No. 162015.
14	Central Files	Quality Control	CS016395-CS016415	Part file: including vendor summary reports, engineering drawings, First Article Reports, Non-Conformance Reports, and Materials Transfer form for Part No. 162016.
14	Central Files	Quality Control	CS016416-CS016425	Part file: including vendor summaries, engineering drawings, First Article Reports, Engineering Change Notice for Part No. 162017.
14	Central Files	Quality Control	CS016426-CS016428	Part file: including Non-Conformance Reports for Part No. 162017.
14	Central Files	Quality Control	CS016429-CS016460	Part file: including vendor summary reports, engineering drawings, First Article Reports, and Non-Conformance Reports for Part No. 16205.
14	Central Files	Quality Control	CS016461-CS016472	Part file: including Non-Conformance Reports, First Article Report for Part No. 16205.
14	Central Files	Quality Control	CS016473-CS016516	Part file: including Non-Conformance Reports, memo regarding the Yeager Lab Report with attached report dated December 13, 1990, memorandum regarding derivation of materials dated May 10, 1993, Materials Transfer form, Ansonia Copper & Brass vendor certification, Cerro Metal Products vendor certification, handwritten note for Part No. 16025.
14	Central Files	Quality Control	CS016517-CS016518	Part file: including engineering drawing for Part No. 162060.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
14	Central Files	Quality Control	CS016519-CS016565	Part file: including vendor summaries, engineering drawings, First Article Reports, memorandum to Currie & Warner regarding compliance with manufacturing tolerance dated April 26, 1991, histogram report.
14	Central Files	Quality Control	CS016566-CS016582	Part file: including First Article Reports, Non-Conformance Reports, memorandum to Currie & Warner regarding compliance with manufacturing tolerance dated April 26, 1991, for Part No. 16208.
14	Central Files	Quality Control	CS016583-CS016598	Part file: including First Article Reports, engineering drawings, and vendor summary reports for Part No. 164021.
14	Central Files	Quality Control	CS016599-CS016616	Part file: including Non-Conformance Reports, memoranda regarding material inspection for Part No. 164021.
14	Central Files	Quality Control	CS016617-CS016625	Part file: including vendor summary reports, engineering drawings, First Article Reports, and quality plan dated March 2, 1995 for Part No. 164022.
14	Central Files	Quality Control	CS016626-CS016703	Part file: including vendor summaries, engineering drawings, First Article Reports, testing data, Metal Center Wachester vendor certification, memorandum regarding heat collector dated March 25, 1986, memorandum regarding Model M pellet dated November 4, 1987 for Part No. 16404.
14	Central Files	Quality Control	CS016704-CS016708	Part file: including engineering drawings for Part No. 164024.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
14	Central Files	Quality Control	CS016709-CS016713	Part file: including engineering drawings for Part No. 164023.
14	Central Files	Quality Control	CS016714-CS016716	Part file: including engineering drawings for Part No.164023.
14	Central Files	Quality Control	CS016717-CS016869	Part file: including Non-Conformance Reports, histograms, testing data, discrepancy reports, memorandum to Milford Automatics dated March 16, 1987, with test data and packing list attached for Part No. 16404.
14	Central Files	Quality Control	CS016870-CS016997	Part file: including Non-Conformance Reports, memorandum regarding request for deviation for Milford Automatic dated December 22, 1992, memorandum regarding foreign matter to Milford Automatic dated November 12, 1990, customer complaint forms, handwritten note dated July 31, 1989 regarding box markings, letter from Milford to Central Sprinkler regarding transmittal of parts inspected, testing and packing list dated November 17, 1988, Materials Transfer form, and histogram test data for Part No. 16404.
14	Central Files	Quality Control	CS016998-CS017003	Part file: including Non-Conformance Reports for Part No. 16404.
14	Central Files	Quality Control	CS017004-CS017013	Part file: including vendor summary reports, engineering drawings, First Article Report for Part No. 16405.
14	Central Files	Quality Control	CS017014-CS017042	Part file: including engineering drawings, vendor summaries, First Article Reports, histograms, Non-Conformance Reports, test data for Part No. 16406.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
14	Central Files	Quality Control	CS017043-CS017044	Part file: including a Non-Conformance Report for Part No. 16405.
14	Central Files	Quality Control	CS017045-CS017103	Part file: including Non-Conformance Reports, histograms, test data, memorandum regarding the Model M pellet dated November 4, 1987, packing slips for Part No. 16406.
14	Central Files	Quality Control	CS017104-CS017196	Part file: including Non-Conformance Reports, First Article Reports, test data, memorandum dated November 14, 1987 regarding the Model M pellet, Indium Corporation of America vendor certification, handwritten memorandum dated January 18, 1988 regarding parts testing, Receiving Inspection Reports, Certificate of Conformance from Indium Corporation, packing slips for Cerro Metal Products for Part No. 16406.
14	Central Files	Quality Control	CS017197-CS017220	Part file: including vendor summary reports, engineering drawings, First Article Reports, Non-Conformance Reports for Part No. 164160.
14	Central Files	Quality Control	CS017221-CS017241	Part file: including Non-Conformance Reports, test data, Receiving Inspection Report for Part No. 16407.
14	Central Files	Quality Control	CS017242-CS017263	Part file: including vendor summary reports, engineering drawings, First Article Reports, and testing information from Westmoreland Mechanical Testing and Research for Part No. 164070.
14	Central Files	Quality Control	CS017264-CS017294	Part file: including "Receiving Inspection Plan" containing Quality Plans, engineering drawings, inspection plans, sprinkler spraying casting acceptance specifications, boundary instruction.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
14	Central Files	Quality Control	CS017295-CS017350	Part file: including vendor summary reports, engineering drawings, inspection sheets, test data, First Inspection Reports for Part No.16501.
14	Central Files	Quality Control	CS017351-CS017356	Part file: including Non-Conformance Reports with memorandum dated April 22, 1992 regarding scrap of subassemblies must for Part No.16501.
14	Central Files	Quality Control	CS017357-CS017358	Part file: including engineering drawing for Part No. 165021.
14	Central Files	Quality Control	CS017359-CS017360	Part file: including engineering drawing for Part No. 165027.
14	Central Files	Quality Control	CS017361-CS017362	Part file: including engineering drawing for Part No. 165029.
14	Central Files	Quality Control	CS017363-CS017390	Part file: including First Article Reports, vendor summaries, engineering drawings, correspondence from the General Screw Products Corporation dated March 14, 1986 specifying drawing dimension, measure dimension, and derivations listed for Part No. 16503.
14	Central Files	Quality Control	CS017391-CS017411	Part file: including Non-Conformance Reports, engineering drawings, Milford Automatic letters transmitting parts for Part No. 16503.
14	Central Files	Quality Control	CS017412-CS017426	Part file: including vendor summaries, engineering drawings, Non-Conformance Reports, First Article Reports, Beemer Precision vendor certification, technical specifications on rubber compounds, packing slip for Part No. 16504.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
14	Central Files	Quality Control	CS017427-CS017429	Part file: including Non-Conformance Reports for Part No.16515.
14	Central Files	Quality Control	CS017430-CS017457	Part file: including vendor summary reports, First Article Reports, engineering drawings for Part No. 16505.
14	Central Files	Quality Control	CS017458-CS017460	Part file: including engineering drawings for Part No. 16505-1.
14	Central Files	Quality Control	CS017461-CS017499	Part file: including Non-Conformance Reports, memos describing derivations, Teale Machine Co. correspondence dated December 18, 1992 regarding tolerance dated January 21, 1993, test reports, Engineering Change Notices for Part No. 16505.
14	Central Files	Quality Control	CS017500-CS017501	Part file: including engineering drawing for Part No. 16507.
14	Central Files	Quality Control	CS017502-CS017503	Part file: including engineering drawing for Part No. 16508.
14	Central Files	Quality Control	CS017504-CS017512	Part file: including vendor summary reports, engineering drawings, First Article Reports for Part No.16515.
14	Central Files	Quality Control	CS017513-CS017514	Part file: including engineering drawing for Part No.16516.
14	Central Files	Quality Control	CS017515-CS017537	Part file: including vendor summary reports, engineering drawings, invoices from Parco, and Non-Conformance Reports for Part No. 198002.
14	Central Files	Quality Control	CS017538-CS017552	Part file: including vendor summary reports, engineering drawings, and First Article Reports for Part No. 198020.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
14	Central Files	Quality Control	CS017553-CS017566	Part file: including engineering drawings, vendor summary reports, First Article Reports, and Non-Conformance Reports for Part No. 198049.
14	Central Files	Quality Control	CS017567	Part file: including technical drawing of Part No. 162-060-01.
14	Central Files	Quality Control	CS017568-CS017609	Part file: including quality Assurance Procedures Manual.
14	Central Files	Quality Control	CS017610-CS017641	Part file: including Non-Conformance Reports for Part No.16416.
14	Central Files	Quality Control	CS017642-CS017645	Part file: including vendor summary reports, First Article Report, and engineering drawing for Part No. 16417.
14	Central Files	Quality Control	CS017646-CS017656	Part file: including engineering drawings for parts No. 16420 and 16500.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
15	William Pardue	Operations	CS017657-CS017661	Fax with attached Omega R-1A cut sheet to Oliver Kunitake from Carmine Schiavone.
15	William Pardue	Operations	CS017662-CS017672	Claim file containing memoranda, work order and telephone message slips. Claimant: Colony Park Hotel, Dallas, TX
15	William Pardue	Operations	CS017673-CS017799	Claim file containing correspondence to and from Central Sprinkler's claims adjuster, insurance broker, the claimant's insurance company, receipts for claimed damages, and list of property damage. Claimant: Deauville Condo/Robert Dickey
15	William Pardue	Operations	CS017800-CS017806	Claim file containing Engineering Diagnostic Report and correspondence from sprinkler system installer. Claimant: Overhead Fire Protection/Dickey
15	William Pardue	Operations	CS017807-CS017834	Claim file containing correspondence from Central Sprinkler's insurers, claimant's insurers, Engineering Diagnostic Report, receipts for repair of damage. Claimant: Dickey
15	William Pardue	Operations	CS017835-CS017859	Claim file containing Engineering Diagnostic Reports and Central Sprinkler's tracking documents for HEC-12 sprinkler heads returned from Dickey residence. Claimant: Overhead Fire Protection/Dickey

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
15	William Pardue	Operations	CS017860-CS017875	Complaint filed in Agbobu v. Fire Sprinklers, et al. Claimant: Overhead Fire Protection/Dickey
15	William Pardue	Operations	CS017876-CS017962	Claim file containing correspondence from Central Sprinkler's insurance broker, the sprinkler system installer, Engineering Diagnostic Report, building plans, memoranda re: on/off sprinklers, pleadings filed in Church Insurance Company v. Crumpton Sprinkler Co., correspondence from counsel for the Church Insurance Company. Claimant: Episcopal Church of St. Michael/Crumpton Sprinkler
15	William Pardue	Operations	CS017963-CS018011	Claim file containing correspondence to and from insurers for Central Sprinkler and the claimant, correspondence from the sprinkler system installer. Claimant: Fairbanks Ranch Homes/American Automatic Fire Protection
15	William Pardue	Operations	CS018012-CS018018	Claim file containing correspondence from State Farm to Central Sprinkler and the City of Fortune Fire Department, Engineering Diagnostic Report and engineering drawing for the Omega sprinkler head in question. Claimant: Fountains Phase I/State Farm Fire and Casualty

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
15	William Pardue	Operations	CS018019-CS018038	Claim file containing correspondence from sprinkler system installer to Central Sprinkler, correspondence with insurers for the claimant and Central Sprinkler, receipts and disbursements for claimed water damage, Release. Claimant: Four Oaks/Continental Sprinkler Company
15	William Pardue	Operations	CS018039-CS018100	Claim file containing correspondence from counsel for claimant's insurers, receipts and disbursements for property damage, Release, correspondence with sprinkler system installer, photographs. Claimant: Cheryl Chase Freedman
15	William Pardue	Operations	CS018101-CS018135	Great Lakes Plumbing v. Central Sprinkler: file containing correspondence with insurer for the claimant, notes, telephone message slips, damage reports, correspondence between counsel for the claimant and Central Sprinkler and Complaint filed in Great Lakes Plumbing v. Central Sprinkler.
15	William Pardue	Operations	CS018136-CS018227	Deposition of William Pardue taken in Central Fire Protection Contractors, Inc. v. Sherrelwood, Inc.
15	William Pardue	Operations	CS018228-CS018250	Claim file containing correspondence from insurers for the claimant, Central Sprinkler's insurance broker, damage appraisal report, Engineering Diagnostic Report, receipts for repair of water damage. Claimant: Plummer Realty

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
15	William Pardue	Operations	CS018251-CS018319	Claim file containing correspondence from counsel for claimant, court orders and discovery requests, Engineering Diagnostic Reports, and cut sheets prepared as exhibits in Sherrelwood v. Central Fire Protection Contractors, Inc. Claimant: Gold Run Condos/Sherrelwood, Inc.
15	William Pardue	Operations	CS018320-CS018321	Operation meeting minutes for June 5, 1990.
15	William Pardue	Operations	CS018322-CS018437	Underwriters' Laboratories reports.
15	William Pardue	Operations	CS018438-CS018492	Pleadings and documents prepared for Central Fire Protection Contractors, Inc. v. Sherrelwood, Inc.: including Rocky Mountain Engineering and Materials Technology, Inc.'s diagnostic report of sprinkler heads at Gold Run Condominiums, correspondence from counsel for claimants, discovery responses, Engineering Diagnostic Reports, correspondence from insurance companies. Claimant: Gold Run Condominiums
15	William Pardue	Operations	CS018493-CS018550	ASAP Fire Protection Company file containing correspondence to and from the sprinkler system contractor and Central Sprinkler Company, invoices, Receiving Reports, credit memos, statements, invoices for installation of sprinkler heads at Woodfin Suites. Claimant: Woodfin Suites

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
15	William Pardue	Operations	CS018551-CS018598	Claim file containing Omega cut sheets, complaint in Agbobu v. Central Sprinkler, discovery requests, fire Marshall's report, correspondence from counsel for claimant. Claimant: Fire Chief, Inc.
15	William Pardue	Operations	CS018599-CS018651	Claim file containing correspondence from Central Sprinkler's insurance adjusters, memoranda regarding analysis of sprinkler head, correspondence from City of Pasadena, engineering drawings, complaint in Samao v. Central Sprinkler Company, receipts for work completed by Baker Company Constructors, summary of work completed Baker Company Constructors. Claimant: Arroyo Partners/Dorothy Samao
15	William Pardue	Operations	CS018652-CS018714	Claim file containing agreements with Fire Chief, Inc. for installation of sprinkler head, proposals and building plans. Claimant: Parkridge Homes/Fire Chief, Inc.
15	William Pardue	Operations	CS018715-CS018761	Claim file for Sea Wind Project containing correspondence with the Baker Company Constructors, invoices for labor. Claimant: Sea Wind Project

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
15	William Pardue	Operations	CS018762-CS018833	Claim file containing invoices for Central Sprinkler sprinkler heads, labor invoices from the Baker Company. Claimant: Huntington Bay Shore Project
15	William Pardue	Operations	CS018834-CS018841	Claim file containing invoices for work completed by Baker Company. Claimant: Amalfi Terrace
15	William Pardue	Operations	CS018842-CS018848	Claim file containing invoices for work completed by Baker Company. Claimant: Newport Bay Inn
15	William Pardue	Operations	CS018849-CS018866	Claim file containing Central Sprinkler invoices, credit memos and invoices from Baker Company. Claimant: Durant Court Apartments
15	William Pardue	Operations	CS018867-CS018877	Claim file containing credit memos and invoices from the Baker Company. Claimant: Washington Avenue Apartments
15	William Pardue	Operations	CS018878-CS018885	Claim file containing invoices for work completed by Baker Company. Claimant: Countryside Inn

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
15	William Pardue	Operations	CS018886-CS018913	Claim file containing Central Sprinkler invoices, credit memos, and invoices for work completed by the Baker Company. Claimant: Broadway Plaza
15	William Pardue	Operations	CS018914-CS018918	Claim file containing correspondence to the Baker Company and invoices for work completed. Claimant: Acacia Wood Project
15	William Pardue	Operations	CS018919-CS018928	Claim file containing invoices from the Baker Company for work completed replacing sprinkler heads. Claimant: Courtyard Apartments
15	William Pardue	Operations	CS018929-CS019000	Claim file for miscellaneous properties remediated by Baker Company, including invoices for work performed by Baker Company, Central Sprinkler credit memos, correspondence with insurance adjustors, Engineering Diagnostic Reports.
15	William Pardue	Operations	CS019001-CS019047	Claim file containing correspondence between Central Sprinkler Co. and installer regarding Omega change out, status report regarding change out, building information, telephone message slip, credit memos. Claimant: Bay Point Condos/T&T Fire Protection

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
15	William Pardue	Operations	CS019048-CS019063	Claim file containing correspondence with insurance adjustor. Claimant: Boca Raton Hotel & Club
15	William Pardue	Operations	CS019064-CS019075	Claim file containing correspondence with insurance adjuster, internal memo re: omega self-activation. Claimant: Willert & Henricksen Plumbing
15	William Pardue	Operations	CS019076-CS019090	Claim file containing correspondence with insurance adjuster. Claimant: Burbank Housing Development
15	William Pardue	Operations	CS019091-CS019097	Claim file containing correspondence with insurance adjuster. Claimant: Burnsley Hotel
15	William Pardue	Operations	CS019098-CS019108	Claim file containing correspondence with insurance adjuster, field trip report to CNA. Claimant: CNA Plaza
15	William Pardue	Operations	CS019109-CS019118	Claim file containing correspondence with insurance adjuster, engineering report for Omega field activation. Claimant: Banyan Tree Condo Complex

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
15	William Pardue	Operations	CS019119-CS019178	Claim file containing correspondence from insurance adjusters, summons and complaint filed in Illinois Associates v. Culligan Fire Safety Protection Systems and Central Sprinkler Co., memorandum regarding analysis of sprinkler heads removed from Canterbury Hotel, correspondence from Culligan Fire Protection regarding diagnosis of Omega head removed from hotel, trip report and building plans for Canterbury Hotel. Claimant: Canterbury Hotel/Culligan Fire Protection
15	William Pardue	Operations	CS019179-CS019214	Claim file containing correspondence from insurance brokers and adjusting services, memorandum regarding analysis of returned sprinkler head from Canterbury Hill Hotel, invoices for sprinkler head. Claimant: Cathedral Hill Hotel /Allan Automatic Sprinkler Company
15	William Pardue	Operations	CS019215-CS019220	Claim file containing correspondence from counsel for claimant attaching judgment. Claimant: Century Capital Square Building, Inc.
15	William Pardue	Operations	CS019221-CS019232	Claim file for Continental Telecom, Inc. v. American Automatic Sprinkler Systems. Claimant: Continental Telecom, Inc.
15	William Pardue	Operations	CS019233-CS019269	Complaints filed in Hartford Ins. Co. v. Central Sprinkler Co.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
15	William Pardue	Operations	CS019270-CS019308	Pleadings filed in Continental Telecom, Inc. v. American Automatic Sprinkler System and Central Sprinkler Co.
15	William Pardue	Operations	CS019309-CS019325	Continental Telecom file: this file includes correspondence with American Automatic Sprinkler Systems, correspondence from insurers for claimant, photographs of damage, Engineering Diagnostic Report. Claimant: Continental Telecom, Inc.
15	William Pardue	Operations	CS019326-CS019578	Clarion Hotel file: this file includes correspondence with the sprinkler system installer, evaluation of sprinkler head removed from Clarion Hotel, pleadings filed in Associated Indem. Corp. v. Central Sprinkler Co., correspondence with building owner, Engineering Diagnostic Report, correspondence with insurers and insurance adjustors, Release. Claimant: Clarion Hotel
15	William Pardue	Operations	CS019579-CS019582	This file contains miscellaneous correspondence from claimants to Central Sprinkler and Engineering Diagnostic Reports.
15	William Pardue	Operations	CS019583-CS019604	Claim file containing correspondence with insurers, sprinkler system installer, Engineering Diagnostic Report, memorandum regarding inspection of sprinkler head. Claimant: Cobb County Park and Recreation Building

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
15	William Pardue	Operations	CS019605-CS019720	Claim file containing correspondence to and from sprinkler system installer, invoices, shipping documents and notes of conversations with sprinkler system installer. Claimant: Daynite Facilitators Contractor
15	William Pardue	Operations	CS019721-CS019723	Claim file containing correspondence, Engineering Diagnostic Report. Claimant: American Automatic Sprinkler Systems

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
16	William Pardue	Operations	CS019724-CS019768	Claims file, including Engineering Diagnostic Reports, correspondence, invoices, and supporting documentation. Claimant: So-What of California and Southland Buildings
16	William Pardue	Operations	CS019769-CS019774	Claims file, including Engineering Diagnostic Reports, correspondence, invoices, and supporting documentation. Claimant: Sentinel Fire Protection
16	William Pardue	Operations	CS019775-CS019784	Claims file, including Engineering Diagnostic Reports, correspondence, invoices, and supporting documentation. Claimant: Twin Towers Hitchcock Company
16	William Pardue	Operations	CS019785-CS019804	Claims file, including Engineering Diagnostic Reports, correspondence, invoices, and supporting documentation. Claimant: Summit Fire
16	William Pardue	Operations	CS019805-CS019822	Claims file, including Engineering Diagnostic Reports, correspondence, invoices, and supporting documentation. Claimant: Sundance Corporation
16	William Pardue	Operations	CS019823-CS019851	Claims file, including Engineering Diagnostic Reports, correspondence, invoices, and supporting documentation. Claimant: 34th Street of God Hartford Insurance

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
16	William Pardue	Operations	CS019852-CS019890	Claims file, including Engineering Diagnostic Reports, correspondence, invoices, and supporting documentation. Claimant: Homes and Sons Construction Company
16	William Pardue	Operations	CS019891-CS019916	Claims file, including Engineering Diagnostic Reports, correspondence, invoices, and supporting documentation. Claimant: University of Maryland, College Park, Maryland AVM Mechanical
16	William Pardue	Operations	CS019917-CS019942	Claims file, including Engineering Diagnostic Reports, correspondence, invoices, and supporting documentation. Claimant: Villa Mediterranian McBain Partners
16	William Pardue	Operations	CS019943-CS019950	Claims file, including Engineering Diagnostic Reports, correspondence, invoices, and supporting documentation. Claimant: Water Tower Wallace Simon Syreini Company
16	William Pardue	Operations	CS019951-CS019967	Claims file, including Engineering Diagnostic Reports, correspondence, invoices, and supporting documentation. Claimant: Westin Hotel
16	William Pardue	Operations	CS019968-CS020046	Claims file, including Engineering Diagnostic Reports, correspondence, invoices, and supporting documentation. Claimant: Westminster Village

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
16	William Pardue	Operations	CS020047-CS020103	Claims file, including Engineering Diagnostic Reports, correspondence, invoices, and supporting documentation. Claimant: West Roads Apartments Hudec, Gahimer
16	William Pardue	Operations	CS020104	Miscellaneous cover sheet.
16	William Pardue	Operations	CS020105-CS020112	Claims file, including Engineering Diagnostic Reports, correspondence, invoices, and supporting documentation. Claimant: Woodframe Hotel
16	William Pardue	Operations	CS020113-CS020207	Claims file, including Engineering Diagnostic Reports, correspondence, invoices, and supporting documentation. Claimant: Wormald Fire Systems Marion Apartments
16	William Pardue	Operations	CS020208-CS020321	Claims file, including Engineering Diagnostic Reports, correspondence, invoices, and supporting documentation. Claimant: Plumbers Plus Marion Apartments
16	William Pardue	Operations	CS020322-CS020685	Claims file, including Engineering Diagnostic Reports, correspondence, invoices, and supporting documentation. Claimant: Sisters of Notre Dame
16	William Pardue	Operations	CS020686-CS020707	Claims file, including Engineering Diagnostic Reports, correspondence, invoices, and supporting documentation. Claimant: Johnathan Crubb

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
16	William Pardue	Operations	CS020708-CS020727	Claims file, including Engineering Diagnostic Reports, correspondence, invoices, and supporting documentation. Claimant: Hammer Sprinkler Systems
16	William Pardue	Operations	CS020728-CS020731	Claims file, including Engineering Diagnostic Reports, correspondence, invoices, and supporting documentation. Claimant: Williams Fire Sprinkler
16	William Pardue	Operations	CS020732-CS020740	Claims file, including Engineering Diagnostic Reports, correspondence, invoices, and supporting documentation. Claimant: Velma Wilkinson Teachers Insurance
16	William Pardue	Operations	CS020741-CS020791	Claims file, including Engineering Diagnostic Reports, correspondence, invoices, and supporting documentation. Claimant: Worsham Sprinkler
16	William Pardue	Operations	CS020792-CS020807	Claims file, including Engineering Diagnostic Reports, correspondence, invoices, and supporting documentation. Claimant: Wormald
16	William Pardue	Operations	CS020808-CS020826	Claims file, including Engineering Diagnostic Reports, correspondence, invoices, and supporting documentation. Claimant: Wrightsville Fire Department

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
16	William Pardue	Operations	CS020827-CS020834	Claims file, including Engineering Diagnostic Reports, correspondence, invoices, and supporting documentation. Claimant: Young Brothers Fire Protection
16	William Pardue	Operations	CS020835-CS020867	Claims file, including Engineering Diagnostic Reports, correspondence, invoices, and supporting documentation. Claimant: Young Brothers Fire Protection
17	J.R. Anderson	Engineering	CS020868-CS020945	File: "On Off" Sprinkler Hourglass Diaphragm Memoranda, correspondence with UL, notes, handwritten diagrams, correspondence with Rahco Rubber.
17	J.R. Anderson	Engineering	CS020946-CS021165	File: Half Inch Omega Calculations Handwritten drawings with notes and calculations, correspondence with UL, Residential Sprinkler fire test notes, temperature versus time graphs.
17	J.R. Anderson	Engineering	CS021166-CS021200	File: L/O Omega Freon Engineering drawings, notes with calculations, drawings with calculations.
17	J.R. Anderson	Engineering	CS021201	File: Half Inch Omega 200 Degrees Farenheit

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
17	J.R. Anderson	Engineering	CS021202-CS021215	File: Half Inch Model Alpha Calculations Requisitions for supplies, handwritten notes, calculations, and drawings.
17	J.R. Anderson	Engineering	CS021216-CS021279	File: Omega Horizontal Correspondence with UL, handwritten notes, memoranda, Olin Alloy Engineering Guide, handwritten notes and calculations.
17	J.R. Anderson	Engineering	CS021280-CS021383	File: Half Inch Omega Freon Memoranda, engineering drawings, handwritten diagrams with calculations.
17	J.R. Anderson	Engineering	CS021384-CS021680	File: Omega Freon Correspondence with UL, handwritten diagrams with notes and calculations, follow-up service procedure correspondence, xerox copies of photographs, fire test notes, engineering drawings, correspondence with the Department of Transportation and United States Coast Guard, UL 1058, UL document entitled UL 1254 Dry Chemical Extinguishing.
17	J.R. Anderson	Engineering	CS021681-CS021698	File: X.L.O. Omega Freon Handwritten diagrams with notes and calculations.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
17	J.R. Anderson	Engineering	CS021699-CS021807	File: L/O - QR Model Alpha Correspondence with UL, handwritten notes with diagrams and calculations, handwritten draft memoranda, engineering drawings, Bill of Materials.
17	J.R. Anderson	Engineering	CS021808-CS021868	File: C-1 Low Load Heat Collector Correspondence with UL, notes and calculations, handwritten diagrams, engineering drawings.
17	J.R. Anderson	Engineering	CS021869-CS022063	File: L/O Quick Response Engineering Notes, engineering drawings, handwritten notes and calculations, handwritten diagrams, correspondence with UL, Bill of Materials.
17	J.R. Anderson	Engineering	CS022064-CS022100	File: Model F Sprinkler Engineering Engineering drawings, handwritten notes, spreadsheets, correspondence.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
18	James R. Anderson	Engineering	CS22101-CS22112	AME Corporation file containing memoranda, handwritten notes, revised engineering drawings regarding calibration seal screw.
18	James R. Anderson	Engineering	CS22113-CS22170	File containing correspondence, memoranda, background data, draft reports and report on dezincification.
18	James R. Anderson	Engineering	CS22171-CS22269	Nevada Test Site/Chuck Augustin file containing correspondence, reports and testing materials on the failure of sprinklers at Bechtel Nevada Test Site.
18	James R. Anderson	Engineering	CS22270-CS22357	Intel/NevadaTest Site file containing engineering drawings, correspondence regarding settlement, trip report dated 9/7/94, handwritten notes, letter dated 9/1/94 regarding EMDM rubber and attaching pages from the National O-Ring catalog, cut sheet for the Flow Control FC On/Off automatic sprinkler.
18	James R. Anderson	Engineering	CS22358-CS22584	Omega Change-out file containing report on headcount by state, test results summary, activity report, memos regarding the Omega sprinkler, memos regarding retrofit, purchase orders, installation instructions, meeting minutes, memos and agendas, Non-Conformance Reports, quality reports, engineering drawings, Engineering Change Notices, testing information, article on O-rings, index of technical articles, Parco price list, technical information on EPDM rubber, elastomer selection guide, Military Standards Guide for Visual Inspection of Elastomeric O-rings.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
18	James R. Anderson	Engineering	CS22585-CS22731	Parco file containing trip report, meeting minutes, technical drawings, testing materials, o-ring technical bulletin from the Rubber Manufacturers Ass'n., paper on the platinum cure system for silicone o-rings; pricing information and correspondence and memoranda on o-rings and o-ring testing.
19	Kevin Maughn	Technical Services	CS22732-CS22899	Newspaper articles about the Omega, letters to customers, photographs of the Omega sprinkler head, insurance company letters regarding coverage for buildings with Omega sprinklers, a presentation made to the North American Fire Marshall's Association on the Omega sprinkler, Underwriter's Laboratories report on the silicone o-ring, engineering drawings of the Omega sprinkler, Engineering Change Notices, engineering drawings, meeting minutes from an Omega o-ring change meeting dated 5/20/96 and further memoranda about the Omega o-ring change.
19	Kevin Maughn	Technical Services	CS22900-CS23003	Draft cut sheets for the Omega HEC-12 Pro-Prohibitor, Omega HEC-12 RES residential sprinkler and Omega HEC-12A residential sprinkler, Engineering Change Notices and Bills of Material.
19	Kevin Maughn	Technical Services	CS23004-CS23189	Engineering Change Notices, engineering drawings, cut sheets for Omega R-1, Omega R-1M, and the Omega Prohibitor Q-R.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
19	Kevin Maughn	Technical Services	CS23190-CS23313	Letter to UL re: model R-1 Omega sprinkler, Engineering Change notice, cut sheets for the Omega R-1A, Engineering Change Notices and drawings, cut sheet for the Omega R-1M in Japanese.
19	Kevin Maughn	Technical Services	CS23314-CS23481	Cut sheets for the Omega HEC-12 EC Pro, information from UL on testing, cut sheets for the Omega HEC-20 in Japanese, UL testing report on fire sprinklers, cut sheets for the Omega HEC-20.
19	Kevin Maughn	Technical Services	CS23482-CS23632	Residential Sprinkler Installation Guide (preliminary), engineering drawings, cut sheets for the Ident-A-Fire, Engineering Change Notices, cut sheet for the Omega Prohibitor, UL report on investigation of Omega model HEC-12.
19	Kevin Maughn	Technical Services	CS23633-CS23733	Cut sheet for the Omega HEC-12 EC in Japanese, engineering drawings; cut sheets for the Omega HEC-12 EC in English.
19	Kevin Maughn	Technical Services	CS23734-CS23934	Cut sheets for the Omega HEC-12, UL reports on investigation of Omega model HEC-12, report on automatic sprinklers from UL dated 9/19/83, engineering drawings; UL report on residential sidewall sprinkler dated 11/29/83, UL report on automatic sprinklers dated 7/11/83.
19	Kevin Maughn	Technical Services	CS23935-CS24032	Technical drawings of Final Assembly and Bill of Materials, report from UL regarding the investigation of Omega model C-1 and EC-20, cut sheets for the Omega EC-20A, refill price lists dated March 31, 1994.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
19	Kevin Maughn	Technical Services	CS24033-CS24155	Cut sheets for the On/Off in Japanese, engineering drawings for the Final Assembly and Bill of Materials for the Flow Control Sprinkler, Flow Control installation list, cut sheets for the Flow Control FC On/Off automatic sprinkler, cut sheet for the H-17/32 recessed sidewall sprinkler.
19	Kevin Maughn	Technical Services	CS24156-CS24227	Technical drawings of Final Assembly, Bill of Material for the C-1A Omega Prohibitor quick response, technical drawings, Final Assembly and Bill of Material for the C-1A Omega Prohibitor sprinkler commercial, technical drawing for the Omega Prohibitor, cut sheets for the Omega C-1A Pro Prohibitor institutional sprinkler.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
20A	Central Files	Quality Control	CS024228-CS024360	Omega In Process Inspection Logs recording partially assembled goods inspected by Central Sprinkler's Quality Control Department for June 1994
20A	Central Files	Quality Control	CS024361-CS024397	Omega In Process Inspection Log recording partially assembled goods inspected by Central Sprinkler's Quality Control Department for July 1994
20A	Central Files	Quality Control	CS024398-CS024682	Omega In Process Inspection Log recording partially assembled goods inspected by Central Sprinkler's Quality Control Department for January 1995
20A	Central Files	Quality Control	CS024683-CS024867	Omega In Process Inspection Log recording partially assembled goods inspected by Central Sprinkler's Quality Control Department for March 1995
20A	Central Files	Quality Control	CS024868-CS025009	Omega In Process Inspection Log recording partially assembled goods inspected by Central Sprinkler's Quality Control Department for April 1995
20A	Central Files	Quality Control	CS025010-CS025183	Omega In Process Inspection Log recording partially assembled goods inspected by Central Sprinkler's Quality Control Department for May 1995
20A	Central Files	Quality Control	CS025184-CS025357	Omega In Process Inspection Log recording partially assembled goods inspected by Central Sprinkler's Quality Control Department for June 1995
20A	Central Files	Quality Control	CS025358-CS025482	Omega In Process Inspection Log recording partially assembled goods inspected by Central Sprinkler's Quality Control Department for July 1995

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
20A	Central Files	Quality Control	CS025483-CS025662	Omega In Process Inspection Logs recording partially assembled goods inspected by Central Sprinkler's Quality Control Department for August 1995
20A	Central Files	Quality Control	CS025663-CS025821	Omega In Process Inspection Logs recording partially assembled goods inspected by Central Sprinkler's Quality Control Department for September 1995
20A	Central Files	Quality Control	CS025822-CS025973	Omega In Process Inspection Log recording partially assembled goods inspected by Central Sprinkler's Quality Control Department for October 1995
20A	Central Files	Quality Control	CS025974-CS026137	Omega In Process Inspection Log recording partially assembled goods inspected by Central Sprinkler's Quality Control Department for November 1995
20A	Central Files	Quality Control	CS026138-CS026271	Omega In Process Inspection Log recording partially assembled goods inspected by Central Sprinkler's Quality Control Department for December 1995
20A	Central Files	Quality Control	CS026272-CS026423	Omega In Process Inspection Log recording partially assembled goods inspected by Central Sprinkler's Quality Control Department for January 1996
20A	Central Files	Quality Control	CS026424-CS026564	Omega In Process Inspection Log recording partially assembled goods inspected by Central Sprinkler's Quality Control Department for February 1996
20A	Central Files	Quality Control	CS026565-CS026695	Omega In Process Inspection Log recording partially assembled goods inspected by Central Sprinkler's Quality Control Department for March 1996

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
20A	Central Files	Quality Control	CS026696-CS026824	Omega In Process Inspection Log recording partially assembled goods inspected by Central Sprinkler's Quality Control Department for April 1996
20A	Central Files	Quality Control	CS026825-CS026957	Omega In Process Inspection Log recording partially assembled goods inspected by Central Sprinkler's Quality Control Department for May 1996
20A	Central Files	Quality Control	CS026958-CS027087	Omega In Process Inspection Log recording partially assembled goods inspected by Central Sprinkler's Quality Control Department for June 1996
20A	Central Files	Quality Control	CS027088-CS027278	Omega In Process Inspection Log recording partially assembled goods inspected by Central Sprinkler's Quality Control Department for July 1996
20A	Central Files	Quality Control	CS027279-CS027458	Omega In Process Inspection Log recording partially assembled goods inspected by Central Sprinkler's Quality Control Department for August 1996
20B	Central Files	Quality Control	CS027459-CS027614	Omega In Process Inspection Log recording partially assembled goods inspected by Central Sprinkler's Quality Control Department for September 1996
20B	Central Files	Quality Control	CS027615-CS027808	Omega In Process Inspection Log recording partially assembled goods inspected by Central Sprinkler's Quality Control Department for October 1996
20B	Central Files	Quality Control	CS027809-CS027959	Omega In Process Inspection Log recording partially assembled goods inspected by Central Sprinkler's Quality Control Department for November 1996

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
20B	Central Files	Quality Control	CS027960-CS028071	Omega In Process Inspection Log recording partially assembled goods inspected by Central Sprinkler's Quality Control Department for December 1996
20B	Central Files	Quality Control	CS028072-CS028237	Omega In Process Inspection Log recording partially assembled goods inspected by Central Sprinkler's Quality Control Department for January 1997
20B	Central Files	Quality Control	CS028238-CS028425	Omega In Process Inspection Log recording partially assembled goods inspected by Central Sprinkler's Quality Control Department for February 1997
20B	Central Files	Quality Control	CS028426-CS028593	Omega In Process Inspection Log recording partially assembled goods inspected by Central Sprinkler's Quality Control Department for March 1997
20B	Central Files	Quality Control	CS028594-CS028844	Omega In Process Inspection Log recording partially assembled goods inspected by Central Sprinkler's Quality Control Department for May 1997
20B	Central Files	Quality Control	CS028845-CS029092	Omega In Process Inspection Log recording partially assembled goods inspected by Central Sprinkler's Quality Control Department for April 1997
20B	Central Files	Quality Control	CS029093-CS029321	Omega In Process Inspection Log recording partially assembled goods inspected by Central Sprinkler's Quality Control Department for June 1997
20B	Central Files	Quality Control	CS029322-CS029516	Omega In Process Inspection Logs recording partially assembled goods inspected by Central Sprinkler's Quality Control Department for July 1997

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
20B	Central Files	Quality Control	CS029517-CS029772	Omega In Process Inspection Logs recording partially assembled goods inspected by Central Sprinkler's Quality Control Department for August 1997
20B	Central Files	Quality Control	CS029773-CS029948	Omega In Process Inspection Logs recording partially assembled goods inspected by Central Sprinkler's Quality Control Department for September 1997
20B	Central Files	Quality Control	CS029949-CS030154	Omega In Process Inspection Log recording partially assembled goods inspected by Central Sprinkler's Quality Control Department for October 1997

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
21	Eric Korn	Quality Control	CS030155-CS030178	Requests for Deviation or Waiver for Omega residential sprinkler, Omega commercial sprinkler, Flow Control, Omega Sidewall, Commercial EC Sprinkler.
21	Eric Korn	Quality Control	CS030179-CS030181	Handwritten notes regarding plunger housing.
21	Eric Korn	Quality Control	CS030182-CS030209	Requests for Deviation or Waiver for Omega residential sprinkler, Omega commercial sprinkler, Flow Control, Omega Sidewall, Omega Freon Sprinkler.
21	Eric Korn	Quality Control	CS030210	First Article Inspection Report.
21	Eric Korn	Quality Control	CS030211	Requests for Deviation or Waiver for commercial Omega sprinkler.
21	Eric Korn	Quality Control	CS030212	Miscellaneous memoranda.
21	Eric Korn	Quality Control	CS030213	Engineering drawing.
21	Eric Korn	Quality Control	CS030214-CS030219	Requests for Deviation or Waiver for residential Omega sprinkler, commercial Omega sprinkler, Part No. 1559116404.
21	Eric Korn	Quality Control	CS030220-CS030221	Non-Conformance report for Model M sprinkler.
21	Eric Korn	Quality Control	CS030222-CS030240	Requests for Deviation or Waiver for commercial Omega sprinkler, M sprinkler, Residential sprinkler, Adjustable Concealed Omega sprinkler.
21	Eric Korn	Quality Control	CS030241-CS030243	Requests for Deviation or Waiver for Omega heat collector.
21	Eric Korn	Quality Control	CS030244	Requests for Deviation or Waiver for aluminum bearing disk.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
21	Eric Korn	Quality Control	CS030245	Requests for Deviation or Waiver for Omega pellet housing.
21	Eric Korn	Quality Control	CS030246-CS030247	Requests for Deviation or Waiver for Omega plunger housing.
21	Eric Korn	Quality Control	CS030248-CS030279	Requests for Deviation or Waiver for Omega Residential sprinkler, Omega Commercial sprinkler, M heat collector, bearing disk, Half Inch Omega sprinkler, pellet, Half Inch Omega Adjustable Concealed C-1A, brass Omega, Half Inch Omega M sprinkler, Half Inch Omega model F/C sprinkler, Half Inch Omega Flow Control.
21	Eric Korn	Quality Control	CS030280	Correspondence with Ness Automatic Machine Products.
21	Eric Korn	Quality Control	CS030281-CS030282	Requests for Deviation or Waiver for Model M Half Inch sprinkler.
21	Eric Korn	Quality Control	CS030283-CS030285	Handwritten notes concerning M Half Inch sprinkler, Requests for Deviation or Waiver for M Half Inch.
21	Eric Korn	Quality Control	CS030286-CS030300	Requests for Deviation or Waiver for C-1A Omega sprinkler, M Half Inch, plunger housing, deflector, heat collector, screw machine, Flow Control.
21	Eric Korn	Quality Control	CS030301-CS030303	Teale Machine Company Requests for Deviation or Waiver for heat collector.
21	Eric Korn	Quality Control	CS030304-CS030312	Requests for Deviation or Waiver for Flow Control, escutcheon o-ring, plunger housing.
21	Eric Korn	Quality Control	CS030313	Engineering drawing.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
21	Eric Korn	Quality Control	CS030314-CS030315	Requests for Deviation or Waiver o-ring and nozzle.
21	Eric Korn	Quality Control	CS030316-CS030321	Teale Machine Company Requests for Deviation or Waiver for heat collector, plunger.
21	Eric Korn	Quality Control	CS030322-CS030336	Requests for Deviation or Waiver for spring holder, Flow Control, o-ring, M frame, R-1M sprinkler, plunger housing, deflectors, calibration screw, spring holder, residential sprinkler, guiderim.
21	Eric Korn	Quality Control	CS030337	Engineering drawing.
21	Eric Korn	Quality Control	CS030338-CS030339	Requests for Deviation or Waiver for Omega products line.
21	Eric Korn	Quality Control	CS030340	Engineering Change Notice.
21	Eric Korn	Quality Control	CS030341-CS030342	Engineering drawings.
21	Eric Korn	Quality Control	CS030343-CS030347	Requests for Deviation or Waiver for plunger housing, Flow Control, deflector, R-1 and C-1, pendant body.
21	Eric Korn	Quality Control	CS030348	Non-Conformance Report for Omega pendant body.
21	Eric Korn	Quality Control	CS030349-CS030350	Handwritten notes regarding Omega spring holder press fitting.
21	Eric Korn	Quality Control	CS030351	Engineering Change Notice for Omega bodies.
21	Eric Korn	Quality Control	CS030352-CS030363	Requests for Deviation or Waiver for C-1 Omega, Adjustable Concealed plunger, Flow Control, C-1A and HEC 12, R-1 Omega sprinkler, plunger deflector, Flow Control.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
21	Eric Korn	Quality Control	CS030364	Engineering Change Notice for Flow Control.
21	Eric Korn	Quality Control	CS030365-CS030372	Requests for Deviation or Waiver for chrome Omega bodies, Omega sprinkler, Omega department all parts, Omega auxiliary spring, Omega pendant sprinkler, Omega Final Assemble and Bill of Materials, Wrench.
21	Eric Korn	Quality Control	CS030373-CS030384	C-1A Project File Memorandum from Michael Fries to George Polan, correspondence to UL.
21	Eric Korn	Quality Control	CS030385-CS030463	EC20A and C-1A Underwriter's Laboratories File Requests for Deviation or Waiver, handwritten notes, engineering drawings, product descriptions, parts lists, inspection notes, correspondence with UL, engineering drawings, handwritten notes.
21	Eric Korn	Quality Control	CS030464-CS030679	Memorandum regarding Material Review Board Meeting, transmitting Non-Conformance Reports for Jan. 1997-Sept. 1997.
21	Eric Korn	Quality Control	CS030680-CS030695	Memorandum regarding Material Review Board Meeting, transmitting Non-Conformance Reports for Feb. 29, 1996.
21	Eric Korn	Quality Control	CS030696-CS030899	Memorandum regarding Material Review Board Meeting, transmitting Material Rejection Log for Jan. 1994-June 1994.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
21	Eric Korn	Quality Control	CS030900-CS031568	Memorandum regarding Material Review Board Meeting, transmitting Material Rejection Review Log and Non-Conformance Reports for Jan. 1993-Dec. 1993.
21	Eric Korn	Quality Control	CS031569-CS032468	Memorandum regarding Material Review Board Meeting, transmitting Material Rejection Review Log and Non-Conformance Reports for Jan. 1992-Dec. 1992.
21	Eric Korn	Quality Control	CS032469-CS032485	Memorandum regarding Engineering Change Notice meeting for December 17, 1991, transmitting 1991 summary of Engineering Change Requests to be discussed.
22	Eric Korn	Quality Control	CS032486-CS032700	Master File of raw materials purchased by Central Sprinkler Co.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	Robert Bandura	Engineering	CS032701-CS032758	UL certification file for the Model M head ½ inch horizontal sidewall with quick response feature.
23	Robert Bandura	Engineering	CS032759-CS032771	UL certification file for the Model M ½ inch intermediate level head.
23	Robert Bandura	Engineering	CS032772-CS032890	Complete UL test report for Model M dated 12/26/85 with all revisions, including UL test reports, revisions, Central Sprinkler Bill of Materials for Model M, engineering drawings for Model M, correspondence with UL re: Model M.
23	Robert Bandura	Engineering	CS032891-CS032896	UL certification file for the Model M ½ inch & 3/8 inch SSP, SSU, MSW with alternate spring washer.
23	Robert Bandura	Engineering	CS032897-CS032911	UL certification file for the Model M ½ inch horizontal sidewall EC & QREC, letter report dated 8/23/89.
23	Robert Bandura	Engineering	CS032912-CS033015	UL certification file for the C-1 Omega ½ residential sprinkler head.
23	Robert Bandura	Engineering	CS033016-CS033057	UL certification file for the ½ inch EC-20 & HEC-12 Omega pendant extended coverage sprinkler head.
23	Robert Bandura	Engineering	CS033058-CS033064	UL certification file for the ½ Omega C-1, EC-20, HEC-12, & HEC-20 with Model M heat corrector.
23	Robert Bandura	Engineering	CS033065-CS033093	UL certification file for the C1A & EC-20A adjustable pendant style sprinklers/commercial.
23	Robert Bandura	Engineering	CS033094-CS033095	UL file for removal of Model M, SSP, SSU & HSW sprinklers from UL testing & FUS.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	Robert Bandura	Engineering	CS033096-CS033142	UL certification file for the EC-20A, 160°F, 12ft. x 12ft. vented/unvented sprinkler.
23	Robert Bandura	Engineering	CS033143-CS033148	UL certification file for the EC-20A, ½ inch pendant residential alternate deflector material & 7/16 inch pendant residential alternate deflector material.
23	Robert Bandura	Engineering	CS033149-CS033180	UL certification file for the EC-20A pendant style residential ½ inch sprinkler head.
23	Robert Bandura	Engineering	CS033181-CS033203	UL certification file for the EC-20A ½ inch pendant commercial alternate deflector material.
23	Robert Bandura	Engineering	CS033204-CS033210	UL certification file for the C-1A ½ inch residential pendant alternate deflector material.
23	Robert Bandura	Engineering	CS033211-CS033263	UL certification file for the C-1A ½ inch residential pendant sprinkler head.
23	Robert Bandura	Engineering	CS033264-CS033279	UL certification file for the 3/8 inch C-1 adjustable Omega commercial sprinkler head.
23	Robert Bandura	Engineering	CS033280-CS033334	UL certification file for the R-1M 3/8 inch pendant adjustable sprinkler head.
23	Robert Bandura	Engineering	CS033335-CS033390	UL certification file for the R-1A 7/16 inch residential pendant adjustable K = 4.1 12ft. spacing sprinkler head.
23	Robert Bandura	Engineering	CS033391-CS033431	UL certification file for the R-1A residential pendant adjustable 7/16 inch K = 4.1 sprinkler head.
23	Robert Bandura	Engineering	CS033432-CS033437	UL certification file for the R-1 3/8 inch residential pendant alternate deflector materials sprinkler head.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	Robert Bandura	Engineering	CS033438-CS033526	UL certification file for the 3/8 inch residential Omega sprinkler head.
23	Robert Bandura	Engineering	CS033527-CS033544	UL certification file for the FX auxiliary ejection spring retrofit kit for C-1A, C-1, EC-20, & EC-20A sprinkler heads.
23	Robert Bandura	Engineering	CS033545-CS033554	UL certification file for the Omega RES heads with silicone O-ring, Teflon grease, and brass dust cover.
23	Robert Bandura	Engineering	CS033555-CS033566	UL certification file for the commercial Omega style sprinklers with silicone O-rings, Teflon grease, heavy springs and brass dust covers.
23	Robert Bandura	Engineering	CS033567-CS033585	UL certification file for the AC Omega Adjustable Concealed sprinkler head with silicone O-rings, Teflon grease, heavy springs, and brass dust covers.
23	Robert Bandura	Engineering	CS033586-CS033587	UL certification file for the C-1A, C01AID, HEC-12, and HEC-12ID; 200°F rated quick response sprinkler head.
23	Robert Bandura	Engineering	CS033588-CS033594	UL certification file for the HEC-12 and HEC-20 horizontal side wall extended coverage sprinklers with alternative deflector material.
23	Robert Bandura	Engineering	CS033595-CS033625	UL certification file for the ½ inch Omega horizontal extended coverage HEC-12 and HEC-20 sprinkler heads.
23	Robert Bandura	Engineering	CS033626-CS033642	UL certification file for the EC-20A pendant residential ½ and 7/16 inch sprinkler head with alloy (35330) plunger housing material.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	Robert Bandura	Engineering	CS033643-CS033646	UL certification file for the FC Flow Control flush sprinkler head.
23	Robert Bandura	Engineering	CS033647-CS033703	UL certification file for the ½ Omega series commercial sleeve solder joint type sprinkler.
23	Robert Bandura	Engineering	CS033704-CS033746	UL certification file for the FC pendant and flush sprinkler head with dye or sand cast body and M style heat collector.
23	Robert Bandura	Engineering	CS033747-CS033803	UL certification file for the ½ Omega series commercial sleeve solder joint type sprinkler.
23	Robert Bandura	Engineering	CS033804-CS033809	UL certification file for the HEC-12 PRO EC and QREC sprinkler heads.
23	Robert Bandura	Engineering	CS033810-CS033889	UL certification file for the EC-20A pendant style residential 7/16 inch and recessed pendant sprinkler.
23	Robert Bandura	Engineering	CS033890-CS033897	UL certification file for O-ring tests.
23	Robert Bandura	Engineering	CS033898-CS033901	UL certification file for the Omega S.S. guide pin.
23	Robert Bandura	Engineering	CS033902-CS033934	UL certification file for the ½ Omega pendant commercial sprinkler head.
23	Robert Bandura	Engineering	CS033935-CS033942	UL certification file for the A, AA, and AC Concealed with prepainted plastic coated cover plates.
23	Robert Bandura	Engineering	CS033943-CS033948	UL certification file for the C-1A ½ inch alternate deflector material.
23	Robert Bandura	Engineering	CS033949-CS033953	UL certification file for the C-1A ½ with alloy (35330) plunger housing material.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	Robert Bandura	Engineering	CS033954-CS033959	UL certification file for the C-1A 160° pendant, 4 inch below ceiling operation, cold soldering and sensitivity.
23	Robert Bandura	Engineering	CS033960-CS033999	UL certification file for the Model M LO sprinkler head.
23	Robert Bandura	Engineering	CS034000-CS034009	UL certification file for the ½ inch pendant extended coverage sprinkler.
23	Robert Bandura	Engineering	CS034010-CS034015	UL certification file for Omega Locktite 290 to secure retaining nut.
23	Robert Bandura	Engineering	CS034016-CS034021	UL certification file for the Ident-A-Fire.
23	Robert Bandura	Engineering	CS034022-CS034027	UL certification file for the Ident-A-Fire FC, C-1A, AC, C-1A PRO, EC-20A, HEC-12, HEC-12 PRO, QR, and HEC-20.
23	Robert Bandura	Engineering	CS034028-CS034060	UL certification file for the HEC-12 ½ inch residential horizontal sidewall sprinkler.
23	Robert Bandura	Engineering	CS034061-CS034065	UL certification file for the HEC-12 ½ inch residential horizontal sidewall with alternate reflector material.
23	Robert Bandura	Engineering	CS034066-CS034079	UL certification file for the HEC-12 residential ½ inch horizontal sidewall with modified deflector (re-ex).
23	Robert Bandura	Engineering	CS034080-CS034120	UL certification file for the C-1A PRO recessed pendant Prohibitor HEC-12 PRO sidewall Prohibitor (commercial only).
23	Robert Bandura	Engineering	CS034121-CS034130	UL certification file for the prohibitor-C1-PRO, EC-20 PRO, and HEC-12 PRO ½ inch sprinkler.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	Robert Bandura	Engineering	CS034131-CS034133	UL certification file for the C-1A PRO & HEC-12 PRO quick response.
23	Robert Bandura	Engineering	CS034134-CS034151	UL certification file for Omega residential heads with painted heat collector.
23	Robert Bandura	Engineering	CS034152-CS034155	UL certification file for the R-1, HEC-12, C-1A, EC-20A, HEC-20 with light painted finish for decorative purposes.
23	Robert Bandura	Engineering	CS034156-CS034162	UL certification file for the ceramic bearing disc.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
24	Central Files	Quality Control	CS034163-CS034202	1989 monthly Scrap Report.
24	Central Files	Quality Control	CS034203-CS034292	January 1989 Quality Control In-Process Inspection Report recording inspections of partially assembled goods inspected by Central Sprinkler's Quality Control Department.
24	Central Files	Quality Control	CS034293-CS034357	June 1989 Quality Control In-Process Inspection Report recording inspections of partially assembled goods inspected by Central Sprinkler's Quality Control Department.
24	Central Files	Quality Control	CS034358-CS034472	July 1989 Quality Control In-Process Inspection Report recording inspections of partially assembled goods inspected by Central Sprinkler's Quality Control Department.
24	Central Files	Quality Control	CS034473-CS034569	March 1989 Quality Control In-Process Inspection Report recording inspections of partially assembled goods inspected by Central Sprinkler's Quality Control Department.
24	Central Files	Quality Control	CS034570-CS034651	April 1989 Quality Control In-Process Inspection Report recording inspections of partially assembled goods inspected by Central Sprinkler's Quality Control Department.
24	Central Files	Quality Control	CS034652-CS034725	May 1989 Quality Control In-Process Inspection Report recording inspections of partially assembled goods inspected by Central Sprinkler's Quality Control Department.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
24	Central Files	Quality Control	CS034726-CS034730	October 1989 Quality Control In-Process Inspection Report recording inspections of partially assembled goods inspected by Central Sprinkler's Quality Control Department.
24	Central Files	Quality Control	CS034731-CS034737	November 1989 Quality Control In-Process Inspection Report recording inspections of partially assembled goods inspected by Central Sprinkler's Quality Control Department.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
25A	William Pardue	Operations	CS034738-CS035024	L&B Construction Co., Inc. v. Plumbers Plus, containing pleadings, correspondence between counsel for claimants, discovery requests and responses, test results for Omega head in issue.
25A	William Pardue	Operations	CS035025-CS035081	Omega R-1 file, containing handwritten notes regarding 1983 and 1984 Engineering Diagnostic Reports, trip reports regarding trip to Cobb Creek Park & Recreation Department to inspect Omega R-1 sprinkler heads, internal memo regarding R-1 Omega field activation, Engineering Diagnostic Report regarding R-1 Omega, internal memorandum regarding R-1 Omega alleged leakage problem.
25A	William Pardue	Operations	CS035082-CS035113	Omega HEC-12 file, containing handwritten notes regarding 1983 and 1984 Engineering Diagnostic Reports, internal memoranda regarding field activations of the HEC-12 sprinkler heads, Engineering Diagnostic Reports for HEC-12 sidewall Omega sprinkler heads.
25A	William Pardue	Operations	CS035114-CS035115	Correspondence from counsel for Plumbers Plus in the matter of L&D Construction Co., Inc. v. Plumbers Plus.
25A	William Pardue	Operations	CS035116-CS035119	Engineering Diagnostic Reports for Omega R-1, HEC-12, and EC-20 sprinkler heads.
25A	William Pardue	Operations	CS035120-CS035150	Correspondence from ASU Adjusting Services regarding Coenin claim.
25A	William Pardue	Operations	CS035151-CS035152	Correspondence from Aetna Insurance regarding DKD Property Management claim.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
25A	William Pardue	Operations	CS035153-CS035178	Pleadings filed in the matter of Pacific Power & Light Co. v. Central Sprinkler Co., et al.
25A	William Pardue	Operations	CS035179-CS035192	Claim file, including correspondence from sprinkler system installer, various insurers, internal memoranda regarding R-1 Omega sprinkler field leakage. Claimant: Total Fire/Markel Homes
25A	William Pardue	Operations	CS035193-CS035208	Claim file, including correspondence from insurers, claims adjusters, internal memoranda regarding R-1 Omega field activation. Claimant: North Hall Dallas Texas Reliance Fire Protection
25A	William Pardue	Operations	CS035209-CS035242	Claim file, including photos of water damage, correspondence with claims adjusters, correspondence with building owners, internal memorandum regarding C-1A Omega field activation, invoices for repair of water damage. Claimant: Allied Fire Sprinkler/Ocean Cliff Apts.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
25A	William Pardue	Operations	CS035243-CS035257	Claim file, including correspondence with sprinkler installer, insurers, counsel for claimant, notice of dismissal of Pacific Power & Light v. Central Sprinkler Corp., internal memorandum regarding field activation of Model FC sprinkler at Pacific Power & Light in Portland, OR. Claimant: Pacific Power & Light, Portland, OR/Superior Fire
25A	William Pardue	Operations	CS035257-CS035282	Claim file, including correspondence with installer, Central Sprinkler invoices, telephone message slips, notes regarding calculation for labor, Engineering Diagnostic Report regarding C-1 Omega. Claimant: Pacific Gas & Electric Co./Ayoob and Peery Plumbing
25A	William Pardue	Operations	CS035283-CS035301	Claim file, including correspondence with insurance adjusters, insurance company, telephone message slips, Engineering Diagnostic Report regarding HEC-12 Omega field activation, invoices for labor. Claimant: Park Shore Towers, Maple, FL, B&I Contractors
25A	William Pardue	Operations	CS035302-CS035309	Claim file, including correspondence with insurance brokers and insurance companies. Claimant: Pine Crest Home (Transitional Living Inc.)

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
25A	William Pardue	Operations	CS035310-CS035574	Claim file, including correspondence and documentation regarding claim from insurance adjuster, insurance company, correspondence with sprinkler installers, invoices for labor and materials, invoices for water damage and repair of water damaged property, correspondence with building owner, internal memoranda regarding Omega retrofit at Peabody Court Hotel, photos of water damage, handwritten notes regarding claim; estimates for repair of damage. Claimant: Peabody Court Hotel, Baltimore, MD

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
25A	William Pardue	Operations	CS035575-CS036060	Claim file for Plumbing Contractors, Inc. v. Central Sprinkler Co., including correspondence between counsel for claimants and defendants, settlement, pleadings and discovery requests, summary of Engineering Diagnostic Reports for 1984 through 1988, internal memoranda regarding R-1 Omega sprinkler premature activation and field leakage, field trip reports, Engineering Diagnostic Reports, correspondence with Cobb County Fire Department, Receiving Reports, correspondence with plaintiff, Plumbing Contractors, memoranda regarding installation of sprinklers in copper systems, articles regarding water treatment, report prepared by Tony M. Brugger and Craig D. Clauser regarding analysis of Omega style sprinkler, internal memorandum regarding corrosion of Omega style sprinkler head, correspondence with chemists and metallurgists regarding analysis of Omega sprinkler heads, Central Sprinkler invoices and purchase orders, receipts for property allegedly water damaged, a standards handbook regarding alloys, claim analysis prepared by counsel for Plumbing Contractors, corrosion analysis report prepared by McKnight & Associates, work orders from Plumbing Contractors, list of back charges submitted by Plumbing Contractors, invoices for repair work.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
25A	William Pardue	Operations	CS036061-CS036080	Claim file, including correspondence with building owner and sprinkler system installer, receipts for labor and replacement of sprinkler head due to water damage. Claimant: Radisson Hotel in Fargo, ND/Abollo Sprinkler Co.
25A	William Pardue	Operations	CS036081-CS036099	Claim file, including Engineering Diagnostic Reports for Omega sprinklers, correspondence with counsel for plaintiff, correspondence with building owner, telephone message, internal memorandum regarding claim, certificate of analysis prepared by chemist regarding R-1 sprinkler head. Claimant: Rubble Park Condo Complex

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
25B	Closed/Historical Engineering Files	Engineering	CS036100-CS036226	"Sidewall" file: correspondence between Brian Hoening and Central Sprinkler Co., correspondence to and from Underwriters Laboratories and Brian Hoening, correspondence to and from Brian Hoening and Committee on Automatic Sprinklers, discharge capacity test results, Underwriters Laboratories data sheet, Underwriter Laboratories testing information, testing tabulation sheets.
25B	Closed/Historical Engineering Files	Engineering	CS036227-CS036244	"Prep Fins" file: correspondence to and from Brian Hoening and Underwriters Laboratories, correspondence to and from Brian Hoening and Central Sprinkler Co., Underwriter Laboratories data sheets.
25B	Closed/Historical Engineering Files	Engineering	CS036245-CS036345	"Omega R" file: correspondence to and from Central Sprinkler Co., invoices from Central Sprinkler Co., correspondence to and from Underwriter Laboratories, Underwriter Laboratories testing data sheets, engineering drawings.
25B	Closed/Historical Engineering Files	Engineering	CS036346-CS036507	"250 PFI rating" file: correspondence to and from Underwriter Laboratories, Underwriter Laboratories data sheets, engineering drawing, correspondence to and from Central Sprinkler Co., invoices, cost limit increase sheets from Underwriter Laboratories, information pamphlets on sprinkler systems, residential sprinkler fire test data sheets.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
25B	Closed/Historical Engineering Files	Engineering	CS036508-CS036711	"R-1M Retrofit" file: memoramda, engineering drawings, correspondence to and from Underwriter Laboratories, correspondence to and from Central Sprinkler Co., meeting minutes, invoices from Central Sprinkler Co., data test sheets, Underwriter Laboratories data sheets.
25B	Closed/Historical Engineering Files	Engineering	CS036712-CS036957	"1½ inch Omega" file: correspondence to and from Central Sprinkler Co., correspondence to and from Underwriter Laboratories, engineering drawings, memoranda, acknowledgment and notice of completion of engineering investigation, requisition for supplies.
25B	Closed/Historical Engineering Files	Engineering	CS036958-CS037189	"Continuance of UL listing" file: correspondence to and from Central Sprinkler Co., correspondence to and from Underwriter Laboratories, engineering drawings, residential sprinkler discharge distribution test sheets.
25B	Closed/Historical Engineering Files	Engineering	CS037190-CS037322	"Omega drawings" file: engineering plans and drawings.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
26	Central Files	Quality Control	CS037323-CS037348	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 136-005
26	Central Files	Quality Control	CS037349-CS037365	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-030
26	Central Files	Quality Control	CS037366-CS037372	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-03
26	Central Files	Quality Control	CS037373-CS037383	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-040
26	Central Files	Quality Control	CS037384-CS037396	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-04

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
26	Central Files	Quality Control	CS037397-CS037419	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-050
26	Central Files	Quality Control	CS037420-CS037442	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-05
26	Central Files	Quality Control	CS037443-CS037476	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-061
26	Central Files	Quality Control	CS037477-CS037527	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-06
26	Central Files	Quality Control	CS037528-CS037544	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-080

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
26	Central Files	Quality Control	CS037545-CS037559	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-09
26	Central Files	Quality Control	CS037560-CS037571	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-091
26	Central Files	Quality Control	CS037572-CS037652	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-101
26	Central Files	Quality Control	CS037653-CS037689	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-110
26	Central Files	Quality Control	CS037690-CS037715	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-118

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
26	Central Files	Quality Control	CS037716-CS037724	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-119
26	Central Files	Quality Control	CS037725-CS037729	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-121
26	Central Files	Quality Control	CS037730-CS037779	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-129
26	Central Files	Quality Control	CS037780-CS037824	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-129
26	Central Files	Quality Control	CS037825-CS037838	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-131

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
26	Central Files	Quality Control	CS037839-CS037845	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-131
26	Central Files	Quality Control	CS037846-CS037849	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-133
26	Central Files	Quality Control	CS037850-CS037870	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-134
26	Central Files	Quality Control	CS037871-CS037876	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-134
26	Central Files	Quality Control	CS037877-CS037882	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-136

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
26	Central Files	Quality Control	CS037883-CS037897	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-137
26	Central Files	Quality Control	CS037898-CS037905	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-14
26	Central Files	Quality Control	CS037906-CS037918	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-142
26	Central Files	Quality Control	CS037919-CS037947	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-15
26	Central Files	Quality Control	CS037948-CS037966	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-157

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
26	Central Files	Quality Control	CS037967-CS037989	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-153
26	Central Files	Quality Control	CS037990-CS038010	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-17
26	Central Files	Quality Control	CS038011-CS038033	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-290
26	Central Files	Quality Control	CS038034-CS038044	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-410
26	Central Files	Quality Control	CS038045-CS038076	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-430

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
26	Central Files	Quality Control	CS038077-CS038097	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-43
26	Central Files	Quality Control	CS038098-CS038127	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-44
26	Central Files	Quality Control	CS038128-CS038135	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-780
26	Central Files	Quality Control	CS038136-CS038137	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-78
26	Central Files	Quality Control	CS038138-CS038142	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-93

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
26	Central Files	Quality Control	CS038143-CS038226	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 155-930
26	Central Files	Quality Control	CS038227-CS038234	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 156-10
26	Central Files	Quality Control	CS038235-CS038281	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 156-14
26	Central Files	Quality Control	CS038282-CS038337	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 156-204
26	Central Files	Quality Control	CS038338-CS038409	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 156-22

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
26	Central Files	Quality Control	CS038410-CS038428	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 156-240
26	Central Files	Quality Control	CS038429-CS038463	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 156-24
26	Central Files	Quality Control	CS038464-CS038538	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 156-309
26	Central Files	Quality Control	CS038539-CS038626	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 156-309
26	Central Files	Quality Control	CS038627-CS038682	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 156-310

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
26	Central Files	Quality Control	CS038683-CS038725	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 156-3108
26	Central Files	Quality Control	CS038726-CS038738	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 156-35
26	Central Files	Quality Control	CS038739-CS038751	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 156-350
26	Central Files	Quality Control	CS038752-CS038762	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 156-357
26	Central Files	Quality Control	CS038763-CS038824	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 156-352

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
26	Central Files	Quality Control	CS038825-CS038842	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 156-355
26	Central Files	Quality Control	CS038843-CS038881	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 156-358
26	Central Files	Quality Control	CS038882	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 156-50
26	Central Files	Quality Control	CS038883-CS038884	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. A-250-02
26	Central Files	Quality Control	CS038885-CS038893	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 156-807

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
26	Central Files	Quality Control	CS038894-CS038896	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 156-809
26	Central Files	Quality Control	CS038897-CS038899	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 156-811
26	Central Files	Quality Control	CS038900-CS038918	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 157-039
26	Central Files	Quality Control	CS038919-CS038922	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 157-039
26	Central Files	Quality Control	CS038923-CS038931	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 157-215

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
26	Central Files	Quality Control	CS038932-CS038958	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 157-215
26	Central Files	Quality Control	CS038959-CS038971	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 157-145
26	Central Files	Quality Control	CS038972-CS039108	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 157-220
26	Central Files	Quality Control	CS039109-CS039110	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 157-233
26	Central Files	Quality Control	CS039111-CS039246	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 157-230

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
26	Central Files	Quality Control	CS039247-CS039356	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 157-420
26	Central Files	Quality Control	CS039357-CS039456	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 157-45
26	Central Files	Quality Control	CS039457-CS039546	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 158-03
26	Central Files	Quality Control	CS039547-CS039618	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 159-02
26	Central Files	Quality Control	CS039619-CS039699	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 159-056

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
26	Central Files	Quality Control	CS039700-CS039780	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 159-060
26	Central Files	Quality Control	CS039781-CS039889	Part file: engineering drawings, Non-Conformance Reports, Vendor Certifications, First Article Inspection Reports, Incoming Inspection Reports, histogram. Part No. 160-03

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
27A	Central Files	Quality Control	CS039890-CS040109	Histograms for 1988.
27A	Central Files	Quality Control	CS040110-CS040589	1985 Omega log sheets for EC-20A and C-1A containing Omega In Process Inspection Logs and Omega inspection check lists recording inspections of partially assembled goods inspected by Central Sprinkler's Quality Control Department.
27A	Central Files	Quality Control	CS040590-CS040942	1988 Omega In Process Inspection Logs for EC-20A and C-1A, recording inspections of partially assembled goods inspected by Central Sprinkler's Quality Control Department.
27A	Central Files	Quality Control	CS040943-CS041086	Model M In Process Inspection Logs for 1987-1988, recording inspections of partially assembled goods inspected by Central Sprinkler's Quality Control Department.
27A	Central Files	Quality Control	CS041087-CS041291	Omega In Process Inspection Logs for 1986 for EC-20A and C-1A recording inspections of partially assembled goods inspected by Central Sprinkler's Quality Control Department.
27A	Central Files	Quality Control	CS041292-CS041405	Omega In Process Inspection Logs for 1987 for EC-20A andC-1A recording inspections of partially assembled goods inspected by Central Sprinkler's Quality Control Department.
27A	Central Files	Quality Control	CS041406-CS041562	Flow Control In Process Inspection Logs for 1988, recording inspections of partially assembled goods inspected by Central Sprinkler's Quality Control Department.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
27A	Central Files	Quality Control	CS041563-CS041756	Flow Control In Process Inspection Logs for 1983-1987, recording inspections of partially assembled goods inspected by Central Sprinkler's Quality Control Department.
27A	Central Files	Quality Control	CS041757-CS041928	Omega Incoming Inspection Logs for 1986-1987 for HEC-12 S/W and HEC-20, recording inspections of partially assembled goods inspected by Central Sprinkler's Quality Control Department.
27A	Central Files	Quality Control	CS041929-CS042459	Omega Incoming Inspection Logs for 1988 for HEC-12 S/W and HEC-20 and Omega inspection check lists recording inspections of partially assembled goods inspected by Central Sprinkler's Quality Control Department.
27A	Central Files	Quality Control	CS042460-CS043046	Omega In Process Inspection Logs for 1988 for R-1 RES and Omega inspection check lists recording inspections of partially assembled goods inspected by Central Sprinkler's Quality Control Department.
27B	Central Files	Quality Control	CS043047-CS043176	Pellet Squeezing Operation Logs for 1985-1986, containing pellet squeezing operation log sheets for Atlantic Tool prepared by Central Sprinkler's Quality Control Department.
27B	Central Files	Quality Control	CS043177-CS043960	Histograms for chrome, copper, brass residential sprinklers for 1988.
28	Central Files	Quality Control	CS043961-CS043964	Engineering drawings, Parts 158-00 through 158-09.
28	Central Files	Quality Control	CS043965-CS043969	Engineering drawings, Parts 159-00 through 159-09.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
28	Central Files	Quality Control	CS043970-CS043977	Engineering drawings, Parts 159-10 through 159-19.
28	Central Files	Quality Control	CS043978-CS043984	Engineering drawings, Parts 159-020 through 159-029.
28	Central Files	Quality Control	CS043985-CS043990	Engineering drawings, Parts 159-30 through 159-39.
28	Central Files	Quality Control	CS043991-CS043994	Engineering drawings, Parts 159-050 through 159-059.
28	Central Files	Quality Control	CS043995-CS043996	Engineering drawings, Parts 159-060 through 159-80.
28	Central Files	Quality Control	CS043997-CS044000	Engineering drawings, Parts 159-420 through 159-429.
28	Central Files	Quality Control	CS044001-CS044004	Engineering drawings, Parts 159-430 through 159-439.
28	Central Files	Quality Control	CS044005-CS044013	Engineering drawings, Parts 160-00 through 160-60.
28	Central Files	Quality Control	CS044014-CS044022	Engineering drawings, Parts 162-00 through 162-19.
28	Central Files	Quality Control	CS044023-CS044025	Engineering drawings, Parts 162-80.
28	Central Files	Quality Control	CS044026-CS044032	Engineering drawings, Parts 165-20 through 165-39.
28	Central Files	Quality Control	CS044033-CS044041	Engineering drawings, Parts 165-00 through 165-19.
28	Central Files	Quality Control	CS044042-CS044044	Engineering drawings, Parts 162-095.
28	Central Files	Quality Control	CS044045-CS044051	Engineering drawings, Parts 164-00 through 164-19.
28	Central Files	Quality Control	CS044052-CS044054	Engineering drawings, Parts 164-20 through 164-39.
28	Central Files	Quality Control	CS044055-CS044058	Engineering drawings, Parts 166-70 through 166-79.
28	Central Files	Quality Control	CS044059-CS044061	Engineering drawings, Parts 156-200 through 156-209.
28	Central Files	Quality Control	CS044062-CS044064	Engineering drawings, Parts 156-300 through 156-309.
28	Central Files	Quality Control	CS044065-CS044066	Engineering drawings, Parts 155-120 through 155-129.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
28	Central Files	Quality Control	CS044067-CS044073	Engineering drawings, Parts 156-310 through 156-319.
28	Central Files	Quality Control	CS044074-CS044082	Engineering drawings, Parts 156-350 through 156-359.
28	Central Files	Quality Control	CS044083-CS044085	Engineering drawings, Parts 156-800 through 156-809.
28	Central Files	Quality Control	CS044086-CS044093	Engineering drawings, Parts 156-810 through 156-819.
28	Central Files	Quality Control	CS044094-CS044100	Engineering drawings, Parts 157-40 through 157-49.
28	Central Files	Quality Control	CS044101-CS044108	Engineering drawings, Parts 157-140 through 157-149.
28	Central Files	Quality Control	CS044109-CS044110	Engineering drawings, Parts 157-210 through 157-219.
28	Central Files	Quality Control	CS044111-CS044114	Engineering drawings, Parts 157-220 through 157-229.
28	Central Files	Quality Control	CS044115-CS044126	Engineering drawings, Parts 157-230 through 157-239.
28	Central Files	Quality Control	CS044127-CS044130	Engineering drawings, Parts 157-240 through 157-249.
28	Central Files	Quality Control	CS044131-CS044142	Engineering drawings, Parts 155-00 through 155-09.
28	Central Files	Quality Control	CS044143-CS044146	Engineering drawings, Parts 155-50 through 155-59.
28	Central Files	Quality Control	CS044147-CS044152	Engineering drawings, Parts 155-060 through 155-119.
28	Central Files	Quality Control	CS044153-CS044157	Engineering drawings, Parts 155-170 through 155-179.
28	Central Files	Quality Control	CS044158-CS044159	Engineering drawings, Parts 156-00 through 156-09.
28	Central Files	Quality Control	CS044160-CS044163	Engineering drawings, Parts 155-10 through 156-19.
28	Central Files	Quality Control	CS044164-CS044168	Engineering drawings, Parts 156-20 through 156-29.
28	Central Files	Quality Control	CS044169-CS044171	Engineering drawings, Parts 156-20 through 156-29.
28	Central Files	Quality Control	CS044172-CS044175	Engineering drawings, Parts 156-30 through 156-39.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
28	Central Files	Quality Control	CS044176-CS044181	Engineering drawings, Parts 156-040 through 156-049.
28	Central Files	Quality Control	CS044182-CS044185	Engineering drawings, Parts 156-50 through 156-59.
28	Central Files	Quality Control	CS044186-CS044188	Engineering drawings, Parts 156-060 through 156-069.
28	Central Files	Quality Control	CS044189-CS044299	Work Instructions for Omega.
28	Central Files	Quality Control	CS044300-CS044374	Omega Quality Plans.
29	Closed Files	Engineering	CS044375-CS044440	"Library of Congress" file, containing memorandum concerning FC sprinklers removed from Library of Congress, trip reports, correspondence with the Library of Congress Office of Architects.
29	Closed Files	Engineering	CS044441-CS044447	"Flow Control" file, containing handwritten drawings and notes with calculations, memorandum concerning Flow Control sprinkler heads, correspondence.
29	Closed Files	Engineering	CS044448-CS044468	"HEC-12" file, containing memorandum concerning model designation, tests status, chronology.
29	Closed Files	Engineering	CS044469-CS044479	"Omega notes" file, containing handwritten notes on Omega model, engineering drawings, Engineering Change Notices.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
29	Closed Files	Engineering	CS044480-CS044521	"R-1A" file, containing memorandum on R-1A, R-1M, correspondence with UL concerning R-1A, R-1M, trip report, sprinkler model designation revision, engineering drawings, correspondence with UL, new model designation for RX Omega, RX Omega listing status, minutes of R-1 alternative meeting dated April 17, 1991, memorandum dated April 12, 1991 concerning R-1M Omega listing project, April 11, 1991 memorandum concerning R-1 salvage retrofit, residential sprinkler comparison chart, engineering drawings.
29	Closed Files	Engineering	CS044522-CS044529	"Omega plunger housing" file, containing memorandum concerning Omega plunger housings, correspondence with UL, correspondence pertaining to proposed material alternatives.
29	Closed Files	Engineering	CS044530-CS044547	"Omega half inch commercial" file, containing correspondence with UL.
29	Closed Files	Engineering	CS044548-CS044582	UL report on residential Omega HEC-12 sidewall sprinkler.
29	Closed Files	Engineering	CS044583-CS044610	UL report on model C-1 quick response sprinklers for fire protection and UL report on automatic sprinklers.
29	Closed Files	Engineering	CS044611	Miscellaneous file folder.
29	Closed Files	Engineering	CS044612-CS044624	"C-1 Omega" file, containing correspondence with UL on model C-1A adjustable pendant style sprinklers.
29	Closed Files	Engineering	CS044625-CS044630	"Indent-A-Fire" file, containing correspondence with UL re: investigation of Omega model HEC-12.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
29	Closed Files	Engineering	CS044631-CS044634	"Omega guide pins" file, containing correspondence with UL.
29	Closed Files	Engineering	CS044635-CS044665	"Half inch Omega horizontal HEC-12 residential" file, containing 1983 UL report on residential sidewall sprinkler.
29	Closed Files	Engineering	CS044666-CS044724	"Half inch Omega horizontal extended coverage HEC-12 and HEC-20" file, containing UL report of July 1983 on automatic sprinklers, correspondence in 1986 concerning Omega quick response listings, 1983 UL report on automatic sprinklers, March 1984 correspondence with UL.
29	Closed Files	Engineering	CS044725-CS044740	"Half inch Omega horizontal sidewall Prohibitor" file, containing correspondence with UL.
29	Closed Files	Engineering	CS044741-CS044769	"Half inch model M" file, containing correspondence with UL and UL report on automatic sprinklers.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
29	Closed Files	Engineering	CS044770-CS044876	Flow Control file, containing handwritten notes with diagrams and computations, handwritten memorandum regarding Currie and Warner Nozzle Cost Reduction, engineering drawings, UL 1983 report (revised 1988) on Automatic and Open Sprinklers, memorandum dated 10/02/90 from Chuck Lukens to Rich Hobbs concerning Currie and Warner Cost Reduce Nozzle for Flow Control Heads, handwritten notes, UL memorandum dated 05/09/91, Technician Service Request dated May 1991, engineering drawings, expense report.
29	Closed Files	Engineering	CS044877-CS044927	R-1 Trip file, containing correspondence with UL dated June 1991 regarding Omega residential sprinklers, residential sprinkler fire test data printout, residential sprinkler discharge distribution test printout, data sheet regarding perimeter collection, correspondence with UL dated 07/16/91 regarding Omega style residential pendent sprinkler.
29	Closed Files	Engineering	CS044928-CS044934	Correspondence with HEB Manufacturing Company, engineering drawings, notes.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
29	Closed Files	Engineering	CS044935-CS044988	Model M file, containing memorandum from Chuck Lukens to Rich Hobbs dated December 1990 regarding M head release testing, handwritten notes, engineering drawings, Engineering Change Notice, Model M sprinklers, Bill of Material, handwritten notes regarding M head test program, 01/07/91 U.L. Non-Conforming Follow-up Test Results on Model M, October 1990 memorandum regarding M sprinklers, correspondence with UL, October 1990 regarding Non-Conforming Follow-Up Test Results on Model M, handwritten notes on Model M sprinklers.
29	Closed Files	Engineering	CS044989-CS045013	Omega Sidewall Anti-Movement Plates file, containing Assembly Procedures, Bill of Material, product information for Omega sprinkler wrench, installation data for Omega sprinkler wrench, engineering drawings, handwritten drawings with computations.
29	Closed Files	Engineering	CS045014-CS045030	AC/C-1A Projects File, containing memorandum from Michael Fries to George Polan, dated August 1990, regarding C-1A UL re-ex results, memorandum to Rich Hobbs dated June 1990, regarding Close-out of engineering projects.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
29	Closed Files	Engineering	CS045031-CS045056	Omega file, containing product information for Omega EC-20A residential pendent automatic sprinkler, Omega seal mechanism load calculations simplified, engineering drawings, assembly procedure, memorandum dated 06/07/89 from George Polan concerning residential Omegas, engineering drawings, handwritten drawings with computations, chart detailing sprinkler style listing temperature rating, body number and revision number, guide pin deflector and plunger housing, Non-Conformance Report, Chubb Fire Export Fixed Temperature Detector Type product information.
29	Closed Files	Engineering	CS045057-CS045059	C-1A file, containing memorandum dated July 1991 concerning residential C-1A product.
29	Closed Files	Engineering	CS045060-CS045100	FC leakage file, containing correspondence dated December 1987 to Factory Mutual Research, regarding examination of FC sprinklers, Flow Control sprinkler fusable element sheet, Incoming Inspection Reports, test results, engineering drawings, memorandum dated March 1986, regarding Flow Control sprinkler snap disc specification, Non-Conformance Report, handwritten notes concerning water pressure, memorandum dated 06/15/89 concerning physical testing, memorandum dated December 1988 concerning New Jersey Bell Flow Control issues.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
29	Closed Files	Engineering	CS045101-CS045147	XP Omega file, containing XP Omega module assembly drawings, notes, drawings and calculations for load reduction, half inch Omega seal mechanism load calculations simplified, technical drawings, memorandum dated August 1990 from George Polan to William Pardue, regarding Omega bodies 3/8 and 1/2, memorandum dated 08/23/90 from Rich Hobbs to George Polan concerning Omega bodies, new seal mechanism for Omega style sprinklers, engineering drawings with notations, handwritten notes, Omega residential sprinkler cost comparison, dated July 1990, United States Patent No. 4,465,141 dated 08/14/84.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
29	Closed Files	Engineering	CS045148-CS045223	Ident-A-Fire file, containing memorandum dated September 1989 pertaining to technical specifications, copy of catalog of wire specifications, engineering drawings, Engineering Change Notice, correspondence with UL dated October 1990 concerning Omega Ident-A-Fire automatic sprinklers, special order for C-1A Ident-A-Fire, C-1A Ident-A-Fire Bill of Material, UL Listing card for Central Sprinkler Co., correspondence with UL, January 1989, concerning Omega style sprinklers with Ident-A-Fire switches, handwritten drawings with computations and notes, Electro-Mech Assembly quotation dated August 1988, Material Transfer slip, company information from Electro-Mech Assembly, Cutler Hammer catalog page for commercial push-button switches, catalog page for miniature switch kit, PV Series panel switches, memorandum dated September 1989 regarding Ident-A-Fire style sprinklers, Article 770 from the National Electric Code regarding optical fiber cables, Article 760 from the National Electric Code regarding fire protective signaling systems, special order Omega HEC-12 sidewall Ident-A-Fire Bill of Material, handwritten drawing with computations and notations, CNK catalog, for sub-miniature push-button switches.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
29	Closed Files	Engineering	CS045224-CS045237	Pendent file, containing correspondence with UL dated November 1987, regarding Quick Response Model M, correspondence with UL, regarding Model M sprinklers using pendent deflector, UL correspondence February 1987, regarding investigation of Model M sprinklers using modified pendent deflector, Material Transfer dated November 1986, Model M pendent chart, sprinkler location versus frame arms, memorandum dated November 1986 to UL, regarding Model M sprinkler with new pendent deflector.
29	Closed Files	Engineering	CS045238-CS045241	HEC-12 file, containing test results, memo regarding HEC-12.
29	Closed Files	Engineering	CS045242-CS045292	"Omega style ding" file, containing memo dated December 1990, regarding Omega heat collector damage issue, memorandum dated November 1990, regarding Model M heat collector assemblies, handwritten notes, Procedure to Change Heat Fins on Damaged Omega Heads, M Sprinkler water pressure release test notes, chart of sorted heads for return by manufacture, Material Transfer, sprinkler liquid bath test log sheets for July to November 1990, handwritten list of products that may have heat collector issues, time-to-release chart, bath test results, handwritten notes.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
29	Closed Files	Engineering	CS045293-CS045325	R-1M New Fix file, containing memorandum, regarding leakage test on Central R-1M sprinklers, Engineering Change Notice for control manifold, engineering drawings for control manifold, Final Assembly and Bill of Materials, memorandum dated 05/07/93, regarding Reported Field Problems with Shortened Omega R-1M Threads, Engineering Diagnostic Report, engineering drawings with handwritten revisions, November 1992 memorandum regarding R-1M wrenches, November 1992 memorandum regarding R-1M body rework, November 1992 memorandum regarding R-1M body rework, Engineering Change Notice and R-1M new style Omega sprinkler, engineering drawing, Final Assembly and Bill of Materials.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
29	Closed Files	Engineering	CS045326-CS045457	R-1M trip file, containing correspondence with UL regarding Model R-1M Omega residential sprinkler, memorandum, July 1991, regarding design requirements for residential applications, R-1M Omega cut sheet, product information for Omega R-1M, installation diagram for Omega R-1M, Technician Service Request for R-1M, engineering drawings for R-1 Omega, R-1 retrofit drawings, Project Proposal Form for R-1 salvage retrofit, correspondence with UL regarding Omega listing project, April 1991, handwritten charts of 16 ft. by 16 ft. floor collection, residential sprinkler discharge distribution test, data sheet, cold soldering, data sheet, perimeter collection data sheet, residential sprinkler fire test data, 16 ft. by 16 ft. coverage test results, handwritten notes, sales information regarding R-1A versus R-1M, CEP price quote for deflectors, data sheet, perimeter collection, First Article Inspection Report, Engineering Non-Conformance Log, engineering drawings, Non-Conformance Report for deflector of R-1M.
29	Closed Files	Engineering	CS045458-CS045475	"Half inch Omega new version modified assembly" file, containing February 1985 requisition for purchase order, engineering drawings with handwritten notes, notations, and computations, engineering drawings, handwritten drawings with notes, computations.
29	Closed Files	Engineering	CS045476-CS045532	Omega heat collector file, containing handwritten drawings, engineering drawings with handwritten notes, voided drawings, handwritten drawings with notations and computations, revised engineering drawings.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
29	Closed Files	Engineering	CS045533-CS045544	3/8 Versus 7/16 Omega file, containing water distribution test notes, August 1984, water distribution tests, revised July 1981, installation guide for Omega residential sprinklers, water distribution tests, August 1984, Omega head discharge at pressure levels, engineering drawings.
29	Closed Files	Engineering	CS045545-CS045548	LO Omega file, containing engineering drawings, R.D. Brass and APM Simco Quote, handwritten engineering drawing for Central Sprinkler Co.
29	Closed Files	Engineering	CS045549-CS045571	Omega file, containing July 1986 memorandum regarding steel guide pins, UL, report regarding half inch Omega model listing as a quick response sprinkler, Vanguard Plastics memorandum regarding Omega sprinklers thread engagement, general product information for Omega residential fire sprinklers pendent and sidewall Models R-1, C-1, EC-20 and HEC-12 dated March 1984, commercial versus residential type Omega sprinklers recognition criteria, dated March 1984.
29	Closed Files	Engineering	CS045572-CS045581	Dezincification file, containing memo dated September 1994, regarding dezincification, Internal Movement Card, August 1994 memorandum to Advanced Fire Protection regarding Omega dezincification, August 1994 memo regarding dezincification, May 1994 memo to Advanced Fire Protection.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
29	Closed Files	Engineering	CS045582-CS045605	Omega fittings leakage file, containing December 1985 memo from Culligan Fire Protection, handwritten note regarding Culligan Fire Protection, handwritten notes, Omega sprinkler hydrostatic test,, November 1985 memorandum regarding Omega head fitting leakage, handwritten note regarding Culligan Fire Protection, October 1985 memorandum regarding Omega head fitting leakage, October 1985 memorandum regarding Omega sprinkler leakage issue, October 1985 memorandum regarding leakage, memorandum October 1985 regarding Omega heads leakage issue, handwritten notes.
29	Closed Files	Engineering	CS045606-CS045625	Omega material file, containing correspondence to UL concerning proposed material change for Omega sprinklers, handwritten engineering drawings, UL final bill.
29	Closed Files	Engineering	CS045626-CS045636	3/8 inch Orifice file, containing UL form for cost limit increase, correspondence with UL concerning 3/8 inch orifice sprinklers, UL notice of completion of engineering investigation, UL cost limit increase for project Material Transfer sheets, correspondence with UL regarding Model M 3/8 inch orifice sprinkler.
29	Closed Files	Engineering	CS045637-CS045638	Model M Res file, containing correspondence with UL, regarding Model M with 7/16 orifice bushing.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
29	Closed Files	Engineering	CS045638-CS045649	Omega activation file, containing April 1988 memo regarding Omega M heat collector assembly machine, pellet squeezing operation log sheet, engineering drawing.
29	Closed Files	Engineering	CS045650-CS045706	Model M upright file, containing correspondence with UL regarding modified Model M sprinklers, Material Transfer sheets, handwritten notes regarding Model M sprinkler, release test results, UL costs limit increase forms, UL acknowledgment dated October 1986, internal memorandum regarding Model M ½ inch orifice upright sprinkler, price quote from M.D. Hubbard and H.K. Metalcraft regarding computer simulation profile of spring washer, engineering drawings, correspondence with UL referring to non-conforming follow-up test results, October 1988 M Style seal mechanism diagnostic review, correspondence with UL concerning modified Model M sprinklers.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
30	Carmine Schiavone	Customer Service	CS045707-CS045720	Claim file, including Engineering Diagnostic Report, Internal Movement Card, Return Authorization and correspondence to and from claimant. Claimant: Baker Company
30	Carmine Schiavone	Customer Service	CS045721-CS045728	Claim file, including memoranda and Engineering Diagnostic Report. Claimant: Baker Company
30	Carmine Schiavone	Customer Service	CS045729-CS045732	Claim file, including Engineering Diagnostic Report. Claimant: Shadow Ridge/Rogers Plumbing
30	Carmine Schiavone	Customer Service	CS045733-CS045736	Claim file, including Engineering Diagnostic Report. Claimant: Valley Fire Protection/Guyer residence
30	Carmine Schiavone	Customer Service	CS045737-CS045742	Claim file, including Engineering Diagnostic Reports. Claimant: Woodfin Suites
30	Carmine Schiavone	Customer Service	CS045743-CS045861	Claim file, including Engineering Diagnostic Report, Return Authorization, Internal Movement Cards, Replacement Transfers, correspondence to and from Central Sprinkler and Allstate Fire, telephone slips and labor credits. Claimant: Allstate Fire Protection

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
30	Carmine Schiavone	Customer Service	CS045862-CS045976	Claim file, including Engineering Diagnostic Reports, telephone slips, Internal Movement Cards, Return Authorizations, correspondence with insurers, correspondence with sprinkler system installer, diagnostic report prepared by Dr. Victor Greenhut. Claimant: Advanced Automatic Sprinklers
30	Carmine Schiavone	Customer Service	CS045977-CS045986	Claim file, including Receiving Reports, Engineering Diagnostic Reports. Claimant: Advanced Automatic Sprinklers
30	Carmine Schiavone	Customer Service	CS045987-CS045993	Claim file, including Engineering Diagnostic Report, Return Authorization, Internal Movement Card. Claimant: Approved Plumbing
30	Carmine Schiavone	Customer Service	CS045994-CS046015	Claim file, contains Engineering Diagnostic Report, Internal Movement Card, Return Authorizations, correspondence between Central Sprinkler and Automatic Fire, Replacement Transfer Log sheets. Claimant: Automatic Fire
30	Carmine Schiavone	Customer Service	CS046016-CS046055	Claim file, including telephone message slips, invoices, Release, Replacement Transfer Log, Internal Movement Card, Return Authorization, Engineering Diagnostic Report. Claimant: Aware Fire Protection

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
30	Carmine Schiavone	Customer Service	CS046056-CS046066	Claim file, including Internal Movement Card, Return Authorization, Engineering Diagnostic Report. Claimant: Automatic Fire Sprinkler
30	Carmine Schiavone	Customer Service	CS046067-CS046078	Claim file, including Engineering Diagnostic Report and Non-Conformance Reports. Claimant: Automatic Fire Sprinkler/Gary Peterson
30	Carmine Schiavone	Customer Service	CS046079-CS046086	Claim file, including Engineering Diagnostic Reports, Receiving Reports. Claimant: Au's Plumbing/Sheraton Waikiki
30	Carmine Schiavone	Customer Service	CS046087-CS046090	Claim file, including Engineering Diagnostic Report, Receiving Report. Claimant: Au's Plumbing/Sheraton Waikiki
30	Carmine Schiavone	Customer Service	CS046091-CS046097	Claim file, including Engineering Diagnostic Reports, Receiving Reports. Claimant: Au's Plumbing
30	Carmine Schiavone	Customer Service	CS046098-CS046124	Claim file, including Engineering Diagnostic Reports, invoices, credit memos, correspondence to sprinkler system installer, Internal Movement Card, Return Authorization, claims for damages. Claimant: Approved Plumbing

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
30	Carmine Schiavone	Customer Service	CS046125-CS046129	Claim file, including Engineering Diagnostic Report and Receiving Report. Claimant: Anaheim Warehouse/J. Pitts
30	Carmine Schiavone	Customer Service	CS046130-CS046165	Claim file, including Engineering Diagnostic Reports, Replacement Transfer Logs, Material Transfers, handwritten notes, labor credits and correspondence between Central Sprinkler and claimant. Claimant: Daynite Fire Protection
30	Carmine Schiavone	Customer Service	CS046166-CS046176	Claim file, including correspondence between Central Sprinkler and claimant, Receiving Reports, credit memos, Engineering Diagnostic Reports. Claimant: D&D Mechanical
30	Carmine Schiavone	Customer Service	CS046177-CS046192	Claim file, including labor credits, correspondence between Central Sprinkler and claimant, Internal Movement Card, Return Authorization, Replacement Transfer Log, Engineering Diagnostic Report. Claimant: Coastline Fire
30	Carmine Schiavone	Customer Service	CS046193-CS046208	Claim file, including Engineering Diagnostic Reports, labor credit, invoices, Internal Movement Card, Return Authorization. Claimant: Burns Fire

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
30	Carmine Schiavone	Customer Service	CS046209-CS046260	Claim file, including Engineering Diagnostic Report, diagnostic report prepared by RJM Associates, Internal Movement Card, labor credits, Defective Material Report, Return Authorization, Material Transfer, Replacement Transfer Log, internal memorandum regarding Baker Company Constructors credits. Claimant: Burkell Plumbing
30	Carmine Schiavone	Customer Service	CS046261-CS046267	Claim file, including Engineering Diagnostic Report, Receiving Reports. Claimant: Renaissance Terrace Apartments
30	Carmine Schiavone	Customer Service	CS046268-CS046275	Claim file, including Engineering Diagnostic Report, Receiving Report and internal memoranda regarding claim. Claimant: Baker Construction
30	Carmine Schiavone	Customer Service	CS046276-CS046279	Claim file, including Engineering Diagnostic Report, Receiving Report and internal memoranda regarding claim. Claimant: Baker Company
30	Carmine Schiavone	Customer Service	CS046280-CS046303	Claim file, including Engineering Diagnostic Report, Internal Movement Cards, Return Authorizations, Replacement Transfers, labor credits, credit memo. Claimant: Beverly Hilton Hotel

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
30	Carmine Schiavone	Customer Service	CS046304-CS046308	Claim file, including Engineering Diagnostic Report, correspondence from claimant. Claimant: Firemaster
30	Carmine Schiavone	Customer Service	CS046309-CS046321	Claim file, including Engineering Diagnostic Report, Receiving Report, internal memoranda, telephone slips, correspondence from claimant regarding La Jolla project. Claimant: G&G Fire Protection
30	Carmine Schiavone	Customer Service	CS046322-CS046358	Claim file, including Engineering Diagnostic Report, Replacement Transfer Log, Return Authorization, Internal Movement Card, invoices for replacement of sprinklers and correspondence with claimant. Claimant: GB Plumbing
30	Carmine Schiavone	Customer Service	CS046359-CS046363	Claim file, including Engineering Diagnostic Report, correspondence with claimant regarding Juniper Hills and photographs of claimed damage. Claimant: Foothill Plumbing
30	Carmine Schiavone	Customer Service	CS046364-CS046376	Claim file, including Engineering Diagnostic Report, Material Transfers, Receiving Reports, handwritten notes regarding claim. Claimant: Fire Protection Fab.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
30	Carmine Schiavone	Customer Service	CS046377-CS046405	Claim file, including Engineering Diagnostic Report, invoices for change out of sprinkler heads, Receiving Reports, Replacement Transfer, Internal Movement Card, Return Authorization and correspondence with claimant. Claimant: Evans Plumbing
30	Carmine Schiavone	Customer Service	CS046406-CS046421	Claim file, including Engineering Diagnostic Report, correspondence with building owner, Internal Movement Cards, Return Authorizations, Material Transfers, Replacement Transfer. Claimant: Hampton Inn
30	Carmine Schiavone	Customer Service	CS046422-CS046432	Claim file, including Engineering Diagnostic Report, Internal Movement Card, Return Authorization. Claimant: Heistand Construction
30	Carmine Schiavone	Customer Service	CS046433-CS046441	Claim file, including Engineering Diagnostic Report, Receiving Rport, correspondence with claimant. Claimant: Home Fire
30	Carmine Schiavone	Customer Service	CS046442-CS046448	Claim file, including Engineering Diagnostic Report, Receiving Report, Material Transfers. Claimant: Independent Sprinkler

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
30	Carmine Schiavone	Customer Service	CS046449-CS046466	Claim file, including Engineering Diagnostic Report, labor credit, Replacement Transfer, Return Authorizations, correspondence with claimant, Internal Movement Cards. Claimant: JBT Home Fire
30	Carmine Schiavone	Customer Service	CS046467-CS046478	Claim file, including Engineering Diagnostic Report, Internal Movement Cards, Return Authorizations. Claimant: JBT Home Fire
30	Carmine Schiavone	Customer Service	CS046479-CS046503	Claim file, including Engineering Diagnostic Report, Return Authorizations, Internal Movement Cards, correspondence with claimant. Claimant: JBT Home Fire
30	Carmine Schiavone	Customer Service	CS046504-CS046519	Claim file, including Engineering Diagnostic Report, Replacement Transfers, correspondence with claimant, Internal Movement Card, Return Authorizations. Claimant: JC Plumbing
30	Carmine Schiavone	Customer Service	CS046520-CS046535	Claim file, including Engineering Diagnostic Report, correspondence with claimant, Replacement Ttransfer Log, Internal Movement Card, Return Authorizations. Claimant: Rick Weiss Plumbing

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
30	Carmine Schiavone	Customer Service	CS046536-CS046545	Claim file, including Engineering Diagnostic Report, Internal Movement Card, Return Authorizations, correspondence with claimant and Technical Service Request. Claimant: Sunland Fire
30	Carmine Schiavone	Customer Service	CS046546-CS046557	Claim file, including Engineering Diagnostic Report, correspondence with claimant, Internal Movement Card, Return Authorization. Claimant: Vanguard Fire Protection
30	Carmine Schiavone	Customer Service	CS046558-CS046591	Claim file, including Engineering Diagnostic Report, correspondence with claimant, Internal Movement Card, Return Authorizations, labor credits. Claimant: Valley Fire Protection
30	Carmine Schiavone	Customer Service	CS046592-CS046603	Claim file,: File including Engineering Diagnostic Report, Internal Movement Card, correspondence with claimant, Return Authorizations. Claimant: Virginia Sprinkler
30	Carmine Schiavone	Customer Service	CS046604-CS046608	Claim file,: File including Engineering Diagnostic Report, Receiving Report. Claimant: White Brothers Plumbing

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
30	Carmine Schiavone	Customer Service	CS046609-CS046675	Claim file,: File including Engineering Diagnostic Report, correspondence with claimant, Receiving Reports, photographs of damage, receipts for damage, receipts for repair, telephone message slips, Central Sprinkler invoices, labor credits, Central Sprinkler accounts receivable report. Claimant: Western States Fire Protection
30	Carmine Schiavone	Customer Service	CS046676-CS046683	Claim file, including Engineering Diagnostic Report, internal memoranda regarding inspection of sprinklers, correspondence with claimant, receiving report. Claimant: AAA Fire Sprinkler
30	Carmine Schiavone	Customer Service	CS046684-CS046739	Claim file, including correspondence with insurance adjustors, Engineering Diagnostic Report. Claimant: AVM Mechanical Contractors/St. Mary's Hall
30	Carmine Schiavone	Customer Service	CS046740-CS046744	Claim file, including correspondence with claimant, Engineering Diagnostic Report, Receiving Report. Claimant: Abco Peerless Sprinkler
30	Carmine Schiavone	Customer Service	CS046745-CS046749	Claim file, including Engineering Diagnostic Report, Receiving Report. Claimant: Able Sprinkler

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
30	Carmine Schiavone	Customer Service	CS046750-CS046756	Claim file, including Receiving Report, Engineering Diagnostic Report, correspondence with claimant and notes. Claimant: Action Fire Fab
30	Carmine Schiavone	Customer Service	CS046757-CS046771	Claim file, including correspondence with claimant, Engineering Diagnostic Report, Return Authorization, Internal Movement Cards. Claimant: Action Fire

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
30	Carmine Schiavone	Claimant Service	CS046772-CS046781	Claim file, including Engineering Diagnostic Report, Receiving Reports. Claimant: Action File Protection
30	Carmine Schiavone	Claimant Service	CS046782-CS046792	Claim file, including correspondence with claimant, Engineering Diagnostic Report, Internal Movement Card, Return Authorization. Claimant: A.D. Fire
30	Carmine Schiavone	Claimant Service	CS046793-CS046808	Claim file, including correspondence with claimant, Engineering Diagnostic Report, Internal Movement Card, Return Authorization. Claimant: A.D. Fire
30	Carmine Schiavone	Claimant Service	CS046809-CS046820	Claim file, including Internal Movement Card, correspondence with claimant, Engineering Diagnostic Report, Return Authorization, invoices. Claimant: A.D. Fire
30	Carmine Schiavone	Claimant Service	CS046821-CS046833	Claim file, including correspondence with claimant, Engineering Diagnostic Report, internal movement care, Return Authorization, invoices. Claimant: A.D. Fire

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
30	Carmine Schiavone	Claimant Service	CS046834-CS046848	Claim file, including correspondence with claimant, Engineering Diagnostic Report, Receiving Report. Claimant: Advanced Automatic Sprinkler
30	Carmine Schiavone	Claimant Service	CS046849-CS046857	Claim file, including Engineering Diagnostic Report, Receiving Report. Claimant: Advanced Automatic Sprinkler
30	Carmine Schiavone	Claimant Service	CS046858-CS046864	Claim file, including Engineering Diagnostic Report, corresponence with claimant, Receiving Report. Claimant: Advanced Automatic Sprinkler
30	Carmine Schiavone	Claimant Service	CS046865-CS046868	Claim file, including claimant Engineering Diagnostic Report, Receiving Report. Claimant: Advanced Automatic Sprinkler
30	Carmine Schiavone	Claimant Service	CS046869-CS046871	Claim file, including Receiving Report and Material Transfer. Claimant: Advanced Automatic Fire
30	Carmine Schiavone	Claimant Service	CS046872-CS046875	Claim file, including Engineering Diagnostic Report and correspondence to claimant. Claimant: Aljer Plumbing

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
30	Carmine Schiavone	Claimant Service	CS046876-CS046887	Claim file, including correspondence with claimant, Engineering Diagnostic Report, damage report, Internal Movement Card, Return Authorization. Claimant: Allstate Fire Protection
30	Carmine Schiavone	Claimant Service	CS046888-CS046898	Claim file, including Engineering Diagnostic Report, correspondence with claimant. Claimant: Allstate Fire Protection
30	Carmine Schiavone	Claimant Service	CS046899-CS046904	Claim file, including Engineering Diagnostic Report, invoice. Claimant: Allen Plumbing and Heating
30	Carmine Schiavone	Claimant Service	CS046905-CS046909	Claim file, including Engineering Diagnostic Report and correspondence with claimant. Claimant: Alliance Fire Protection
30	Carmine Schiavone	Claimant Service	CS046910-CS046913	Claim file, including Receiving Report. Claimant: America Fire Protection
30	Carmine Schiavone	Claimant Service	CS046914-CS046947	Claim file, including Return Authorization, Internal Movement Card, correspondence with claimant, Engineering Diagnostic Report. Claimant: America Fire Protection

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
30	Carmine Schiavone	Claimant Service	CS046948-CS046953	Claim file, including Receiving Report, correspondence with claimant and Engineering Diagnostic Report. Claimant: America Fire Protection Inc.
30	Carmine Schiavone	Claimant Service	CS046954-CS046966	Claim file, including correspondence with claimant, Engineering Diagnostic Report, Internal Movement Card, Return Authorization. Claimant: America Fire
30	Carmine Schiavone	Claimant Service	CS046967-CS046971	Marketing material re: Model C-1.
30	Carmine Schiavone	Claimant Service	CS046972-CS046983	Notice to Produce filed in Ysidro Development Company v. The City of San Diego.
30	Carmine Schiavone	Claimant Service	CS046984-CS046996	Marketing material re: Model C-1A sprinkler and Response to Demand for the Production of Documents and Demand for Ysidro Development Company v. The City of San Diego.
30	Carmine Schiavone	Claimant Service	CS046997-CS047049	Cross-complaint in Ysidro Development Company v. The City of San Diego.
30	Carmine Schiavone	Claimant Service	CS047050-CS047054	Claim file, including Engineering Diagnostic Report and Receiving Report. Claimant: America Fire Sprinkler Corp.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
30	Carmine Schiavone	Claimant Service	CS047055-CS047064	Claim file, including Engineering Diagnostic Report, Receiving Report, engineering drawing. Claimant: Lachman Resident
30	Carmine Schiavone	Claimant Service	CS047065-CS047077	Claim file, including Engineering Diagnostic Report, Internal Movement Card, correspondence with claimant, Return Authorization. Claimant: Allied Sprinkler
30	Carmine Schiavone	Claimant Service	CS047078-CS047096	Claim file, including Internal Movement Card, Return Authorization, correspondence with claimant, Engineering Diagnostic Report. Claimant: Advanced Systems
30	Carmine Schiavone	Claimant Service	CS047097-CS047107	Claim file, including correspondence with claimant, Engineering Diagnostic Report, Internal Movement Card, Return Authorization. Claimant: Advanced Systems
30	Carmine Schiavone	Claimant Service	CS047108-CS047112	Claim file, including Engineering Diagnostic Report, Receiving Report. Claimant: Aero Automatic Sprinkler

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
30	Carmine Schiavone	Claimant Service	CS047113-CS047124	Claim file, including correspondence with claimant, Engineering Diagnostic Report, Internal Movement Card, Return Authorization. Claimant: Affordable Fire
30	Carmine Schiavone	Claimant Service	CS047125-CS047134	Claim file, including Engineering Diagnostic Report, Return Authorization, Internal Movement Card. Claimant: Affordable Fire
30	Carmine Schiavone	Claimant Service	CS047135-CS047154	Claim file, including correspondence to claimant with engineering drawing, Engineering Diagnostic Report, correspondence with Cob County Fire Department, test results and test results attached, Engineering Diagnostic Report, Receiving Reports and engineering drawings. Claimant: Affordable Fire Protection
30	Carmine Schiavone	Claimant Service	CS047155-CS047166	Claim file, including correspondence with claimant with attached Engineering Diagnostic Report, Internal Movement Card, Return Authorization, invoices from claimant. Claimant: A.L. Lease
30	Carmine Schiavone	Claimant Service	CS047167-CS047184	Claim file, including Internal Movement Card, correspondence with claimant with attached Engineering Diagnostic Report, Return Authorization. Claimant: Alert Automatic

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
30	Carmine Schiavone	Claimant Service	CS047185-CS047227	Claim file, including correspondence from counsel regarding Vista Della Valley project, investigative report by Dunn-Lee-Mid/Kline and Associates professional engineering firm, regarding investigation of fire sprinkler system, incident report from San Diego Housing Commission, Engineering Diagnostic Report. Claimant: SanYsidro/Landmark Fire Protection
30	Carmine Schiavone	Claimant Service	CS047228-CS047224	Claim file, including correspondence with building owner, Engineering Diagnostic Report, correspondence with insurance adjuster. Claimant: Royal Bank Tower
30	Carmine Schiavone	Claimant Service	CS047225-CS047254	Claim file, including correspondence with claimant with attached Engineering Diagnostic Report, Internal Movement Card, Return Authorization, phone slip. Claimant: Allstate Fire
30	Carmine Schiavone	Claimant Service	CS047255-CS047264	Claim file, including correspondence to claimant with Engineering Diagnostic Report attached, Internal Movement Card, Return Authorization. Claimant: Alpha Fire
30	Carmine Schiavone	Claimant Service	CS047265	Memorandum from George Polan regarding R-1A and AC concealed Omega sprinklers.
30	Carmine Schiavone	Claimant Service	CS047266-CS047418	Non-Conformance Report involving Omega sprinkler model.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
31	Walter Walsperger	Quality Control	CS047419-CS047896	Omega Incoming Inspection Reports/Logs recording inspections of raw materials performed by Central Sprinkler's Quality Control Department.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
32	Bob Chakowsky	Production	CS047897	Cover page regarding Omega paperwork
32	Bob Chakowsky	Production	CS047898-CS048096	Rework report for April 1997
32	Bob Chakowsky	Production	CS048097-CS048098	Omega meeting agenda for 10/29/97
32	Bob Chakowsky	Production	CS048099	Weekly log of heads identified as per test kits, generated beginning from 10/23/97
32	Bob Chakowsky	Production	CS048100	Omega project meeting minutes for 10/22/97
32	Bob Chakowsky	Production	CS048101-CS048103	Omega meeting minutes for 5/13/97
32	Bob Chakowsky	Production	CS048104	Memo from Carmine Schiavone dated 5/1/97 regarding change outs
32	Bob Chakowsky	Production	CS048105	Handwritten notes
32	Bob Chakowsky	Production	CS048106-CS048113	Memo from Bob Chajkowsky dated 4/18/97 regarding production and rework
32	Bob Chakowsky	Production	CS048114-CS048124	Rework report
32	Bob Chakowsky	Production	CS048125-CS048127	Hourly reports

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
32	Bob Chakowsky	Production	CS048128-CS048173	Engineering Diagnostic Reports for 1997
32	Bob Chakowsky	Production	CS048174-CS048217	Quality Audit Reports
32	Bob Chakowsky	Production	CS048218-CS048278	Corrective Action Requests
32	Bob Chakowsky	Production	CS048279-CS048569	Correspondence from Underwriters Laboratories regarding follow up tests on residential sprinklers, dated 1991-1997
32	Bob Chakowsky	Production	CS048570-CS048725	Current period schedule attainment report dated 1996-1997
32	Bob Chakowsky	Production	CS048726-CS048740	Fax from Brookhiser/Dickson Automatic Tool to Mike Whitfield dated 8/22/96
32	Bob Chakowsky	Production	CS048741	Omega testing summary
32	Bob Chakowsky	Production	CS048742	Engineering Diagnostic Report
32	Bob Chakowsky	Production	CS048743-CS048744	Non-Conformance Report
32	Bob Chakowsky	Production	CS048745-CS048746	Requests for Deviation or Waiver
32	Bob Chakowsky	Production	CS048747-CS048748	Non-Conformance Report

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
32	Bob Chakowsky	Production	CS048749	Engineering Diagnostic Report
32	Bob Chakowsky	Production	CS048750	Non-Conformance Report
32	Bob Chakowsky	Production	CS048751-CS048753	Engineering Diagnostic Report
32	Bob Chakowsky	Production	CS048754-CS048756	Non-Conformance Report
32	Bob Chakowsky	Production	CS048757	Engineering Diagnostic Report
32	Bob Chakowsky	Production	CS048758-CS048759	Non-Conformance Report
32	Bob Chakowsky	Production	CS048760-CS048761	Engineering Diagnostic Report
32	Bob Chakowsky	Production	CS048762	Non-Conformance Report
32	Bob Chakowsky	Production	CS048763	Engineering Diagnostic Report
32	Bob Chakowsky	Production	CS048764-CS048768	Non-Conformance Report
32	Bob Chakowsky	Production	CS048769-CS048775	Engineering Diagnostic Reports

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
32	Bob Chakowsky	Production	CS048827-CS048832	Requests for Deviation or Waiver
32	Bob Chakowsky	Production	CS048833	Handwritten note
32	Bob Chakowsky	Production	CS048834-CS048883	Documents and Underwriters Laboratories correspondence regarding Snap Discs
32	Bob Chakowsky	Production	CS048884	Memo from Long regarding Cleveland vendor visit dated 12/12/91
32	Bob Chakowsky	Production	CS048885	Bill of material regarding Snap Disc
			CS04886-CS048902	Documents regarding Omega change outs dated May 1997
32	Bob Chakowsky	Production	CS048903-CS048922	Omega meeting minutes dated 1997
32	Bob Chakowsky	Production	CS048923-CS048951	Requests for Deviation or Waiver
32	Bob Chakowsky	Production	CS048952-CS048959	Engineering Diagnostic Reports
32	Bob Chakowsky	Production	CS048960	Memo from Dolan to Yuhas regarding Omega sprinklers with silicone O-rings; leakage issue dated 12/16/96
32	Bob Chakowsky	Production	CS048961-CS048967	Engineering Diagnostic Reports

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
32	Bob Chakowsky	Production	CS048968	Memo from Torstenson regarding Omega O-ring change dated 5/31/96
32	Bob Chakowsky	Production	CS048969	Handwritten note dated 5/7/97
32	Bob Chakowsky	Production	CS048970-CS048977	Engineering Diagnostic Reports
32	Bob Chakowsky	Production	CS048978-CS048981	Engineering worklist 6/7/97
32	Bob Chakowsky	Production	CS048982-CS048997	Engineering Diagnostic Reports
32	Bob Chakowsky	Production	CS048998-CS049001	Requests for Deviation or Waiver
32	Bob Chakowsky	Production	CS049002-CS049176	Non-Conformance Reports

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
33	Mike Fries	Engineering	CS049177-CS049200	Technical articles.
33	Mike Fries	Engineering	CS049201-CS049202	Cut sheet for the Alpha CS adjustable nipple.
33	Mike Fries	Engineering	CS049203-CS049224	Technical articles.
33	Mike Fries	Engineering	CS049225-CS049320	"Omega-O-ring" file, containing memoranda and reports on o-rings, Parco test reports on compression tests of various compounds, memo on visit to Parco, engineering drawings and testing information.
33	Mike Fries	Engineering	CS049321-CS049440	"Omega-Memoranda" file, containing memoranda regarding the testing of o-rings, Underwriters Laboratories report on automatic sprinklers, testing reports of the Omega C-1A sprinkler head, and summary of tests memorandum.
33	Mike Fries	Engineering	CS049441-CS049533	Omega/analysis reports file, containing water analysis reports from Atlantic Analytical Laboratories, memorandum regarding Omega Marriott sprinkler testing, memorandum regarding sample sprinkler heads from various jobs, telephone report on soluble silicates, handwritten notes, interim report from Dr. Victor Greenhut.
33	Mike Fries	Engineering	CS049534-CS049586	"Marriott International/Omega Testing" file, containing memoranda and testing data, Underwriters Laboratories report, test protocol and technical drawings.
33	Mike Fries	Engineering	CS049587-CS049662	"Omega Test Data" file, containing test protocol, test data, and handwritten notes.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
33	Mike Fries	Engineering	CS049663-CS049723	"Flow Control Sprinkler" file, containing technical drawings and Engineering Change Notices, Non-Conformance Reports, Scrap Reports, Flow Control nozzles, Engineering Change Requests, engineering drawings, On/Off patent application and patent, and Amendment After Patent for the automatic On/Off sprinkler.
33	Mike Fries	Engineering	CS049724-CS049957	"Flow Control Sprinkler Guard" file, containing correspondence to and from Underwriters Laboratories regarding guards for sprinkler and revised drawings.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
33	Mike Fries	Engineering	CS049958-CS050408	"Flow Control Calculations" file, containing handwritten notes, drawings and calculations, memoranda on Model FC sprinkler cost reduction analysis and proposals, production lot report, manufacturing report on Flow Control sprinklers from Harrison Design & Consulting dated 10/04/83, Patent for Pendent Style Sprinkler with Cover, U.S. Patent for Directly Mounted Pendent Style Sprinklers and Covers, handwritten notes and drawings, cut sheet for the Omega R-X, memoranda, technical drawings, and handwritten notes on the R-X, memoranda regarding trip to UL, testing information and memoranda on the R-1X Omega Residential, memoranda on trip to UL and agenda for UL trip, testing data on residential sprinkler discharge and fire tests, handwritten notes on testing, engineering drawings and engineering change reports, Final Assembly and Bill of Materials, Project Proposal forms, article on gas phase applications, test report on Parco Silicon Compound, o-ring technical bulletin, affidavit of Howard Harrenstein in Redding v. University of Miami, International Standards and Product Specification sheets.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
33	Mike Fries	Engineering	CS050409-CS050509	"Omega O-Ring Materials" file, containing Novasil report on o-ring seal, engineering drawings, memoranda on Omega o-ring change, handwritten notes on o-ring change, Technician Service Requests, testing data and protocols, testing reports from Parco, technical explanations from Novasil, notes on conversation with Novasil, Underwriter Laboratories report on automatic sprinklers revised 06/19/96, information on glass bulb sprinkler seal requirements, information on automatic sprinklers for fire protection service, ASTM stress relaxation round-robin test results, letter from DuPont Dow to Central Sprinkler attaching a reprint from Machine Design magazine.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
33	Mike Fries	Engineering	CS050510-CS050718	"O-Ring Squeeze" file, containing handwritten notes, technical drawings, load test analysis data, seal mechanism load calculations, handwritten testing information, Underwriters Laboratories report regarding strength of fusible elements of Omega series sprinkler and testing data, Technical Service Requests, UL information on automatic sprinklers for fire protection service, Quality Plans, correspondence regarding Prohibitor Omega heat collector fins, memoranda regarding FC Sprinklers for railway stations, report regarding freezing test dated 08/28/92, testing data on freezing test, testing data on residential installation test, Omegal residential sprinklers Advanced Installation Guides, Viking Installation Guide, Grinnell Installation Guide, materials from the Automatic Sprinkler Systems handbook, Globe Residential Sprinkler Installation Guide, Viking Installation Guide, Omega Residential Sprinklers Advanced Installation Guide.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
33	Mike Fries	Engineering	CS050719-CS051168	"Installation Guide" file, containing Residential Sprinkler Installation Guide for Omega and Glass Bulb Residential Sprinklers, hand drawings regarding placement and testing, memoranda regarding Residential Installation Guide, Technical Service Requests, data on residential installation test, residential sprinkler comparison chart, memoranda regarding new Omega/Residential Installation Guide meeting, Omega Residential Sprinklers Advanced Installation Guide, Viking Installation Guide and testing information, memoranda regarding cold solder test for residential installation, copy of catalog from Permatex Industrial - Sees and Faber Berlin, Inc., Industrial Supplies, data sheet from Bal Feal Engineering Co., Parco o-ring sizes and compound reference guide from Parco Seals, information from Dempsey Industries.
33	Mike Fries	Engineering	CS051169-CS051263	"Seal-O-rings" file, containing information from various manufacturers of o-rings.
33	Mike Fries	Engineering	CS051265-CS051448	"Omega Distribution" file, containing handwritten notes on testing, technical drawings, testing information, correspondence regarding Omega activation at the Panell residence, invoice from D-States Supplies, handwritten testing information, photographs, testing information, engineering drawings, testing information and correspondence regarding sprinkler head discharge in Chicago, report from Crawford dated 04/28/97.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
34	J.R. Anderson	Engineering	CS051449-CS051477	NFPA material regarding Sprinkler Systems for One and Two Family Homes.
34	J.R. Anderson	Engineering	CS051478-CS051504	NFPA material regarding Sprinkler Systems for Residences up to Four stories.
34	J.R. Anderson	Engineering	CS051505-CS051638	NFPA 13 1994 Edition regarding Installation of Sprinkler Systems
34	J.R. Anderson	Engineering	CS051639-CS051714	Coors Ceramics catalog regarding specifications and product information.
34	J.R. Anderson	Engineering	CS051715-CS051722	Appliance Thermostats catalog.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
34	J.R. Anderson	Engineering	CS051723-CS051859	Ceramic and Phenolic Bearing Discs file, including correspondence with UL regarding bearing discs, laboratory testing invoice regarding aluminum bearing discs, pellet squeezing operation log sheet, handwritten notes regarding alumina bearing discs, compression strength results on bearing discs, Non-Conformance Report on bearing discs, requisition for supply sheets for bearing discs, receipts for samples of alumina, laboratory testing invoice for ceramic bearing discs, memorandum of May 1985 regarding "stealite bearing discs," requisition for supplies, engineering drawings for stealite bearing disc, price quotes for ceramic rods, correspondence with UL regarding stealite bearing discs, handwritten notes regarding Omega residential sprinkler heads, phenolic bearing discs, correspondence with UL, investigation of phenolic and stealite ceramic bearing discs, engineering drawings with revisions, correspondence with UL in September 1984 concerning Omega sprinklers using phenolic bearing disc, correspondence with UL in September 1984 regarding stealite bearing discs, correspondence with UL in September 1984 concerning phenolic bearing discs, correspondence with UL in September 1984 concerning phenolic or stealite ceramic bearing discs, engineering drawings with revisions, quotations for stealite cylinders, quotation for phenolic discs, quotes for ceramic bearing discs, catalog from Isolantite, Superior Technical Ceramics Corp. Catalog.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
34	J.R. Anderson	Engineering	CS051860-CS051902	Palmer House file including correspondence with UL regarding automatic sprinklers, correspondence regarding operation of sprinklers, correspondence with UL concerning load on heat responsive element tests, correspondence with UL concerning Omega sprinkler duration tests, correspondence with UL regarding sprinklers from Palmer House Hotel.
34	J.R. Anderson	Engineering	CS051903-CS051966	Palmer House file including correspondence with UL regarding Omega heads from Palmer House, continued correspondence with UL concerning sprinklers received from Palmer House, handwritten memo regarding Omega products, engineering drawing, handwritten notes regarding review procedure, handwritten notes regarding Omega head tests, meeting minutes, February 1985 memorandum regarding inspection of installation of Omega sprinklers in Palmer House.
34	J.R. Anderson	Engineering	CS051967-CS052013	Trigometer file including correspondence with Trigometer regarding material for snap discs, Trigometer invoice, notes regarding Trigometer invoices, requisition for supplies, confirmation of purchase order, requisition quotation, additional handwritten notes on Trigometer, Trigometer purchase order regarding bimetal disc, Bill of Material for snap disc module for FC Flow Control, engineering drawings, thermostat bimetals flexivity chart, electrical resistivity and hardness tolerance range, bimetal composition notes, Trigometer quotation.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
34	J.R. Anderson	Engineering	CS052014-CS052054	Residential sprinklers file including correspondence with FEMA regarding residential sprinkler program, UL report dated December 1985, report on automatic sprinklers.
34	J.R. Anderson	Engineering	CS052055-CS052114	On-Off Type Sprinkler file including UL memo regarding investigation of model FC sprinklers, correspondence with UL regarding model FC Flow Control, UL report October 11, 1983 automatic on-off sprinklers.
34	J.R. Anderson	Engineering	CS052115-CS052121	R-1 Omega file including engineering drawings, final assembly, Bill of Materials.
34	J.R. Anderson	Engineering	CS052122-CS052125	FC Body Self Assembly Alignment Specs file including Engineering Change Requests, Engineering Diagnostic Reports, memorandum.
34	J.R. Anderson	Engineering	CS052126-CS052152	Flow Control Open Issues file including Non-Conformance Reports, engineering drawings, 1993 Paid Warranty Claims memorandum, Flow Control memorandum, memoranda concerning Engineering Diagnostic Reports, with reports attached.
34	J.R. Anderson	Engineering	CS052153-CS052164	O-ring file including memorandum regarding visit to Parco o-ring vendor in Ontario, Canada November 1993.
34	J.R. Anderson	Engineering	CS052165-CS052173	Protective Cap Omega file including engineering drawings.
34	J.R. Anderson	Engineering	CS052174-CS052179	Library of Congress Floor Plans.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
34	J.R. Anderson	Engineering	CS052180-CS052358	Field Problems file including December 1987 distribution data sheets, Material Transfers, memorandum regarding wetting patterns, memorandum regarding Central Sprinkler alarm check valve, memorandum regarding concealed sprinkler installation, memorandum regarding Central Omega sprinklers, Fairbank Court Homes, Hyatt Hotel, American Argo, notes regarding Palmer House, memorandum with UL regarding Palmer House, trip report regarding Omega sprinklers, Engineering Diagnostic Reports, memorandum regarding spacing of sprinklers, Granada Hotel, engineering drawings, correspondence with Embassy Suites, trip report for Atlantic City to retorque and loctite sprinklers, procedure for retorque and staking operation for Omega type heads at the Palmer House, memorandum regarding Palmer House and Tower sprinkler systems, evaluation studies of eutectic alloy.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
34	J.R. Anderson	Engineering	CS052359-CS052415	San Diego Housing Development file, including correspondence concerning Omega sprinklers installed in homes in California, trip report to Palmer House, memorandum regarding retorque of sprinklers installed in California, correspondence with UL concerning Palmer House, trip report to Palmer House, Flow Control sprinklers chart, memorandum concerning Omega sprinklers and field leakage, May 1984 memorandum concerning removal of drywall, April 1984 memorandum concerning sprinkler installation, February 1984 memorandum concerning Omega residential sprinklers, Material Transfer memorandum, October 1983 memorandum concerning flow control sprinkler, June 1983 memorandum concerning World Trade Center, June 1983 memorandum concerning installation for hotels in Washington, D.C.
34	J.R. Anderson	Engineering	CS052416-CS052472	Total Fire Protection file including correspondence with Total Fire Protection concerning rate of rise test, February 1986 correspondence with Total Fire Protection concerning concealed sprinkler, July 1985 correspondence concerning FIRTO's letter, April 1985 correspondence concerning 1984-85 annual test of sprinklers, August 1984 correspondence concerning deflector modification, March 1984 memorandum concerning annual test of sprinklers for 1983, engineering drawings, load cell drawings.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
34	Kevin Dolan	Engineering	CS052473-CS052484	Omega Spring Holder file including Request for Deviation or Waiver for Omega Residential Sprinklers, October 1995 memorandum concerning spring holders, October and November 1994 handwritten notes concerning spring holders, spring holder drawing, residential sprinkler drawings.
34	Kevin Dolan	Engineering	CS052485-CS052512	Omega Body Spring Holder Holes file including Omega pendant sprinkler drawings, Engineering Change Request for Omega pendant sprinklers, revised Omega pendant sprinkler drawings, model shop work request form, diameters of production for spring holder holes, Material Transfer, April 1997 handwritten notes on spring holder holes.
34	Kevin Dolan	Engineering	CS052513-CS052525	Omega Redesign file including Inspection Services Request forms, handwritten drawings of pendant sprinklers, handwritten drawings of guide pins, model shop work request forms, Technical Service Requests.
34	Kevin Dolan	Engineering	CS052526-CS052550	Omega Project file including sprinkler distribution test data collection sheet, model shop request forms February of 1997, sprinkler distribution test data collection sheets, Technical Service Requests for February 1997, Material Transfers for December 1996, deflector engineering drawings, September 1996 memorandum concerning Central Omega Project.
34	Kevin Dolan	Engineering	CS052551-CS052652	Bechtel file including special picture section by Bechtel magnified, special picture file with x-ray display charts, 96-359 legend for use with spectrographs.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
34	Kevin Dolan	Engineering	CS052653-CS052873	Reports prepared by Dr. Victor Greenhut including fax from Rutgers University transmitting Greenhut Report on Flow Control sprinkler from Bechtel test site, preliminary data table on water sample, Bechtel memorandum dated September 1997 concerning Flow Control sprinkler.
34	Kevin Dolan	Engineering	CS052874-CS052889	Bechtel file including handwritten notes concerning Nevada test site, Engineering Diagnostic Reports, Flow Control sprinkler diagrams, Technical Service Requests for Flow Controls.
34	Kevin Dolan	Engineering	CS052890-CS052937	Bechtel file including notes on o-ring inspection, September 1997 memorandum concerning Flow Control sprinkler, draft test results of sprinklers at Nevada test site, memorandum concerning Flow Controls at Nevada test site, observation summary chart concerning Flow Control returns from Nevada test site, January 1997 interim report updating information on Flow Control sprinklers returned from Nevada test site, operation cycling testing chart, analysis report on water samples, handwritten notes concerning Flow Control sprinkler.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
34	Kevin Dolan	Engineering	CS052938-CS053095	Comparator Photo file including test photos, engineering drawings, Engineering Diagnostic Reports, memorandum concerning Flow Control sprinklers, memorandum concerning sprinkler analysis evaluation, Return Authorizations, Technical Service Requests, revised engineering drawings, installation diagrams, handwritten notes from August of 1996 with handwritten diagrams and computations, interim evaluation of Flow Control sprinklers, return from NTS, handwritten notes from September 1996, analysis of water sample from Las Vegas job site, observation summary chart from Flow Control returns at NTS, handwritten notes on for October 1996, water sample analysis reports, November 1996 handwritten notes on water sample, handwritten notes for December 1996 concerning water analysis.
34	Kevin Dolan	Engineering	CS053096-CS053153	Bechtel file including Internal Movement Card for Bechtel Nevada, August 1996 memorandum concerning Central Flow Control sprinklers at Nevada test site, preliminary data concerning drinking water, July 1996 interim operating instructions for Bechtel Nevada, Return Authorization, water sample from sprinkler system at Bechtel Nevada, August 1996 interim diagnostic evaluation of Flow Control sprinklers at Bechtel, water sample analysis report.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
34	Kevin Dolan	Engineering	CS053154-CS053196	Bechtel file including photographs, discussion of Flow Controls at Nevada test site dated March 1997, handwritten notes regarding evaluation of Flow Controls, January 1997 interim report on Flow Control sprinkler at the Device Assembly Facility in Las Vegas, Nevada.
34	Kevin Dolan	Engineering	CS053197-CS053217	Flow Control at Factory Mutual file including handwritten notes concerning squeeze, engineering drawings for saddle, handwritten notes and calculations regarding seal design, o-ring squeeze calculations, April 1993 memorandum concerning Flow Control sprinklers.
34	Kevin Dolan	Engineering	CS053218-CS053246	Model M heads Problem file including correspondence with UL concerning Model M orifice, deflector drawings, data sheet and distribution for Model M upright, report of test on automatic sprinkler leakage and sensitivity tests, M head release testing memorandum, Bill of Materials for half inch and three-eighths inch orifice Model M, pushing sleeve sub-assembly drawings, half inch Model M final assembly and Bill of Materials drawing.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
34	Closed Files	Engineering	CS053247-CS052265	Non-conforming Model M file containing November 1991 memorandum concerning non-conforming follow-up test results on Model M, notes pertaining to Model M gauging test results, deflector engineering drawings, correspondence with UL concerning non-conforming follow-up test results, memorandum concerning Model M ½ inch uprights ten-pan distribution, First Article Inspection Reports.
34	Closed Files	Engineering	CS053267-CS053273	Non-conforming Model M Wall Wetting file containing November 1992 correspondence with UL concerning follow-up test results on Model M, product information on automatic and open sprinklers.
34	Closed Files	Engineering	CS053274-CS053278	Coatings file containing correspondence with UL regarding resolution of non-conforming follow-up test results, Model FC engineering drawings, notes concerning dimensions on freon head parts.
34	Closed Files	Engineering	CS053279-CS053284	Model M Sensitivity Non-Conformance file containing September 1992 correspondence with UL concerning resolution of non-conforming follow-up test results on Model M.
34	Closed Files	Engineering	CS053285-CS053299	C-1A Omega Non-Conformance file containing photographs, correspondence with UL concerning resolution to non-conforming follow-up tests on Model C-1A Omega Commercial Sprinklers, correspondence with UL concerning conforming follow-up test results on Models C-1A sprinklers, Material Transfer Sheets.
34	Closed Files	Engineering	CS053300	Miscellaneous file (one page).

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
34	Closed Files	Engineering	CS053301	Miscellaneous file (one page)
34	Closed Files	Engineering	CS053302-CS053313	Ident-A-Fire file containing catalog page with product description for Ident-A-Fire feature, sprinkler and detector Omega models, catalog for commercial push-button switches, handwritten notes regarding Ident-A-Fire and FC issues, drawing for in-house switch, drawing for switch sub-assembly.
34	Closed Files	Engineering	CS053314-CS053321	Adjustable Wet Drop file containing Bill of Material, engineering drawings, engineering drawings with revisions.
34	Closed Files	Engineering	CS053322-CS053382	Flow Control file containing memorandum concerning Flow Control heads, memorandum concerning Flow Control head installation, Quality Plan for Flow Control sprinkler, revised drawing for Flow Control sprinkler, UL report issued October 1983, revised June 1988, on automatic and open sprinklers, trip report to Thermodisc in Ohio, First Article Inspection Reports.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
34	Closed Files	Engineering	CS053383-CS053441	Flow Control file containing engineering drawings for Flow Control Nozzle, Flow Control drawing with Bill of Material and Final Assembly Procedures, Engineering Change Notice for Flow Control sprinklers, revisions to Flow Control sprinkler drawings, Model M heat collector assembly drawings, R-1 Omega sprinkler drawings, Flow Control pendent and flush sprinklers, Bill of Material and Final Assembly Procedure drawings, product description for Flow Control On/Off automatic sprinkler, afinal report on the effect of different fin shapes on the response time of an Omega sprinkler prepared by Dr. Victor Greenhut, dated November 1994.
34	Closed Files	Engineering	CS053442-CS053445	Cease Fire file containing memorandum concerning Cease Fire model F freon modules transmitting drawing of Omega F sprinkler.
34	Closed Files	Engineering	CS053446-CS053455	O-ring file containing handwritten notes concerning design of the o-ring with computations and diagrams, invoices for materials, design steps instructions.
34	Closed Files	Engineering	CS053456-CS053494	Pellets file containing Non-Conformance Reports, histogram report, First Article Inspection Reports, Receiving Inspection Reports, Receiving Inspection Logs.
34	Closed Files	Engineering	CS053495-CS053502	Plunger Housing file containing handwritten drawing with calculations, engineering drawing with notes and revisions.
34	Closed Files	Engineering	CS053503-CS053504	Snap Disc Module file containing requisition for purchase order.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
34	Closed Files	Engineering	CS053505-CS053508	Ball Analysis file containing engineering drawings for ½ inch Omega, R-1 Omega, and Flow Control sprinkler.
34	Closed Files	Engineering	CS053509-CS053512	Pro QR file containing correspondence dated July 1990 concerning prohibitor update.
34	Closed Files	Engineering	CS053513-CS053529	Model M Sprinkler file containing memorandum concerning Model M sprinklers, M sprinkler warehouse return memorandum, Material Transfer, Model M sharp body end memorandum, retest of Model M sprinkler memorandum, handwritten notes with drawings and calculations, memorandum concerning adaptation of GB spring, engineering drawings with notations and revisions.
34	Closed Files	Engineering	CS053530-CS053533	O-rings/Grease file concerning lubricants for o-rings charts, design instructions.
34	Closed Files	Engineering	CS053534-CS053574	Omega Sprinkler with Silicone O-Ring Testing file containing June 1996 testing of Omega C-1A sprinkler head, May 1997 follow-up items, handwritten notes concerning manufacturing support summary, engineering drawings for o-rings and plunger housing, revised engineering drawings, C-1A squeeze chart, handwritten notes concerning tour of Omega area, handwritten abstracts concerning production built C-1A bodies.
34	Closed Files	Engineering	CS053575-CS053591	Cutting Oil file containing correspondence with UL concerning testing of silicone sealed series sprinklers, correspondence concerning proposed testing of pipe cutting fluid, handwritten notes concerning o-ring seal test, data results from o-ring test with fluid.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
34	Closed Files	Engineering	CS053592-CS053641	Omega file containing correspondence concerning installation of Omega sprinklers in New York City, July 1997 edition of Fire Talk, correspondence concerning Prohibitors.
34	Closed Files	Engineering	CS053642-CS053727	Palmer House file containing Engineering Diagnostic Reports, correspondence with UL regarding activation of sprinklers, handwritten notes concerning pellets and bearing discs, First Article Inspection Reports, memorandum concerning physical properties investigations, correspondence with UL concerning field fix of Omega heads, re-torque and staking operation for Omega heads, memorandum with UL concerning Omega sprinklers from Palmer House, production process sheets, engineering drawings with notes and calculations with histograms, correspondence with UL concerning Omega sprinkler duration tests, memorandum concerning field activation of Omega sprinklers, memorandum regarding inadvertent operation of Omega sprinklers at San Francisco Hilton, memorandum concerning retorque of sprinklers in San Francisco, trip reports, memorandum concerning observations and findings from field retorque and staking operation, handwritten notes concerning instruction for field service on Omega head.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
34	Closed Files	Engineering	CS053728-CS053767	Slow Moving Parts file containing memorandum concerning request for evaluation, memorandum concerning Prohibitor deflector markings, memorandum concerning shortened threads, engineering drawings of Omega R-1M sprinklers, Flow Control installation lists, memorandum concerning Creedmore Psychiatric Center.
34	Closed Files	Engineering	CS053768-CS053778	Ident-A-Fire file containing memorandum concerning air brushed concealed cover plates, engineering drawing, Ident-A-Fire specs for teflon fire alarm cable, catalog for micro miniature push button switches, engineering drawings for button cap.
34	Closed Files	Engineering	CS053779-CS053785	CNA Plaza file containing trip report to CNA Plaza Building, memorandum concerning chrome Omega field activation.
34	Closed Files	Engineering	CS053786-CS053793	Cincinnati Sprinkler Company file containing memorandum concerning Omega activation, trip report, blueprints for Pinecrest Group Home.
34	Closed Files	Engineering	CS053794-CS053805	Total Fire Inc. file containing memorandum concerning brass Omega sprinkler activation, memorandum concerning chrome Omega field leakage.
34	Closed Files	Engineering	CS053806-CS053812	The Clarion Hotel file containing memorandum concerning sprinkler activation, trip reports.
34	Closed Files	Engineering	CS053813-CS053817	Baltimore Inner Harbor file containing memorandum concerning sidewall sprinkler.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
34	Closed Files	Engineering	CS053818-CS053836	Culligan Fire Protection file containing memorandum concerning activation, chart of furnace room heads, memorandum concerning field activations, engineering drawings, trip reports.
34	Closed Files	Engineering	CS053837-CS053895	HSW file containing memorandum concerning recessed and sidewall sprinklers, Bill of Materials for horizontal sidewall, correspondence with UL regarding horizontal sidewall sprinklers, Material Transfers, UL notice of completion of engineering investigation, UL report, December 1985, on automatic sprinklers, memorandum on horizontal sidewall sprinklers, memorandum with UL concerning investigation of recessed sidewall sprinklers and pendent sprinklers.
34	Closed Files	Engineering	CS053896-CS053934	Modified M Spring file containing engineering drawings of spring washers, handwritten drawings with calculations of the M spring, correspondence with UL regarding alternate spring washers, test program description and samples, correspondence with UL regarding investigation into alternate spring washer and investigation of ejection spring, memorandum concerning sprinklers with alternate frame material and alternate spring washer, memorandum concerning approval examination of modified sprinklers.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
35	George Polan	Research and Development	CS053935-CS054079	"FC Bath Test Hangups" file containing handwritten memorandum on production and shipment status of Flow Control sprinklers, memorandum on Flow Control actuation follow-up, memorandum on reported hangup of FC Sprinklers in QC water bath test, memorandum on Model FC Sprinkler Ejection Spring Assembly Sequence Revision, handwritten notes on testing, memorandum on Model FC Sprinkler Snap Disc Module, handwritten notes on testing, memorandum on Flow Control Sprinklers Manufacturing and Shipment Release, memorandum on Test Results of two FC Sprinklers, handwritten memorandum on Flow Control Thermal Bath Test Samples, memorandum on Model FC Unauthorized Assembly Procedure, handwritten note on production and shipment of Flow Control Sprinkler, memorandum on FC Sprinkler Orifice Nozzle Ejector Springs Cavity Drawing Operation, handwritten memorandum on Quinpod Stem Hole Sizing, memorandum on Model FC Flow Control Sprinkler, memorandum on Sprinkler Pellet Squeezing Operation, handwritten notes, testing data, memoranda on Sprinkler Alleged Field Problem, memoranda regarding Sprinkler Heat Sensitive Indicator and Protective Cap Implementation, handwritten note on plunger housing, handwritten note on overtorquing, memorandum regarding Flow Control sprinkler activation at Richfield's Pike, New Jersey, letter regarding installation at State Department, letter regarding investigation of sprinklers at Fort Meade, Maryland, Flow Control Sprinkler Return Information, memorandum regarding

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
				Sprinkler at Pacific Power & Light in Portland, Oregon, memorandum regarding sprinklers at Time/Life Building in Chicago, information on sprinklers at Fort Meade, Maryland, packing slip from Monroe, part information on Adjustable Wet Drop Nipple manufactured by CSC, memorandum regarding Flow Control special test using Therm-o-Disc assemblies with handwritten notes, memorandum regarding sprinkler obsolete material salvage program, memoranda regarding orientation of snap disc module, memoranda regarding snap disc retorquing procedure, memoranda regarding snap disc module, memoranda regarding orientation of Therm-o-Disc assembly, memoranda regarding Flow Control sprinkler snap disc module, memoranda regarding retest of Flow Control sprinklers from Fort Meade, memoranda regarding Flow Control sprinklers approved by City of New York Board of Standards, memoranda regarding retest of Flow Control sprinklers, memoranda regarding file inspection and pack date code marking and inspection stamps, memoranda regarding snap disc performance under simulated fire condition, memoranda regarding quality audit Flow Control sprinklers, handwritten memoranda on discharge test samples, handwritten memoranda on transportation results, handwritten memorandum regarding test results, memoranda regarding Library of Congress retrofit, memoranda regarding Flow Control sprinkler diaphragm, memoranda regarding sprinkler retainer housing and silicon o-ring rolling operations, correspondence with Underwriters Laboratories on deflector for Flow Control

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
				handwritten memoranda regarding preformance at low pressure, handwritten memoranda regarding heat collector history of revision changes, Quality Control Defective Products Report, handwritten notes, memoranda regarding Flow Control production, handwritten memorandum regarding Flow Control production, memorandum regarding cost analysis, correspondence regarding testing at University of Maryland, memoranda regarding use of Model FC Flow Control sprinkler on pre-action system, memoranda regarding Flow Control sprinkler torque-hydro procedure, handwritten memoranda regarding sprinkler nozzle modification and engineering drawing.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
35	George Polan	Research and Development	CS054080-CS054273	"C-1A ADJ. ½ Residential, Commercial, Quick Response" file containing handwritten notes on testing, testing data sheets, correspondence with Underwriters Laboratories on the C-1A residential sprinkler, reports on distribution test, trip report to Underwriters Laboratories, Underwriters Laboratories report on Model C-1A and EC-20A adjustable pendent style sprinklers, variation notice from Underwriters Laboratories, list of UL Listed residential sprinklers, memoranda regarding C-1A residential Omega testing, memoranda regarding EC-20A residential Omega status, model comparison sheets, correspondence with Underwriters Laboratories regarding residential sprinkler with less than 18GPM/13GPM baseline characteristics, correspondence with Underwriters Laboratories regarding performance of C-1A Omega exposed to 10-Day CO_2 SO_2 corrosive environment, photographs, report from Underwriters Laboratories regarding investigation of Central Omega style sprinklers having everlube white paint finishes for decorative purposes, UL report regarding investigation of Central Omega style and standard frame type sprinklers having painted finishes for decorative purposes, UL report regarding Model C-1A adjustable pendent style sprinkler.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
35	George Polan	Research and Development	CS054274-CS054459	"FM-General File 93" file containing correspondence with Factory Mutual Research regarding contract examination of various sprinklers, proposal and service agreement, handwritten testing information, correspondence with Factory Mutual Research regarding draft performance requirements for extra large orifice sprinklers, correspondence with Factory Mutual regarding draft approval standard for residential and limited water supply automatic sprinklers, handwritten notes on testing, map to Factory Mutual Research.
35	George Poland	Research and Development	CS054460-CS054509	"Flow Controlled Diaphragm" file containing information from Falcon Products on manufacturing, memorandum regarding testing of diaphragm, correspondence with Rahco Rubber regarding diaphragm, hand drawings and volume calculations of diaphragm, handwritten testing information, memorandum regarding testing of sprinkler diaphragms, Quality Control Defective Products Reports, Bill of Material for ½ inch orifice Flow Control fixed temperature automatic sprinkler, handwritten memorandum on diaphragm modifications, memorandum on diaphragm modifications, correspondence with Rahco Rubber on diaphragm modifications, engineering drawings, Rahco proposed material specifications for diaphragm, information on dry pipe and deluge valve for fire protection services, memoranda regarding request for quality conformance requirements for diaphragm.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
35	George Polan	Research & Development	CS054510-CS054755	"On/Off Flow Control" file containing correspondence with Underwriters Laboratories on the Flow Control sprinkler using the Model M heat-collector assembly, correspondence with Factory Mutual on the FC sprinkler, Materials Transfers, reports from UL on testing of the Flow Control using the model L-1 heat-collector assembly, handwritten memos on Flow Control housing, handwritten notes on testing data, engineering drawings, First Article Inspection Reports, Non-Conformance Reports, engineering drawings, cut sheet for Flow Control sprinkler, UL report on flush type Flow Control sprinklers, cut sheet on pendant style model FC flush Flow Control automatic sprinklers, engineering drawings, memoranda and technical bulletin on Dupont products.
35	George Polan	Research & Development	CS054756-CS054814	"Modified Field Mechanism for Omega Style Sprinklers" file containing technical drawings, residential sprinkler costs comparison, data sheet from Underwriters Laboratories on sprinkler test, correspondence with Underwriters Laboratories, technical bulletin from 3M, memoranda on seal mechanism.
35	George Polan	Research & Development	CS054815-CS054883	"Phase 1" file containing UL testing information and reports, technical drawings, test data sheets, purchase requisition forms, handwritten notes and drawings.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
35	George Polan	Research & Development	CS054884-CS055005	"Revised Omega Mechanism" file containing handwritten notes, drawings and testing information, engineering drawings, draft correspondence regarding trademark or patent of modified Omega, Engineering Change Notices, memoranda on changes, technical information on recess and flush sprinkler heads, sales department charts of wrenches, memoranda on wrenches, memoranda on dry-pipe valve rubber facing, memoranda on dry-pipe valve, memoranda on Boca Hotel & Club retrofit, memoranda on Omega M-style heat collector assembly, memoranda on soldered M-style pellet housings, memoranda on the upright sprinkler, memoranda on o-ring sizing, memoranda on model E heads for Japan, memoranda on dimensions on Omega heads, memoranda on seal discs and handwritten notes on seal discs, memoranda and correspondence from Arrow Sprinkler regarding sprinklers at Hubbard Milling Company in Mankato, MN, memoranda regarding quality control, memoranda regarding transportation of sprinklers, memoranda regarding performance of Omega sprinklers in the field , memoranda regarding bath test procedures, memoranda regarding testing.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
35	George Polan	Research & Development	CS055006-CS055746	"R-1 Omega with M element" file containing Underwriters Laboratories reports, handwritten memoranda; correspondence with the Patent and Trademark Office, memoranda on the R-1 Omega, handwritten notes, engineering drawings, draft cut sheet for the Omega AC sprinkler, test information data sheets, engineering drawings, information on testing, testing information from Factory Mutual, information on testing from Carlson Southeast Corporation, handwritten memoranda, Quality Control Defective Product Report, memoranda regarding cost reduction analysis and proposals, First Article Inspection Reports, hand drawings, handwritten memoranda on the Library of Congress retrofit, U.S. patent for fire sprinkler apparatus, report from UL on the model R-2M Omega style pendant sprinkler, HEC-12 residential sidewall chronological chart, engineering drawings, correspondence, reports testing data regarding the HEC-12 residential sidewall sprinkler, memoranda regarding trip reports to Underwriters Laboratories, engineering drawings, handwritten test information, memoranda regarding the HEC-12, memoranda, correspondence, engineering drawings and technical reports regarding Snap Disc, report of trip to Shenedoah Nursing Home in Shenedoah, PA, prototype information on the right-angle Snap Disc assembly from Therm-O-Disc, memoranda and correspondence with Therm-O-Disc, shipment schedule, agenda for meeting between Central Sprinkler and Therm-O-Disc, Therm-O-Disc product enhancement proposal, testing data, packing

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
				memorandum, handwritten notes, testing information on the Therm-O-Disc Snap Disc module, correspondence with Therm-O-Disc, timetable for the Therm-O-Disc shut off automatic sprinkler, product development plan, memoranda regarding quality control trip report to Therm-O-Disc, test results of Therm-O-Disc products, correspondence, memoranda, testing results and reports from UL regarding the Therm-O-Disc Snap Disc module, shipping memoranda, Material Transfers, packing slips, engineering drawings, testing information of o-rings.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
35	George Polan	Research & Development	CS055747-CS055955	"Omega Hospital" file containing testing results from building research establishment, meeting minute notes from manufacturing working group of the Total Fire Protection Company, meeting minutes from the British Automatic Sprinkler Association, handwritten notes on testing, testing criteria for low-cost, low-pressure sprinkler systems installed in hospitals, memoranda regarding C-1A residential Omega UL listing chronology, engineering drawings, correspondence with Underwriters Laboratories on the C-1-EC-20 residential sprinkler, memoranda regarding Underwriters Laboratories, Underwriters Laboratories report on automatic sprinklers, correspondence to and from Underwriters Laboratories, testing information, memoranda on testing, handwritten notes on testing, Engineering Change Notices, parts quotation from Waltec Components, telex regarding Underwriters Laboratories authorization to increase expenses for project.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
35	George Polan	Research & Development	CS055956-CS056379	"EC-20A ADJ. ½" residential/specially listed commercial EC" file containing reports and correspondence with Underwriters Laboratories, handwritten memoranda on cost increase, handwritten testing information, internal memoranda regarding stamped heat-fins M-style, technical report from Factory Mutual Research regarding plunge test determination of sprinkler sensitivity, Factory Mutual Research study regarding effects on sprinkler performance of faster automatic sprinkler response in response to a developing fire, Factory Mutual Research report titled "Improving KDD", agenda for Sprinkler Technology seminar at Factory Mutual Center, report titled "Early Suppression/Fast Response Program - RDD Measurement", form titled "Building Estimate - Property Claims", testing data, Factory Mutual Research draft report titled "Community Sprinkler Fire Test -- Scottsdale, Arizona", handwritten notations on testing data, hand drawn drawings, engineering drawings, technical information on sprinkler from Grunau Sprinkler Manufacturing Company, correspondence with The Evans Findings Company regarding problems with sample, quotation from the Evans Findings Company, handwritten memoranda on the Evans Findings Company, memoranda on the Evans Findings Company.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
35	George Polan	Research & Development	CS056380-CS056616	"Omega-R 3.85K UL Test Data" file containing reports from Underwriters Laboratories, handwritten testing data, testing information, Underwriters Laboratories follow-up service procedures and report and inspection forms, correspondence with Underwriters Laboratories.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
36	Michael Fries	Engineering	CS056617-CS056643	"Omega o-ring leakage problems" file with engineering drawing, notes, and drawings.
36	Michael Fries	Engineering	CS056644-CS056652	Omega "next generation" file with memoranda regarding design criteria for experimental Omega sprinkler head.
36	Michael Fries	Engineering	CS056653-CS056666	"Omega (link & lever)" file with drawings and photograph of experimental sprinkler head.
36	Michael Fries	Engineering	CS056667-CS056740	Omega adjustable sprinkler head redesign file, including Engineering Change Notices, drawings, notes, calculations.
36	Michael Fries	Engineering	CS056741-CS056881	Omega-R 385 K Calculations file, including hand drawn diagrams with notes and calculations dating from 1983, engineering drawings for spring load calculation, furnished test results, memoranda regarding the outcome of testing, Underwriters Laboratories data sheet regarding discharge capacity, 1982 letter re: engineering drawings with revision for Omega-R sprinklers, snap disc housing, plunger housing, plunger and main housing, engineering drawings of Omega-R sprinkler deflector.
36	Michael Fries	Engineering	CS056882-CS056890	"Reduced Load Plunger Concept" file, including hand drawn diagrams with notes and calculations regarding plunger tapper.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
36	Michael Fries	Engineering	CS056891-CS056899	"Tamper Proof Omega" file, including correspondence with UL regarding Omega institutional and Ident-A-Fire horizontal sidewall with HEC-12 deflector, the Omega Indent-A-Fire sprinkler, handwritten notes regarding purchase of raw materials, Material Transfers.
36	Michael Fries	Engineering	CS056900-CS056904	Omega Lodgement Test file, containing correspondence with UL regarding lodgement test.
36	Michael Fries	Engineering	CS056905-CS056922	Vds West Germany file, containing correspondence regarding approved Central Sprinkler materials, photographs and listing information from Vds.
36	Michael Fries	Engineering	CS056923	Memorandum regarding Flow Control sprinkler heads.
36	Michael Fries	Engineering	CS056924-CS056931	Engineering report on activation of Omega style sprinklers.
36	Michael Fries	Engineering	CS056932-CS056935	Engineering drawings for R-1 Omega load diagram and calculation.
36	Michael Fries	Engineering	CS056936-CS056944	Correspondence with Underwriters Laboratories regarding commercial Omega head.
36	Michael Fries	Engineering	CS056945-CS056946	Handwritten list of listings for Omega sprinklers.
36	Michael Fries	Engineering	CS056947	Engineering drawing for Model M sub-assembly.
36	Michael Fries	Engineering	CS056948-CS056958	Correspondence with Underwriters Laboratories regarding the residential Omega, duration test, and the commercial Omega.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
36	Michael Fries	Engineering	CS056959-CS056999	JRM Associate file, containing invoices for professional services and diagnostic reports prepared by Dr. Myers with correspondence regarding testing of sprinkler part.
36	Michael Fries	Engineering	CS057000-CS057209	LO Omega file, containing calculations, fire data sheet, Material Transfers, correspondence with Underwriters Laboratories regarding fact finding investigation for Model EC-22, memorandum regarding additional testing of Omega EC-22 sprinkler, Underwriters Laboratories data sheet, cost increases from Underwriters Laboratories, correspondence with Underwriters Laboratories regarding Model L1-FC and L1-EC-22 sprinklers, quotes from vendors for manufacture of Omega sprinkler bodies, acknowledgments from Underwriter Laboratories regarding testing of subject sprinklers, bold materials for Omega LO sprinkler head, engineering drawings for LO Omega, spreadsheet regarding costs to manufacture the LO Omega test data.
36	Michael Fries	Engineering	CS057210-CS057338	Half Inch Omega Extrusion and Relaxation file, containing memorandum regarding long-term load test on Omega heads, handwritten notes and calculations, hand drawing diagrams, charts regarding extrusion rate for the Omega.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
36	Michael Fries	Engineering	CS057339-CS057357	M Sprinkler file, containing memorandum regarding Underwriters Laboratories procedures for testing, hand drawn diagrams, notes and calculations, chart regarding o-ring squeeze for Omega half-inch M heads, engineering drawing for spring washer, charts regarding wave spring washers, memorandum regarding Omega Model M, engineering drawings of Model M assembly, memorandum regarding half-inch and LO Model heads, cost analysis.
36	Michael Fries	Engineering	CS057358-CS057490	FC-FM file, containing memorandum regarding the Flow Control sprinkler diaphragm, FM testing, presentation regarding early fire suppression with fast response sprinklers.
36	Michael Fries	Engineering	CS057491-CS057500	Omega Engineering Report file, containing an engineering report on activation of Omega style sprinklers, engineering drawings of the R-1 Omega load diagram and calculation.
36	Michael Fries	Engineering	CS057501-CS057505	Omega Heat Transfer file, containing correspondence with Underwriter Laboratories regarding modified Omega C-1A handwritten response time calculations, engineering drawings for the M heat collector assembly pellet and the M heat collector.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
36	Michael Fries	Engineering	CS057506-CS057557	FM file, containing correspondence with vendor regarding Omega body, correspondence with Factory Mutual regarding approval examination for the Model C-1A standard flush sprinkler, correspondence with Factory Mutual regarding approval examination of Model AC standard concealed sprinkler, correspondence from Factual Mutual regarding approval of decorative sprinklers, approval of fast responding standard sprinklers, approval of quick response sprinklers, invoice from Factual Mutual, memorandum regarding heads for testing at FM, Material Transfers and memorandum regarding FM approval of the C-1A and Omega Adjustable Concealed sprinkler head status report.
36	Michael Fries	Engineering	CS057558-CS057570	C-1A 10 Pan Follow-up Test file, containing memorandum regarding the C-1A UL results, handwritten notes, correspondence from UL regarding conforming follow-up test results from the Model C-1A.
36	Michael Fries	Engineering	CS057571-CS057644	R-1A file, containing memorandum regarding the RX residential sprinkler, memorandum regarding trip report to UL, data sheet regarding testing of the Model R-1 Omega and an engineering report on the activation of Omega style sprinklers.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
36	Michael Fries	Engineering	CS057645-CS057719	White Painted Sprinklers A, H, M Omegas file containing handwritten note, correspondence from Underwriters Laboratories regarding investigation of Central Sprinkler's Omega style sprinklers having painted finishes for decorative purposes, engineering drawings, correspondence with UL regarding white polyester-coated Omega and conventional sprinklers, hand-drawn diagram and calculations, UL test report, correspondence with potential vendors of coating for decorative sprinkler heads, correspondence with Factory Mutual regarding corrosion proof and decorative coated sprinkler heads, memorandum regarding white painted sprinklers, current status.
36	Michael Fries	Engineering	CS057770-CS057746	HEC-12 Re-EX file containing correspondence with Underwriter Laboratories regarding revision of Model HEC-12 RES horizontal sidewall deflector, data sheets.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
36	Michael Fries	Engineering	CS057747-CS057895	Omega O-ring file, containing correspondence with Factual Mutual regarding investigation of Omega sprinklers utilizing new o-ring material, correspondence with Underwriters Laboratories regarding testing of Buna-N and Fluorocarbon o-ring for Omega sprinklers, Engineering Change Notices, correspondence with UL regarding provision of sample o-ring and sprinkler test result, data sheet, engineering drawings of various Omega parts, memorandum regarding Omega o-ring change status, correspondence with vendors regarding provision of o-ring material, certificates of conformance from Laboratory Testing Inc., Technical Service Request, UL test results, purchase orders to vendors; memorandum regarding Omega sprinkler enhancement, xerox pictures of o-rings, engineering drawings of Model M heat collector assembly pellet, comparison chart of o-ring material, engineering drawings of Omega R sprinkler dedicated o-ring, the Omega sprinkler plunger, the AC Omega heat collector and the M heat collector bearing disk, xerox of broken Buna-N o-ring.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
36	Michael Fries	Engineering	CS057896-CS057999	Half-Inch Omega FM file containing engineering drawings of the Omega sprinkler guide pin, correspondence with potential vendors, Factory Mutual test results, engineering drawings of Omega heat collector, handwritten note regarding Omega heads, correspondence with potential vendors of Omega part, handwritten diagrams with notes and calculations regarding testing of Omega sprinkler heads at Factory Mutual, correspondence with FM regarding testing of Omega sprinkler heads.
36	Michael Fries	Engineering	CS058000-CS058045	FM Flow Control Sprinkler file containing a comparative study of quick acting On/Off sprinkler heads to standard sprinkler heads, correspondence with Factory Mutual regarding Central's Model Flow Control Automatic Sprinkler, including K factor testing, correspondence with potential vendors of parts for the Flow Control sprinkler, a study regarding experimental program to evaluate the performance of quick acting On/Off sprinkler heads.
36	Michael Fries	Engineering	CS058046-CS058312	FM Omega file containing correspondence with Factory Mutual regarding investigation of Omega sprinklers utilizing new o-ring material, Central C-1A Omega project, Factory Mutual test results, technical service request, memorandum regarding FM approval of the C-1A and Omega Adjustable Concealed sprinkler head and Project Proposal form regarding FM approval for the C1A.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
36	Michael Fries	Engineering	CS058313-CS058364	Description of Underwriters Laboratories Omega testing regarding C-1A and EC.
36	Michael Fries	Engineering	CS058365-CS058501	Omega load tester data with marketing materials from Entran Devices Inc. and Condor Inc.
36	Michael Fries	Engineering	CS058502-CS058603	Test status, Material Transfers, status sheet, engineering drawings, cut sheets regarding HEC-12.
36	Michael Fries	Engineering	CS058604-CS058819	Underwriters Laboratories file regarding extended coverage residential sprinklers, including correspondence with UL, test data, memoranda, notes and cut sheets.
36	Michael Fries	Engineering	CS058820-CS058863	Underwriters Laboratories file regarding experimental residential sprinkler testing.
36	Michael Fries	Engineering	CS058864-CS059036	Test file regarding HEC-12 residential sprinkler, including Engineering Change Request, memoranda, engineering drawings, Technical Service Request, cut sheet and Underwriter Laboratories reports under quotation test status sheets, notes, correspondence with UL.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
37	Central Files	Quality Control	CS059037-CS059231	Quality Control Inspection Logs for January through June 1990
37	Central Files	Quality Control	CS059232-CS059317	Quality Control Inspection Logs for January through June 1989
37	Central Files	Quality Control	CS059318-CS059395	Quality Control Inspection Logs for July through December 1989
37	Central Files	Quality Control	CS059396-CS059868	Quality Control Inspection Logs for January through June 1990
37	Central Files	Quality Control	CS059869-CS060101	Quality Control Inspection Logs for January through June 1989
37	Central Files	Quality Control	CS060102-CS060539	Quality Control Inspection Logs for January through June 1990
37	Central Files	Quality Control	CS060540-CS061195	Quality Control Inspection Logs for January through June 1990
37	Central Files	Quality Control	CS061196-CS061726	Quality Control Inspection Logs for July through December 1989

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
38A	Central Files	Quality Control	CS061727-CS061739	Omega Quality Control Inspection Logs for April 1992
38A	Central Files	Quality Control	CS061740-CS061748	Omega Quality Control Inspection Logs for February 1992
38A	Central Files	Quality Control	CS061749-CS061752	Omega Quality Control Inspection Logs for January 1992
38A	Central Files	Quality Control	CS061753-CS061762	Snap Disc Room Quality Control Inspection Logs for November 1991
38A	Central Files	Quality Control	CS061763-CS061784	Snap Disc Room Quality Control Inspection Logs for April 1991
38A	Central Files	Quality Control	CS061785-CS061795	Snap Disc Room Quality Control Inspection Logs for July 1991
38A	Central Files	Quality Control	CS061796-CS061827	Snap Disc Room Quality Control Inspection Logs for August 1991
38A	Central Files	Quality Control	CS061828-CS061847	Snap Disc Room Quality Control Inspection Logs for May 1991
38A	Central Files	Quality Control	CS061848-CS061866	Snap Disc Room Quality Control Inspection Logs for June 1991
38A	Central Files	Quality Control	CS061867-CS061891	Snap Disc Room Quality Control Inspection Logs for March 1991
38A	Central Files	Quality Control	CS061892-CS061899	Omega Quality Control Inspection Logs for February 1991
38B	Central Files	Quality Control	CS061900-CS061911	Omega Quality Control Inspection Logs for November 1990

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
38B	Central Files	Quality Control	CS061912-CS061934	Omega Quality Control In Process Inspection Logs for October 1990
38B	Central Files	Quality Control	CS061935-CS061967	Omega Quality Control In Process Inspection Logs for September 1990
38B	Central Files	Quality Control	CS061968-CS062008	Omega Quality Control In Process Inspection Logs for August 1990
38B	Central Files	Quality Control	CS062009-CS062059	Omega Quality Control In Process Inspection Logs for July 1990

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
39	Closed Files	Engineering	CS062060-CS062090	Publication entitled Fire Sprinkler Systems - A Design Guide, publication entitled The Copper Connection, memorandum regarding dezincification, memorandum concerning corrosion leakage in copper systems, copper alloy 360 specifications.
39	Closed Files	Engineering	CS062091-CS062110	Engineering drawings for horizontal sidewall, void Omega sprinkler drawings, half inch Omega sprinkler drawings with revisions.
39	Closed Files	Engineering	CS062111-CS062206	Engineering Diagnostic Reports from 1987, 1988, 1986, revision 1987, 1986, 1985.
39	Closed Files	Engineering	CS062207-CS062250	Correspondence regarding sprinkler activation, memorandum from 1984 concerning sprinkler activation, 1988 analysis of Omega style sprinkler from Metallurgical Services.
39	Closed Files	Engineering	CS062251-CS062442	Correspondence concerning analysis of water samples, article on zinc-free bronzes, 1987 memorandum concerning installation of sprinklers in copper systems, 1988 memorandum concerning sprinkler head activiations, April 1988 report on corrosion analysis of sprinkler valves by McKnight and Associates, June 1988 report on Omega residential sprinkler leakage by Microprocess Labs, March 1988 sprinkler system slotted fastener report by Orange County materials, x-ray spectrum charts by McKnight and Associates, article on corrosion and dezincification of brass in water, article on brass resist dezincification, article on OM-metal complex brass for dye-casting.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
39	Closed Files	Engineering	CS062443-CS062536	Article on the myth of zinc free bronze, article on wrought copper alloys for corrosion, federal specifications for chromium plating dated 1967, fastening and joining reference for design and assembly, technical data for fasteners for corrosive environments, article on coatings and corrosion, KBI bulletin regarding corrosion resistance materials, Anaconda Brass Company publication on corrosion resistance of copper materials.
39	Closed Files	Engineering	CS062537-CS063765	[This bates range was inadvertantly erased during dictation; because box already has been produced to Complaint Counsel, this entry cannot be reconstructed.]

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
40	Central Files	Engineering	CS063766-CS063913	Bills of Materials and Final Assembly Procedures for Omega product line.
40	Central Files	Engineering	CS063914-CS063920	Engineering drawings of the GB-Glass Bulb and Model E sprinklers.
40	Central Files	Engineering	CS063921-CS063923	Engineering drawings of the Glass Bulb and Model M sprinklers-Spring Washer.
40	Central Files	Engineering	CS063924-CS063946	Engineering drawings of the Flow Control automatic sprinkler, Snap Disc guard ball, stem, restriction sleeve, sleeve spacer, faceplate filter and deflector.
40	Central Files	Engineering	CS063847-CS063859	Engineering drawings for the Flow Control filter sub-assembly plunger, housing sub-assembly, retainer housing sub-assembly, Snap Disc module sub-assembly, Snap Disc module assembly, Snap Disc module section assembly, and model sectional assembly.
40	Central Files	Engineering	CS063860-CS063870	Omega commercial - plunger housing sub-assembly, plate ring assembly, cover plate/supporting ring sub-assembly.
40	Central Files	Engineering	CS063871-CS063880	Engineering drawings of the R-1 Omega sprinkler plunger housing sub-assembly, stamp orientation assembly.
40	Central Files	Engineering	CS063881-CS063883	EC-20A Omega sprinkler plunging housing sub-assembly engineering drawings.
40	Central Files	Engineering	CS063884-CS063899	Engineering drawings of the HEC-12 Omega sprinkler, plunger housing sub-assembly.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
40	Central Files	Engineering	CS063900-CS063904	Engineering drawings for all products with model M heat-collector sub-assemblies and pellet assembly squeezing operation.
40	Central Files	Engineering	CS063905-CS063907	Engineering drawings of the HEC Omega sprinkler heat collector sub-assembly.
40	Central Files	Engineering	CS063908-CS063909	Engineering drawings of the Model M sprinklers bushing sleeve sub-assembly.
40	Central Files	Engineering	CS063910-CS063913	Engineering drawings of the Ident-A-Fire switch sub-assembly.
40	Central Files	Engineering	CS063945	Engineering drawing of deflector.
40	Central Files	Engineering	CS063946-CS063991	Engineering drawings of the Flow Control automatic sprinkler filter sub-assembly, sectional assembly, return spring assembly, rivet, teflon washer, field installation assembly, valve housing, seal housing, seal plunger, disc support, seal O-rings, calibration seal screw, sectional assembly, plunger nut, plunger housing, shield cover, discharge shield assembly, discharge shroud assembly, housing O-ring, retaining nut, shroud skirt, nozzle-sleeve, insulator.
40	Central Files	Engineering	CS063992-CS063998	Engineering drawings of the Omega sprinklers, dedicated O-ring, O-ring seal.
40	Central Files	Engineering	CS063999-CS064002	Engineering drawing of plunger housing for Omega sprinkler.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
40	Central Files	Engineering	CS064003-CS064033	Engineering drawings for Omega sprinklers for the deflector, the insulator, the retaining nuts, the heat collector, the washer, the spring, the spring holder, the cap, and the dedicated O-ring.
40	Central Files	Engineering	CS064034-CS064098	Engineering drawings for Omega sprinklers including the shipping tab, plunger, body, Ident-A-Fire switch body modification, dust cover, bushing, short guide pen, heat collector, cover plate, port ring, desk cover, plunger, O-ring, head protector, intermediate guide pin.
40	Central Files	Engineering	CS064099-CS064280	Engineering drawings for the Omega R-1M sprinkler including body, label, marking stamp, deflector, plunger, insulator, retaining nut, deflector, dedicated O-ring, plunger housing, main housing, extruded spring holder, plunger housing, deflector, dust cover, deflector canopy, long guide pin, head protector, cap, retaining collar, machine screw, housing, one-way screws, Ident-A-Fire switch housing modifications, rigid support collar, heat collector, rivet, pellet, bearing disc, casting frame, machining frame, casting/machining sprinkler frame.

In re Central Sprinkler Co. - Document Index - Phase II

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
1	William Pardue	Operations	CS-001-000001 CS-001-000003	Correspondence to sprinkler system installer regarding replacement of sprinklers at Thunderbird Gardens Retirement Resort.
1	William Pardue	Operations	CS-001-000004	Correspondence to Clarion Hotel regarding replacement of Omega Model HEC-20.
1	William Pardue	Operations	CS-001-000005 CS-001-000007	Ledger regarding insurance claims.
1	William Pardue	Operations	CS-001-000008 CS-001-000031	QR Sensor Valve file, including correspondence with vendor, memorandum, engineering drawings, Project Proposal form and notes regarding cost to manufacture.
1	William Pardue	Operations	CS-001-000032 CS-001-000033	Spreadsheet regarding production.
1	William Pardue	Operations	CS-001-000034 CS-001-000038	Notes regarding preparation of reports.
1	William Pardue	Operations	CS-001-000039 CS-001-000045	Notes regarding costs of sprinkler head production.
1	William Pardue	Operations	CS-001-000046 CS-001-000047	Notes regarding raw material variance report.
1	William Pardue	Operations	CS-001-000048 CS-001-000053	Notes regarding February 7, 1994 staff report.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
1	William Pardue	Operations	CS-001-000054 CS-001-000055	Memorandum regarding production dated February 28, 1994.
1	William Pardue	Operations	CS-001-000056	Scrap summary for week of February 3, 1994.
1	William Pardue	Operations	CS-001-000057 CS-001-000062	Top 100 parts production December 1995 report.
1	William Pardue	Operations	CS-001-000063 CS-001-000065	Spreadsheet regarding product sales.
1	William Pardue	Operations	CS-001-000066 CS-001-000067	Spreadsheet regarding consolidated warehouse excess inventory analysis by subcategory November 1994 to December 1995.
1	William Pardue	Operations	CS-001-000068 CS-001-000097	Multiple copies of Monthly Management Report/Manufacturing for November 1995 prepared by William Pardue.
1	William Pardue	Operations	CS-001-000098 CS-001-000112	Monthly Management Report/Purchasing November 19, 1995 prepared by Richard hobbs.
1	William Pardue	Operations	CS-001-000113 CS-001-000114	Spreadsheet regarding production.
1	William Pardue	Operations	CS-001-000115 CS-001-000117	Top 100 parts production October 1995 report.
1	William Pardue	Operations	CS-001-000118 CS-001-000119	Manufacturing projects in progress report.
1	William Pardue	Operations	CS-001-000120	Manufacturing engineering assignments report.
1	William Pardue	Operations	CS-001-000121	Notes regarding manufacturing reports.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
1	William Pardue	Operations	CS-001-000122 CS-001-000125	Cost center report.
1	William Pardue	Operations	CS-001-000126 CS-001-000128	Production work center listing 1996.
1	William Pardue	Operations	CS-001-000129	Production department listing 1996.
1	William Pardue	Operations	CS-001-000130 CS-001-000134	Memorandum regarding improvements in Mikron Department.
1	William Pardue	Operations	CS-001-000135 CS-001-000136	Status of ergonomic items report.
1	William Pardue	Operations	CS-001-000137 CS-001-000152	Equipment report dated 10/27/95.
1	William Pardue	Operations	CS-001-000153 CS-001-000154	Memorandum regarding manufacturing plans (long range) dated August 28, 1995.
1	William Pardue	Operations	CS-001-000155 CS-001-000159	Memorandum regarding capital budget detail.
1	William Pardue	Operations	CS-001-000160 CS-001-000163	Weekly Scrap report for 3/20/96.
1	William Pardue	Operations	CS-001-000164 CS-001-000176	Marketing meeting minutes for 3/25/96 and 12/1/96.
1	William Pardue	Operations	CS-001-000177 CS-001-000179	Rolling forecast report for 1996.
1	William Pardue	Operations	CS-001-000180 CS-001-000207	Weekly Scrap reports for May and June 1996.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
1	William Pardue	Operations	CS-001-000208 CS-001-000308	Scrap summary reports.
1	William Pardue	Operations	CS-001-000308 CS-001-000316	ULC approvals list.
1	William Pardue	Operations	CS-001-000317 CS-001-000319	ULC listed products report.
1	William Pardue	Operations	CS-001-000320 CS-001-000322	Chart regarding Central Sprinkler Co. products pending ULC listing.
1	William Pardue	Operations	CS-001-000323	Handwritten notes regarding Harrison design.
1	William Pardue	Operations	CS-001-000324 CS-001-000325	Ledger regarding product sales.
1	William Pardue	Operations	CS-001-000326 CS-001-000332	Sprinkler production report.
1	William Pardue	Operations	CS-001-000333 CS-001-000335	Sprinkler production versus sales report.
1	William Pardue	Operations	CS-001-000336 CS-001-000363	Sales inventory forecast for 1994.
1	William Pardue	Operations	CS-001-000364	Forecast for January sales versus production.
1	William Pardue	Operations	CS-001-000365 CS-001-000380	Sprinkler production report.
1	William Pardue	Operations	CS-001-000381 CS-001-000408	Sales inventory forecast for 1995.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
1	William Pardue	Operations	CS-001-000409 CS-001-000429	Sprinkler production reports.
1	William Pardue	Operations	CS-001-000430 CS-001-000431	Manufacturing plant blueprints.
1	William Pardue	Operations	CS-001-000432 CS-001-000433	Process improvement team meeting Omega department report.
1	William Pardue	Operations	CS-001-000434 CS-001-000436	Memorandum regarding process improvement teams.
1	William Pardue	Operations	CS-001-000437 CS-001-000441	Memorandum regarding German supplied dezincification resistant brass.
1	William Pardue	Operations	CS-001-000442 CS-001-000519	Central Sprinkler parts lists.
1	William Pardue	Operations	CS-001-000520 CS-001-000529	Non-Conformance Report summaries.
1	William Pardue	Operations	CS-001-000530 CS-001-000532	Sprinkler production report.
1	William Pardue	Operations	CS-001-000533 CS-001-000540	Transfer demand reports.
1	William Pardue	Operations	CS-001-000541 CS-001-000572	Schedule attainment report.
1	William Pardue	Operations	CS-001-000573 CS-001-000614	Material Rransfers.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
1	William Pardue	Operations	CS-001-000615 CS-001-000716	Transfer reports with Material Transfers.
1	William Pardue	Operations	CS-001-000717 CS-001-000768	Schedule attainment reports.
1	William Pardue	Operations	CS-001-000769 CS-001-000770	Spreadsheet regarding warehouse inventory.
1	William Pardue	Operations	CS-001-000771 CS-001-000820	Material Transfers.
1	William Pardue	Operations	CS-001-000821	Handwritten notes regarding Omega drawings.
1	William Pardue	Operations	CS-001-000822	Memorandum regarding Omega prints request.
1	William Pardue	Operations	CS-001-000823 CS-001-000964	Engineering drawings for Omega sprinkler parts and completed products.
1	Willism Pardue	Operations	CS-001-000965 CS-001-001017	Accounts payable price variance by part number within accounting code report.
1	William Pardue	Operations	CS-001-001018 CS-001-001030	Memorandum regarding daily Non-Conformance Reports with Non-Conformance Reports attached.
1	William Pardue	Operations	CS-001-001031 CS-001-001042	Memorandum regarding weekly summary of items inspected by vendors.
1	William Pardue	Operations	CS-001-001043 CS-001-001113	Non-Conformance Reports with weekly, monthly and yearly summaries.
1	William Pardue	Operations	CS-001-001114 CS-001-001125	Spreadsheet of Engineering Change Notices and their status.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
1	William Pardue	Operations	CS-001-001125 CS-001-001723	Daily Quality Control Incoming Inspection logs for 1994 and 1995.
2	William Pardue	Operations	CS-001-001724 CS-001-001753	Summarized sales reports.
2	William Pardue	Operations	CS-001-001754 CS-001-001759	Units shipped for month ending 10/31/89 report.
2	William Pardue	Operations	CS-001-001760 CS-001-001764	1991 budget report.
2	William Pardue	Operations	CS-001-001765 CS-001-001772	1991 profit plan for sprinklers.
2	William Pardue	Operations	CS-001-001773 CS-001-001779	Unit cost report.
2	William Pardue	Operations	CS-001-001780 CS-001-001786	Unit cost report.
2	William Pardue	Operations	CS-001-001787 CS-001-001809	Handwritten report regarding expected results for fiscal year 1990, 1991 and 1992.
2	William Pardue	Operations	CS-001-001810 CS-001-001816	1991 capital budget.
2	William Pardue	Operations	CS-001-001817 CS-001-001820	Project capital expenditures for 1991 through 1993.
2	William Pardue	Operations	CS-001-001821 CS-001-001827	1991 capital budget - revised.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
2	William Pardue	Operations	CS-001-001828 CS-001-001850	Engineering log listing Return Authorizations and Engineering Diagnostic Reports prepared.
2	William Pardue	Operations	CS-001-001851 CS-001-001858	Claims summary as of 5/18/92.
2	William Pardue	Operations	CS-001-001859 CS-001-001870	Claims summary as of 5/19/91.
2	William Pardue	Operations	CS-001-001871 CS-001-001873	Monthly diagnostic summary report.
2	William Pardue	Operations	CS-001-001874 CS-001-001882	1994 Paid Warranty Claims report.
2	William Pardue	Operations	CS-001-001883 CS-001-001885	1993 Paid Warranty Claims report.
2	William Pardue	Operations	CS-001-001886 CS-001-001899	Miscellaneous return authorizations for 1992 and 1993.
2	William Pardue	Operations	CS-001-001900 CS-001-001902	1993 Paid Warranty Claims report.
2	William Pardue	Operations	CS-001-001903 CS-001-001905	Engineering Diagnostic Reports for the R1M, C1 and Flow Control Omega sprinklers.
2	William Pardue	Operations	CS-001-001906 CS-001-001957	Return Authorizations for 1992 and 1993.
2	William Pardue	Operations	CS-001-001958	Corrective Action Request regarding grease, o-rings and connectors.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
2	William Pardue	Operations	CS-001-001959	Field trip report regarding Tarrytown Hilton for replacement of C-1A and HEC-12 Omega sprinklers.
2	William Pardue	Operations	CS-001-001960 CS-001-001961	Correspondence to Cobb County Fire Department regarding Omega residential sprinklers.
2	William Pardue	Operations	CS-001-001962 CS-001-001963	Memorandum regarding Omega sprinklers from Central Line Fire Protection in Dallas, Texas.
2	William Pardue	Operations	CS-001-001964	Memorandum regarding Omega HEC-12 sprinklers activation.
2	William Pardue	Operations	CS-001-001965 CS-001-001966	Trip report regarding Royal Bank Building to inspect EC-20 and C-1 Omega sprinklers.
2	William Pardue	Operations	CS-001-001967 CS-001-001970	Memorandum regarding visit to Therm-o-disc.
2	William Pardue	Operations	CS-001-001971 CS-001-001972	Quality control trip report to Fall River Foundry.
2	William Pardue	Operations	CS-001-001973	Memorandum regarding Therm-o-disc snap disc.
2	William Pardue	Operations	CS-001-001974	Memorandum regarding University of California Flow Control testing.
2	William Pardue	Operations	CS-001-001975	Memorandum regarding balance of contract with United States Department of State.
2	William Pardue	Operations	CS-001-001981	Correspondence with United States Department of State.
2	William Pardue	Operations	CS-001-001982	Memorandum regarding large orifice extended coverage Omega sidewall.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
2	William Pardue	Operations	CS-001-001983	Memorandum regarding follow-up to memorandum regarding United States Department of State.
2	William Pardue	Operations	CS-001-001986	Memorandum regarding flushed mount Flow Control sprinkler.
2	William Pardue	Operations	CS-001-001987	Memorandum regarding 145 degree Fahrenheit Omega head.
2	William Pardue	Operations	CS-001-001988 CS-001-001990	Common complaint log.
2	William Pardue	Operations	CS-001-001991 CS-001-002043	Monthly summaries of Engineering Diagnostic Reports for 1993 and 1994.
2	William Pardue	Operations	CS-001-002044 CS-001-002211	Scrap summaries for 1994 and 1995.
2	William Pardue	Operations	CS-001-002211.01- CS-001-002318	Operations meeting notes for 1988 and 1989.
2	William Pardue	Operations	CS-001-002319 CS-001-002325	Research and development reports for 1988.
2	William Pardue	Operations	CS-001-002326 CS-001-002367	Purchasing reports for 1988.
2	William Pardue	Operations	CS-001-002368 CS-001-002500	Handwritten notes from various management meetings for 1986, 1987 and 1988.
2	William Pardue	Operations	CS-001-002501 CS-001-002641	Product class reports.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
2	William Pardue	Operations	CS-001-002642 CS-001-002709	Open order inventory reports for 1988.
2	William Pardue	Operations	CS-001-002710 CS-001-002713	Finished goods inventory spreadsheet.
2	William Pardue	Operations	CS-001-002714 CS-001-002755	Handwritten list and spreadsheet regarding value of raw material and production.
2	William Pardue	Operations	CS-001-002756 CS-001-002758	Product class list dated 5/12/89.
2	William Pardue	Operations	CS-001-002759	Partial part number list dated 1983.
2	William Pardue	Operations	CS-001-002760 CS-001-002852	Central Sprinkler Co. parts list with sell price for 1989.
2	William Pardue	Operations	CS-001-002853 CS-001-003870	Operations meeting minutes and reports for 1990 to 1992.
3	William Pardue	Operations	CS-001-003871	Engineering report regarding Omega residential sprinkler.
3	William Pardue	Operations	CS-001-003872	Correspondence with Valley Fire Protection regarding return of residential sprinkler.
3	William Pardue	Operations	CS-001-003873 CS-001-003874	Correspondence with insurer regarding claim for water damage.
3	William Pardue	Operations	CS-001-003875 CS-001-003879	Report prepared by insurance adjuster regarding Embarcadero Center water damage claim.
3	William Pardue	Operations	CS-001-003880 CS-001-003891	Complaint filed in Hartford Insurance Co. and Sisters of Notre Dame v. Central Sprinkler Corp., et al.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
3	William Pardue	Operations	CS-001-003892 CS-001-003899	Report from Spray Safe regarding Protector M heads.
3	William Pardue	Operations	CS-001-003900 CS-001-004016	Production Schedules and reports for 1992.
3	William Pardue	Operations	CS-001-004017 CS-001-004039	Weekly Labor Analysis reports.
3	William Pardue	Operations	CS-001-004040 CS-001-004403	Material Review Board Meeting Minutes with attached Non-Nonformance Reports and summaries.
3	William Pardue	Operations	CS-001-004404 CS-001-004481	1992 Customer Return Authorizations and Engineering Diagnostic Reports.
3	William Pardue	Operations	CS-001-004482 CS-001-004519	1990 and 1991 Return Authorizations and Quality Control Return Goods Evaluations.
3	William Pardue	Operations	CS -001- 004520 CS -001- 004521	Memorandum regarding Omega Head Manufacturing/Cost Improvements and Related Field Service Suggested Changes.
3	William Pardue	Operations	CS -001- 004522 CS -001- 004538	Memorandum with attachment regarding Residential Installation Guide.
3	William Pardue	Operations	CS -001- 004539 CS -001- 004583	UL Follow-up Procedure for Omega Sprinkler Heads.
3	William Pardue	Operations	CS -001- 004584	Engineering Change Notice for Flow Control.
3	William Pardue	Operations	CS -001- 004585	Bill of Material for Flow Control.
3	William Pardue	Operations	CS -001- 004586	Engineering Drawing for Flow Control Sprinkler Body Sub-Assembly.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
3	William Pardue	Operations	CS -001- 004587 CS -001- 004592	Engineering Drawings of Flow Control Sub-assemblies.
3	William Pardue	Operations	CS -001- 004593 CS -001- 004627	Engineering Change Notices for 1988.
3	William Pardue	Operations	CS -001- 004628	Memorandum regarding Material Change of Products subject to Dezincification.
3	William Pardue	Operations	CS -001- 004629	Bill of Material for Omega Series Sprinkler Heads.
3	William Pardue	Operations	CS -001- 004630 CS -001- 004697	1989 Engineering Change Notices.
3	William Pardue	Operations	CS -001- 004698 CS -001- 004704	Bill of Material for Omega C-1A with attached memorandum regarding Bill of Material format.
3	William Pardue	Operations	CS -001- 004705 CS -001- 004706	Memorandum regarding Project Control Number Chart.
3	William Pardue	Operations	CS -001- 004723 CS -001- 004727	Memorandum regarding Supply of Sprinkler Heads Needed for UL Testing.
3	William Pardue	Operations	CS -001- 004728 CS -001- 004730	Correspondence with Rolf Jensen & Associates regarding Waldorf Astoria Hotel Omegas.
3	William Pardue	Operations	CS -001- 004731 CS -001- 004749	Corrective Action Requests for 1992.
3	William Pardue	Operations	CS -001- 004750 CS -001- 004757	Central Sprinkler Company Quality Audit Report for 1992.
3	William Pardue	Operations	CS -001- 004758 CS -001- 004761	Handwritten notes regarding project invoices and expense changes.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
3	William Pardue	Operations	CS -001- 004762 CS -001- 004810	Memoranda and spreadsheets regarding Engineering Group Time Allocation per Project.
3	William Pardue	Operations	CS -001- 004811 CS -001- 004826	Internal Memorandum regarding FM Approval of the C1-A and Omega Adjustable Concealed Sprinklers.
3	William Pardue	Operations	CS -001- 004827 CS -001- 004866	Memoranda and spreadsheets regarding Engineering Group Time Allocation per project.
3	William Pardue	Operations	CS -001- 004867 CS -001- 004871	Memorandum regarding Meeting Minutes of October 12, 1990 Engineering Projects Meeting.
3	William Pardue	Operations	CS -001- 004872 CS -001- 004905	Handwritten notes, memoranda and spreadsheets regarding Engineering Group time allocation per project.
3	William Pardue	Operations	CS -001- 004906 CS -001- 004923	Memoranda regarding Flow Control Sprinkler Diaphragm, Factory Mutual testing, and C-1A and Omega Adjustable Concealed Testing at Factory Mutual.
3	William Pardue	Operations	CS -001- 004924 CS -001- 004965	Engineering Group project reports, time sheets, and memoranda regarding engineering priority projects.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
4	William Pardue	Operations	CS -001- 004966 CS -001- 004968	Spreadsheet regarding inventory forecast.
4	William Pardue	Operations	CS -001- 004969	Report regarding Overseas Purchases.
4	William Pardue	Operations	CS -001- 004970	Headguard Analysis Report.
4	William Pardue	Operations	CS -001- 004971	Scrap Reports for 1990
4	William Pardue	Operations	CS -001- 004972 CS -001- 004976	Rework reserve report dated 10/31/88.
4	William Pardue	Operations	CS -001- 004977 CS -001- 004993	Safety Committee Meeting Minutes.
4	William Pardue	Operations	CS -001- 004994 CS -001- 005001	Personnel and payroll statistics reports for 1986 and 1987.
4	William Pardue	Operations	CS -001- 005002 CS -001- 005019	Work updates for Anthony Maiale for November 1994.
4	William Pardue	Operations	CS -001- 005020 CS -001- 005021	Blueprint of manufacturing plant.
4	William Pardue	Operations	CS -001- 005022 CS -001- 005059	1990 Price Book.
4	William Pardue	Operations	CS -001- 005060 CS -001- 005068	Handwritten list of products classes.
4	William Pardue	Operations	CS -001- 005069 CS -001- 005087	Handwritten list of products.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
4	William Pardue	Operations	CS -001- 005088 CS -001- 005139	Reports regarding certification and listing of Central Sprinkler products.
4	William Pardue	Operations	CS -001- 005140 CS -001- 005154	1990 Sales Data.
4	William Pardue	Operations	CS -001- 005155 CS -001- 005162	Memoranda regarding non-conforming UL reports with attached correspondence from UL.
4	William Pardue	Operations	CS -001- 005163 CS -001- 005169	Miscellaneous credit memos and receiving reports for Omega Sprinklers.
4	William Pardue	Operations	CS -001- 005170	Handwritten Board meeting notes for 06/07/90.
4	William Pardue	Operations	CS -001- 005171	Handwritten notes regarding Scrap Report.
4	William Pardue	Operations	CS -001- 005172 CS -001- 005179	Fixed asset reports.
4	William Pardue	Operations	CS -001- 005180 CS -001- 005189	Memorandum regarding computer program.
4	William Pardue	Operations	CS -001- 005190 CS -001- 005191	Manufacturing Engineering assignments list for 1995.
4	William Pardue	Operations	CS -001- 005192 CS -001- 005204	Manufacturing Engineering resource improvement list.
4	William Pardue	Operations	CS -001- 005205 CS -001- 005206	Fixed asset report.
4	William Pardue	Operations	CS -001- 005207 CS -001- 005220	Manufacturing Engineering resource improvement reports.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
4	William Pardue	Operations	CS -001- 005221 CS -001- 005224	Memorandum regarding Manufacturing Engineering status report.
4	William Pardue	Operations	CS -001- 005225	Cost Center report for 1995.
4	William Pardue	Operations	CS -001- 005226	Handwritten notes regarding project time line.
4	William Pardue	Operations	CS -001- 005227	Memorandum regarding Flow Control Heat Collector Assembly.
4	William Pardue	Operations	CS -001- 005228	Diagram of building layout.
4	William Pardue	Operations	CS -001- 005229 CS -001- 005235	1994 Excess Inventory Report.
4	William Pardue	Operations	CS -001- 005236 CS -001- 005238	Warehouse Excess Inventory Analysis.
4	William Pardue	Operations	CS -001- 005239 CS -001- 005243	Adjustments to Warehouse Inventory Report.
4	William Pardue	Operations	CS -001- 005244 CS -001- 005246	Spreadsheet regarding product descriptions.
4	William Pardue	Operations	CS -001- 005247 CS -001- 005280	Handwritten notes with attached engineering drawings for various products including Omega brand sprinklers.
4	William Pardue	Operations	CS -001- 005281 CS -001- 005295	Project Proposals.
4	William Pardue	Operations	CS -001- 005296 CS -001- 005409	Quality Score Cards for April and May 1996.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
4	William Pardue	Operations	CS -001- 005410 CS -001- 005416	Memorandum regarding Chart of Accounts.
4	William Pardue	Operations	CS -001- 005417 CS -001- 005420	Report regarding global table maintenance.
4	William Pardue	Operations	CS -001- 005421 CS -001- 005478	Memoranda regarding work centers.
4	William Pardue	Operations	CS -001- 005479 CS -001- 005498	Spreadsheet regarding Central Sprinkler products and certifications.
4	William Pardue	Operations	CS -001- 005499 CS -001- 005501	Handwritten notes regarding Omega products with attached product chart.
4	William Pardue	Operations	CS -001- 005502 CS -001- 005514	Memorandum with attachments regarding ESLO seal design project.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
5	William Pardue	Operations	CS -001- 005515 CS -001- 005520	On hand balance reports.
5	William Pardue	Operations	CS -001- 005521 CS -001- 005523	September 1995 Inventory Analysis.
5	William Pardue	Operations	CS -001- 005524 CS -001- 005530	Top 100 reports.
5	William Pardue	Operations	CS -001- 005531 CS -001- 005534	Memorandum regarding managing inventory.
5	William Pardue	Operations	CS -001- 005535 CS -001- 005544	Facsimiles from Landsdale Services regarding sales of Omegas in Australia.
5	William Pardue	Operations	CS -001- 005545 CS -001- 005555	Schedule Attainment report.
5	William Pardue	Operations	CS -001- 005556 CS -001- 005588	Red Area Logs for rejected raw mateial.
5	William Pardue	Operations	CS -001- 005589	Inventory Value Analysis for Raw Materials.
5	William Pardue	Operations	CS -001- 005590 CS -001- 005597	Sales Forecasts.
5	William Pardue	Operations	CS -001- 005598	Material Review Board Meeting Minutes.
5	William Pardue	Operations	CS -001- 005599 CS -001- 005601	Red Area Log.
5	William Pardue	Operations	CS -001- 005602 CS -001- 005991	Daily Quality Control Receiving Inspection Logs for 1994.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
5	William Pardue	Operations	CS -001- 005992 CS -001- 006009	Memorandum with attachments regarding Non-Conformance Report log.
5	William Pardue	Operations	CS -001- 006010 CS -001- 006125	Daily Quality Control Receiving Logs for 1994.
5	William Pardue	Operations	CS -001- 006126 CS -001- 006164	Engineering Change Notices for 1994 and 1993.
5	William Pardue	Operations	CS -001- 006165 CS -001- 006167	Engineering drawings for R-1A Omega Sprinklers, Final Assembly and Bill of Materials for R-1M, and HEC-12 Deflector.
5	William Pardue	Operations	CS -001- 006168 CS -001- 006704	Schedule Attainment Reports.
5	William Pardue	Operations	CS -001- 006705 CS -001- 006759	Non-Conformance Report logs with attached Non-Conformance Reports.
5	William Pardue	Operations	CS -001- 006760 CS -001- 006761	Miscellaneous invoices for Omega products.
5	William Pardue	Operations	CS -001- 006762 CS -001- 006782	Month-to-date Net Quantity by Product Class Reports.
5	William Pardue	Operations	CS -001- 006783 CS -001- 006789	Management article.
5	William Pardue	Operations	CS -001- 006790 CS -001- 006791	Handwritten notes regarding B.P. Algorythm.
5	William Pardue	Operations	CS -001- 006792 CS -001- 006793	Memorandum regarding elimination of product lines.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
5	William Pardue	Operations	CS -001- 006794 CS -001- 006813	Flow Control Alternate Materials File including memorandum regarding quotations for alternate materials for the Library of Congress, GB o-ring contamination, soldering paste, fusion versus indium soldering paste, and Flow Control cut sheets.
5	William Pardue	Operations	CS -001- 006814 CS -001- 006825	1989 Price Comparison.
5	William Pardue	Operations	CS -001- 006826 CS -001- 006834	Handwritten ledgers regarding price comparisons.
5	William Pardue	Operations	CS -001- 006835 CS -001- 006839	Month-to-date net sales by product class report for 1983.
5	William Pardue	Operations	CS -001- 006840	Finished Goods Inventory for February 1984.
5	William Pardue	Operations	CS -001- 006841 CS -001- 006844	Memorandum regarding Central Wrenches.
5	William Pardue	Operations	CS -001- 006845 CS -001- 006846	Engineering drawings for wrenches.
5	William Pardue	Operations	CS -001- 006847 CS -001- 006849	Memorandum regarding wrenches for Omegas.
5	William Pardue	Operations	CS -001- 006850 CS -001- 006859	Unit sales by product class for 1989 through 1993.
5	William Pardue	Operations	CS -001- 006860 CS -001- 006864	Capital expenditures spreadsheet for 1990 and 1991.
5	William Pardue	Operations	CS -001- 006865	Handwritten notes regarding cost savings.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
5	William Pardue	Operations	CS -001- 006866 CS -001- 006873	1991 Capitol budget.
5	William Pardue	Operations	CS -001- 006874 CS -001- 006894	Sales Forecasts for 1990 and 1991.
5	William Pardue	Operations	CS -001- 006895 CS -001- 006922	Labor reports for 1990 and 1991.
5	William Pardue	Operations	CS -001- 006923 CS -001- 006927	Material cost reports for 1991.
5	William Pardue	Operations	CS -001- 006928 CS -001- 006940	Inventory forecosts for 1990 and 1991.
5	William Pardue	Operations	CS -001- 006941 CS -001- 006970	1991 Profit Plan subreports regarding sales forecasts and shipment quantities.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
6	William Pardue	Operations	CS -001- 006971 CS -001- 006982	Manufacturing Work Center Reports.
6	William Pardue	Operations	CS -001- 006983 CS -001- 006994	Monthly Diagnostic Summary Reports for 1983 and 1984.
6	William Pardue	Operations	CS -001- 006995 CS -001- 007031	Return Authorizations for 1983.
6	William Pardue	Operations	CS -001- 007032 CS -001- 007033	Insurance Summary Report.
6	William Pardue	Operations	CS -001- 007034 CS -001- 007035	Central Sprinkler Company Quality Audit Report regarding Omega training.
6	William Pardue	Operations	CS -001- 007036 CS -001- 007039	August 31, 1990 Physical Inventory Report.
6	William Pardue	Operations	CS -001- 007040 CS -001- 007146	Inventory Reports from 1983 to 1990.
6	William Pardue	Operations	CS -001- 007147 CS -001- 007156	Engineering Group project spreadsheets.
6	William Pardue	Operations	CS -001- 007157 CS -001- 007172	Forecast for 11/12/91.
6	William Pardue	Operations	CS -001- 007173	Labor Reporting Codes report.
6	William Pardue	Operations	CS -001- 007174 CS -001- 007175	Notes regarding labor reports.
6	William Pardue	Operations	CS -001- 007176	Memorandum regarding labor reporting codes.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
6	William Pardue	Operations	CS -001- 007177 CS -001- 007179	Weekly direct labor analysis for October 1991.
6	William Pardue	Operations	CS -001- 007180 CS -001- 007185	Capitol Expenditures spreadsheet for 1991-92.
6	William Pardue	Operations	CS -001- 007186 CS -001- 007192	1992 Capitol Budget.
6	William Pardue	Operations	CS -001- 007193 CS -001- 007198	1991 Capitol Budget.
6	William Pardue	Operations	CS -001- 007199	List of patents and personnel issues.
6	William Pardue	Operations	CS -001- 007200 CS -001- 007202	Correspondence from Fire Protection Systems Inc. regarding on/off sprinklers.
6	William Pardue	Operations	CS -001- 007203 CS -001- 007204	Field trip report for vendor evaluation regarding plunger and main housing of Omega sprinkler heads.
6	William Pardue	Operations	CS -001- 007205 CS -001- 007210	Memoranda regarding return of Omega sprinkler heads due to activation.
6	William Pardue	Operations	CS -001- 007211	Correspondence from Johnson Fire Protection Company regarding 76A and 76 heads.
6	William Pardue	Operations	CS -001- 007212 CS -001- 007214	Correspondence from U.S. Fire Control Corporation regarding licensing of patent for on/off sprinkler.
6	William Pardue	Operations	CS -001- 007215 CS -001- 007216	Correspondence from Central Sprinkler to U.S. Fire Control regarding license of patent for on/off sprinkler.
6	William Pardue	Operations	CS -001- 007217 CS -001- 007250	Various trip reports to investigate activations of Omega sprinkler heads and vendor visits.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
6	William Pardue	Operations	CS -001- 007251 CS -001- 007265	Spray Safe Management accounts report for October 1987.
6	William Pardue	Operations	CS -001- 007266 CS -001- 007281	Spray Safe Automatic Sprinklers management accounts report for September 1987.
6	William Pardue	Operations	CS -001- 007282 CS -001- 087290	Spray Safe Automatic Spriklers management accounts reports for August 1987.
6	William Pardue	Operations	CS -001- 007291 CS -001- 007300	Spray Safe Automatic Sprinklers management accounts report for July 1987.
6	William Pardue	Operations	CS -001- 007301 CS -001- 007312	Spray Safe Automatic Sprinklers management accounts report for July 1987.
6	William Pardue	Operations	CS -001- 007313 CS -001- 007319	Profit and Loss sheet for Spray Safe Automatic Sprinklers for May 1987.
6	William Pardue	Operations	CS -001- 007320 CS -001- 007327	Balance sheet for month ending April 1987 from Spray Safe Automatic Sprinklers.
6	William Pardue	Operations	CS -001- 007328 CS -001- 007335	Balance sheet for month ending March 1987 from Spray Safe Automatic Sprinklers.
6	William Pardue	Operations	CS -001- 007336 CS -001- 007345	Spray Safe Automatic Sprinkler management accounts report for September 1986.
6	William Pardue	Operations	CS -001- 007346 CS -001- 007353	Spray Safe Automatic Sprinkler management accounts report for July 1986.
6	William Pardue	Operations	CS -001- 007354 CS -001- 007361	Spray Safe Automatic Sprinkler management accounts report for June 1986.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
6	William Pardue	Operations	CS -001- 007362 CS -001- 007372	Spray Safe Automatic Sprinkler management accounts report for November 1985.
6	William Pardue	Operations	CS -001- 007373 CS -001- 007385	Spray Safe Automatic Sprinkler management accounts report for October 1985.
6	William Pardue	Operations	CS -001- 007386 CS -001- 007389	Internal memorandum regarding simple cost analysis for heat sensor assembly machine for the Omega Flow Control and M type sprinklers.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
7	William Pardue	Operations	CS-001-007390 CS-001-007523	[This bates range was inadvertantly erased during dictation; because box already has been produced to Complaint Counsel, this entry cannot be reconstructed.]
7	William Pardue	Operations	CS-001-007524 CS-001-007527	Report listing Omega sprinklers.
7	William Pardue	Operations	CS-001-007528 CS-001-007539	Finished goods reports.
7	William Pardue	Operations	CS-001-007540 CS-001-007541	Handwritten notes regarding Omega residential and commercial sprinklers.
7	William Pardue	Operations	CS-001-007542 CS-001-007560	1989 Price Book.
7	William Pardue	Operations	CS-001-007561	Handwritten notes regarding Model R1, C1A and EC20 sprinkler heads.
7	William Pardue	Operations	CS-001-007562 CS-001-007573	Omega Residential Sprinklers Advanced Installation Guide.
7	William Pardue	Operations	CS-001-007574	Handwritten notes regarding C1A Omega sprinkler heads.
7	William Pardue	Operations	CS-001-007575 CS-001-007642	Draft 1987 Price Book.
7	William Pardue	Operations	CS-001-007643	Handwritten notes regarding dry sprinklers.
7	William Pardue	Operations	CS-001-007644 CS-001-007653	Draft cut sheets.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
7	William Pardue	Operations	CS-001-007654 CS-001-007655	Memorandum regarding new part numbers for Flow Control sprinklers.
7	William Pardue	Operations	CS-001-007656	Handwritten note regarding suggestions for Flow Control sprinklers.
7	William Pardue	Operations	CS-001-007657	List of Flow Control models available.
7	William Pardue	Operations	CS-001-007658 CS-001-007661	Handwritten notes regarding Omega product line.
7	William Pardue	Operations	CS-001-007662	Report listing Omega sprinkler models.
7	William Pardue	Operations	CS-001-007663 CS-001-007666	Report listing Omega sprinkler heads by description.
7	William Pardue	Operations	CS-001-007667 CS-001-007676	Index to 1987 Price Book.
7	William Pardue	Operations	CS-001-007677	Correspondence from EFF Incorporated regarding revision of EFF price list.
7	William Pardue	Operations	CS-001-007678	Handwritten notes regarding headguards.
7	William Pardue	Operations	CS-001-007679 CS-001-007713	1986 Price Book.
7	William Pardue	Operations	CS-001-007714 CS-001-007749	1989 Price Book.
7	William Pardue	Operations	CS-001-007750	Handwritten spreadsheet regarding Omega models available.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
7	William Pardue	Operations	CS-001-007751 CS-001-007752	Memoranda regarding the HEC-12 correct listing classification.
7	William Pardue	Operations	CS-001-007753 CS-001-007754	Handwritten notes regarding new and old series HEC-12 sprinkler heads.
7	William Pardue	Operations	CS-001-007755	Memorandum regarding HEC-12 correct listing classification.
7	William Pardue	Operations	CS-001-007756 CS-001-007759	Draft cut sheets for Omega sprinkler head.
7	William Pardue	Operations	CS-001-007760	Report listing Omega sprinkler heads by products class.
7	William Pardue	Operations	CS-001-007761 CS-001-007762	Sprinkler wrench chart.
7	William Pardue	Operations	CS-001-007763 CS-001-007786	Cut sheets for various Omega sprinkler heads.
7	William Pardue	Operations	CS-001-007787 CS-001-007806	Product list.
7	William Pardue	Operations	CS-001-007807 CS-001-007813	Memoranda regarding technical services.
7	William Pardue	Operations	CS-001-007814	Listing for Central Sprinkler products.
7	William Pardue	Operations	CS-001-007815 CS-001-007818	Tech Notes article regarding residential sprinklers.
7	William Pardue	Operations	CS-001-007819 CS-001-007820	Labor cost summary for Omegas.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
7	William Pardue	Operations	CS-001-007821 CS-001-007899	Labor cost summaries including Omega flowchart.
7	William Pardue	Operations	CS-001-007900	Handwritten notes regarding Haden Field Group meeting.
7	William Pardue	Operations	CS-001-007901 CS-001-007903	Management Role and Responsibility Control documents.
7	William Pardue	Operations	CS-001-007904 CS-001-007961	Raw Material reports.
7	William Pardue	Operations	CS-001-007962	Memorandum regarding development of quick response sprinkler with special spray.
7	William Pardue	Operations	CS-001-007963 CS-001-007966	Report regarding marketing overview for 1984.
7	William Pardue	Operations	CS-001-007967 CS-001-008060	Warehouse inventory report.
7	William Pardue	Operations	CS-001-008061 CS-001-008522	Material Transfers.
7	William Pardue	Operations	CS-001-008523 CS-001-008524	Memorandum regarding labor reporting codes.
7	William Pardue	Operations	CS-001-008525 CS-001-008526	Ledger regarding production analysis, second quarter 1991.
7	William Pardue	Operations	CS-001-008527 CS-001-008530	Proposed agendas for meetings with Vds, LPCB, and Spraysafe representatives.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
7	William Pardue	Operations	CS-001-008531 CS-001-008565	Memoranda to Spraysafe Automatic Sprinklers regarding experimental product.
7	William Pardue	Operations	CS-001-008565 CS-001-008566	Monthly Diagnostic summary report for May 1993.
7	William Pardue	Operations	CS-001-008567 CS-001-008582	Return Authorizations for 1983.
7	William Pardue	Operations	CS-001-008583	Ledger regarding obsolescence review summary for 10/31/92.
7	William Pardue	Operations	CS-001-008584 CS-001-008600	Raw Material report dated 9/30/92.
7	William Pardue	Operations	CS-001-008601 CS-001-008623	Raw Material report for 9/30/92.
7	William Pardue	Operations	CS-001-008624 CS-001-008625	Defective Material Reports for Omega raw materials.
7	William Pardue	Operations	CS-001-008626 CS-001-008648	Central Sprinkler products list by class.
7	William Pardue	Operations	CS-001-008649 CS-001-008685	Packaging inserts and cut sheets for various Omega model sprinklers.
7	William Pardue	Operations	CS-001-008686 CS-001-008689	Draft agenda for meeting at Central Sprinkler with representatives of Central Sprinkler, Spraysafe and Glinecke Glass on July 19, 1988.
7	William Pardue	Operations	CS-001-008690 CS-001-008693	Handwritten notes regarding meeting at Central Sprinkler on July 19, 1988.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
7	William Pardue	Operations	CS-001-008694 CS-001-008746	Reports prepared by Spraysafe Automatic Sprinklers regarding production.
7	William Pardue	Operations	CS-001-008747 CS-001-008750	Log regarding days spent at Spraysafe.
7	William Pardue	Operations	CS-001-008751 CS-001-008763	Minutes of meeting with Spraysafe Automatic Sprinkler management held December 17, 1986.
7	William Pardue	Operations	CS-001-008764 CS-001-008766	Spraysafe management account report for October and November 1986 and August 1986.
7	William Pardue	Operations	CS-001-008768 CS-001-008774	Minutes of meeting held June 16, 1986 with Spraysafe management.
8	William Pardue	Operations	CS-001-008775 CS-001-008796	Spraysafe Automatic Sprinklers management accounts report for August 1992.
8	William Pardue	Operations	CS-001-008777 CS-001-008817	Spraysafe Automatic Sprinklers management accounts report for July 1992.
8	William Pardue	Operations	CS-001-008718 CS-001-008837	Spraysafe Automatic Sprinklers management accounts report for March 1992.
8	William Pardue	Operations	CS-001-008838 CS-001-008858	Spraysafe Automatic Sprinklers management accounts report for May 1992.
8	William Pardue	Operations	CS-001-008859 CS-001-008880	Spraysafe Automatic Sprinklers Company accountant's report for second quarter.
8	William Pardue	Operations	CS-001-008881 CS-001-008899	Spraysafe Automatic Sprinklers management accounts report for February 1992.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
8	William Pardue	Operations	CS-001-008900 CS-001-008918	Spraysafe Automatic Sprinklers Company accountant's report for first quarter.
8	William Pardue	Operations	CS-001-008919 CS-001-008939	Spraysafe Automatic Sprinklers management accounts report for June 1992.
8	William Pardue	Operations	CS-001-008940 CS-001-008960	Spraysafe Automatic Sprinklers management accounts report for December 1991.
8	William Pardue	Operations	CS-001-008961 CS-001-008980	Spraysafe Automatic Sprinklers management accounts report for November 1991.
8	William Pardue	Operations	CS-001-008981 CS-001-009001	Spraysafe Automatic Sprinklers management accounts report for September 1991.
8	William Pardue	Operations	CS-001-009002 CS-001-009021	Spraysafe Automatic Sprinklers management accounts report for August 1991.
8	William Pardue	Operations	CS-001-009022 CS-001-009041	Spraysafe Automatic Sprinklers management accounts report for December 1990.
8	William Pardue	Operations	CS-001-009042 CS-001-009060	Spraysafe Automatic Sprinklers management accounts report for November 1990.
8	William Pardue	Operations	CS-001-009061 CS-001-009080	Spraysafe Automatic Sprinklers management accounts report for June 1991.
8	William Pardue	Operations	CS-001-009081 CS-001-009100	Spraysafe Automatic Sprinklers management accounts report for June 1991.
8	William Pardue	Operations	CS-001-009101 CS-001-009121	Spraysafe Automatic Sprinklers management accounts report for May 1991.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
8	William Pardue	Operations	CS-001-009122 CS-001-009142	Spraysafe Automatic Sprinklers management accounts report for April 1991.
8	William Pardue	Operations	CS-001-009143 CS-001-009161	Spraysafe Automatic Sprinklers management accounts report for March 1991.
8	William Pardue	Operations	CS-001-009162 CS-001-009181	Spraysafe Automatic Sprinklers management accounts report for November 1991.
8	William Pardue	Operations	CS-001-009182 CS-001-009199	Spraysafe Automatic Sprinklers management accounts report for January 1991.
8	William Pardue	Operations	CS-001-009200 CS-001-009221	Spraysafe Automatic Sprinklers Company accountant's report for fourth quarter.
8	William Pardue	Operations	CS-001-009222 CS-001-009268	UL follow-up procedures for various Omega sprinkler heads.
8	William Pardue	Operations	CS-001-009269 CS-001-009280	Cut sheets for Protector M Omega sprinkler heads.
8	William Pardue	Operations	CS-001-009281 CS-001-009306	Spreadsheets, memoranda, and correspondence regarding VDS, LPC, FOC, UL, and FM approval of Central Sprinkler products.
8	William Pardue	Operations	CS-001-009307 CS-001-009336	Published listings of Central Sprinkler products.
8	William Pardue	Operations	CS-001-009337 CS-001-009372	1991 UL Listing Directory.
8	William Pardue	Operations	CS-001-009373 CS-001-009395	Excerpts from Procedures Manual required by ISO 9000.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
8	William Pardue	Operations	CS-001-009395 CS-001-009451	Quality System Manual.
8	William Pardue	Operations	CS-001-009452 CS-001-009523	Quality System Manual.
8	William Pardue	Operations	CS-001-009524 CS-001-009618	Quality Control Manual.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
9	William Pardue	Operations	CS-001-009619- CS-001-009799	[This bates range was inadvertently erased during dictation; because box already has been produced to Complaint Counsel, this entry cannot be reconstructed.]
9	William Pardue	Operations	CS-001-009800 - CS-001-009811	Transfers chart dated March 18, 1987.
9	William Pardue	Operations	CS-001-009812 - CS-001-009878	Forecast labor estimate summaries for September 1993.
9	William Pardue	Operations	CS-001-009879 - CS-001-009890	Production report summary for January 1998.
9	William Pardue	Operations	CS-001-009891 - CS-001-009990	Production report for November 1997.
9	William Pardue	Operations	CS-001-009991 - CS-001-010073	Production report for January 1998.
9	William Pardue	Operations	CS-001-010074 - CS-001-010157	Production report for December 1997.
9	William Pardue	Operations	CS-001-010158 - CS-001-010274	Material\labor\overhead costs sales analysis by class for period ending September dated October 1997.
9	William Pardue	Operations	CS-001-010275 - CS-001-010365	Material/labor/overhead costs sales analysis by class for period ending October dated November 1997.
9	William Pardue	Operations	CS-001-010366 - CS-001-010467	Sales analysis by class for period ending September dated October 1997.
9	William Pardue	Operations	CS-001-010468 - CS-001-010558	Sales analysis by class\subclass and part period ending October dated November 1997.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
9	William Pardue	Operations	CS-001-010559 - CS-001-010647	Material\labor\overhead costs sales analysis class\subclass and part period ending January dated February 1998.
9	William Pardue	Operations	CS-001-010648 - CS-001-010737	Sales analysis by class\subclass and part period ending January printed February 1998, November 1997 memorandum concerning project proposal (PPF) release.
9	William Pardue	Operations	CS-001-010738 - CS-001-010757	Project Proposal forms.
9	William Pardue	Operations	CS-001-010758 - CS-001-010765	Flash sales report sales by category dated January 1998.
9	William Pardue	Operations	CS-001-010766 - CS-001-010818	Labor by Department printout for November 1996.
9	William Pardue	Operations	CS-001-010819 - CS-001-010820	Flash sales report sales by category dated February 1997.
9	William Pardue	Operations	CS-001-010821 - CS-001-010943	Sales analysis by class\subclass and part period ending January dated February 1997.
9	William Pardue	Operations	CS-001-010944 - CS-001-010960	Labor efficiency by specified date range report for month of February 1998.
9	William Pardue	Operations	CS-001-010961 - CS-001-010975	Monthly hours report by department for January 1998.
9	William Pardue	Operations	CS-001-010976 - CS-001-010993	Monthly hours report for the month of November 1997.
9	William Pardue	Operations	CS-001-010994 - CS-001-010998	Labor hours report for October 1997.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
9	William Pardue	Operations	CS-001-010999 - CS-001-011014	Labor efficiency by specified dated range for the month of January 1998.
9	William Pardue	Operations	CS-001-011015 - CS-001-011070	Monthly hours report for the month of February 1998.
9	William Pardue	Operations	CS-001-011071 - CS-001-011089	Monthly hours report for the month of July 1997.
9	William Pardue	Operations	CS-001-011090 - CS-001-011125	Monthly hours report for June 1997.
9	William Pardue	Operations	CS-001-011126 - CS-001-011144	Monthly hours report for the month of March 1997.
9	William Pardue	Operations	CS-001-011144 - CS-001-011156	Labor by department for November 1995.
9	William Pardue	Operations	CS-001-011157 - CS-001-011169	Monthly hours report for April 1997.
9	William Pardue	Operations	CS-001-011169 - CS-001-011172	Indirect labor report by depart number.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
10	William Pardue	Operations	CS-001-011173 CS-001-011187	Customer sales analysis for the month ended October 31, 1989.
10	William Pardue	Operations	CS-001-011188 CS-001-011201	Month-to-date net quantity by product line, invoice date July 31, 1989.
10	William Pardue	Operations	CS-001-011202 CS-001-011211	June 1990 interim production report.
10	William Pardue	Operations	CS-001-011212 CS-001-011220	June 1990 interim production report.
10	William Pardue	Operations	CS-001-011221 CS-001-011228	June 1990 interim production report.
10	William Pardue	Operations	CS-001-011229 CS-001-011257	June 1990 interim production report.
10	William Pardue	Operations	CS-001-011258 CS-001-011266	Month-to-date net sales quantity by product class as of June 1990.
10	William Pardue	Operations	CS-001-011267 CS-001-011275	Month-to-date net sales quantity by product class as of June 1990.
10	William Pardue	Operations	CS-001-011276 CS-001-011284	Month-to-date net sales quantity by product class as of June 1990.
10	William Pardue	Operations	CS-001-011285 CS-001-011293	Month-to-date net sales by product class summary as of June 1990.
10	William Pardue	Operations	CS-001-011294 CS-001-011302	Month-to-date net sales by product class warehouses as of June 1990.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
10	William Pardue	Operations	CS-001-011303 CS-001-011311	Month-to-date net sales by product class consignment as of June 1990.
10	William Pardue	Operations	CS-001-011312 CS-001-011319	Month-to-date net sales by product class shipped to territory as of June 1990.
10	William Pardue	Operations	CS-001-011320 CS-001-011333	June 1990 interim production report.
10	William Pardue	Operations	CS-001-011334 CS-001-011339	June 1990 production report re: parts that account for zero percent dollar value inventory.
10	William Pardue	Operations	CS-001-011340 CS-001-011349	June 1990 production report, only parts with production reported against them.
10	William Pardue	Operations	CS-001-011350 CS-001-011364	June 1990 production report from date of entry.
10	William Pardue	Operations	CS-001-011365 CS-001-011377	June 1990 production report.
10	William Pardue	Operations	CS-001-011378 CS-001-011388	June 1990 production report, only parts with production reported against them.
10	William Pardue	Operations	CS-001-011389 CS-001-011394	June 1990 production report, parts that account for zero percent dollar value inventory.
10	William Pardue	Operations	CS-001-011395 CS-001-011414	Weekly production report for the week of June 25, 1990.
10	William Pardue	Operations	CS-001-011415	Month-to-date net sales by product class summary as of May 1990.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
10	William Pardue	Operations	CS-001-011416	Month-to-date net sales by product class consignment as of May 1990.
10	William Pardue	Operations	CS-001-011417	Month-to-date net sales by product class warehouses as of May 1990.
10	William Pardue	Operations	CS-001-011418	Month-to-date net sales quantity by product class summary as of May 1990.
10	William Pardue	Operations	CS-001-011419	Month-to-date net sales quantity by product class consignment as of May 1990.
10	William Pardue	Operations	CS-001-011420	Month-to-date net sales quantity by product class warehouses as of May 1990.
10	William Pardue	Operations	CS-001-011421 CS-001-011429	Month-to-date net sales by product class shipped to territory as of May 1990.
10	William Pardue	Operations	CS-001-011429 CS-001-011445	Model code sheets.
10	William Pardue	Operations	CS-001-011446 CS-001-011447	Listing of products by description.
10	William Pardue	Operations	CS-001-011448 CS-001-011457	Material transfers listing products by description.
10	William Pardue	Operations	CS-001-011458 CS-001-011493	Month-to-date sales by product class summary dated April 30, 1989.
10	William Pardue	Operations	CS-001-011494- CS-001-011531	Net sales by ship date, dated April 28, 1989.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
10	William Pardue	Operations	CS-001-011532- CS-001-011572	Sales and cost of sales for the month ended February 28, 1989.
10	William Pardue	Operations	CS-001-011573	Month-to-date transfers from Landsdale dated January 31, 1989.
10	William Pardue	Operations	CS-001-011574- CS-001-011609	Month-to-date net sales by products class dated January 31, 1989.
10	William Pardue	Operations	CS-001-011610- CS-001-011617	Special billing for the month ended October 31, 1989.
10	William Pardue	Operations	CS-001-011618- CS-001-011641	Month-to-date net sales by product class shipped to territory dated October 31, 1989.
10	William Pardue	Operations	CS-001-011642- CS-001-011665	Month-to-date net sales by product class shipped to territory dated September 30, 1988.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
10	William Pardue	Operations	CS-001-011666	Month-to-date transfers from Landsdale dated September 30, 1988.
10	William Pardue	Operations	CS-001-011667- CS-001-011670	Month-to-date transfers from Landsdale dated August 31, 1988.
10	William Pardue	Operations	CS-001-011671 CS-001-011694	Month-to-date net sales by product class shipped to territory dated August 31, 1988.
10	William Pardue	Operations	CS-001-011695- CS-001-011703	Special billing for the month ended April 30, 1988.
10	William Pardue	Operations	CS-001-011704	Month-to-date transfers from Landsdale dated June 30, 1988.
10	William Pardue	Operations	CS-001-011705 CS-001-011716	Month-to-date net sales by product class shipped to territory dated June 30, 1988.
10	William Pardue	Operations	CS-001-011717- CS-001-011721	Month-to-date net sales by product class by salesmen dated June 30, 1988.
10	William Pardue	Operations	CS-001-011722- CS-001-011728	Month-to-date net sales by product class by salesmen dated June 30, 1988.
10	William Pardue	Operations	CS-001-011729- CS-001-011730	Month-to-date transfers from Landsdale dated May 31, 1988 and July 31, 1988.
10	William Pardue	Operations	CS-001-011731- CS-001-011739	Shipment reports.
10	William Pardue	Operations	CS-001-011740- CS-001-011759	Special billing for the month ended January 31, 1988.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
10	William Pardue	Operations	CS-001-011760- CS-001-011767	Month-to-date net sales by product class shipped to territory dated April 29, 1989.

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BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
11	William Pardue	Operations	CS-001-011768-CS-001-011847	Computer Report regarding shipment/production quantities for the month ending October 31, 1986 for raw materials at Lansdale, dated December 11, 1986.
11	William Pardue	Operations	CS-001-011848-CS-001-011921	Computer Report regarding shipment/production quantities for the month ending October 31, 1985 for raw materials at Lansdale, dated December 12, 1986.
11	William Pardue	Operations	CS-001-011922-CS-001-11997	Computer Report regarding shipment/production quantities for the month ending October 31, 1984 for raw materials at Lansdale, dated November 21, 1984.
11	William Pardue	Operations	CS-001-011998-CS-001-012001	Computer report entitled "Month-to-Date Net Quantity by Product Class from Lansdale" invoice date November 30, 1983, dated December 8, 1983.
11	William Pardue	Operations	CS-001-012002-CS-001-012006	Computer report entitled "Month-to-Date Net Sales by Product Class from Norr" invoice date November 30, 1983, dated December 20, 1983.
11	William Pardue	Operations	CS-001-012007-CS-001-012011	Computer report entitled "Month-to-Date Net Sales by Product Class from Anaheim" invoice date November 30, 1983, dated December 20, 1983.
11	William Pardue	Operations	CS-001-012012-CS-001-012015	Computer report entitled "Month-to-Date Net Sales by Product Class from Lansdale" invoice date November 30, 1983, dated December 19, 1983.
11	William Pardue	Operations	CS-001-012016-CS-001-012020	Computer report entitled "Month-to-Date Net Quantity by Product Class from Texas" invoice date November 30, 1983, dated December 20, 1983.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
11	William Pardue	Operations	CS-001-012021-CS-001-012025	Computer report entitled "Month-to-Date Net Quantity by Product Class from Anaheim" invoice date November 30, 1983, dated December 20, 1983.
11	William Pardue	Operations	CS-001-012026-CS-001-012030	Computer report entitled "Month-to-Date Net Sales by Product Class from Texas" invoice date November 30, 1983, dated December 20, 1983.
11	William Pardue	Operations	CS-001-012031-CS-001-012035	Computer report entitled "Month-to-Date Net Sales by Product Class from Chicago" invoice date November 30, 1983, dated December 20, 1983.
11	William Pardue	Operations	CS-001-012036-CS-001-012040	Computer report entitled "Month-to-Date Net Sales by Product Class for PK" invoice date November 30, 1983, dated December 20, 1983.
11	William Pardue	Operations	CS-001-012041-CS-001-012045	Computer report entitled "Month-to-Date Net Quantity by Product Class" invoice date October 31, 1983, dated November 11, 1983.
11	William Pardue	Operations	CS-001-012046-CS-001-012050	Computer report entitled "Month-to-Date Net Sales by Product Class" invoice date October 31, 1983, dated November 11, 1983.
11	William Pardue	Operations	CS-001-012051-CS-001-012122	Computer report entitled "Shipment Quantity for the month ending October 31, 1986" dated November 20, 1986.
11	William Pardue	Operations	CS-001-012123-CS-001-012266	Computer report entitled "Shipment Quantity for the month ending October 31, 1984" dated October 11, 1985.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
11	William Pardue	Operations	CS-001-012267- CS-001-012283	Computer report entitled "Shipments for the month ending October 31, 1982" dated October 2, 1985.
11	William Pardue	Operations	CS-001-012284- CS-001-012300	Computer report entitled "Shipment for the month ending October 31, 1982."
11	William Pardue	Operations	CS-001-012301- CS-001-012448	Computer report entitled "Shipment/Transfer Quantities for the month ending October 31, 1985," (finished goods only) for all warehouses dated November 13, 1985
11	William Pardue	Operations	CS-001-012449- CS-001-012511	Computer reports entitled "Annual Shipment Quantity by Fiscal Year as of October 31, 1989" dated January 5, 1990.
11	William Pardue	Operations	CS-001-012512- CS-001-012911	Computer report entitled "Accounts Payable Parts Received for Part Vendor for Fiscal Year 1994" dated January 17, 1995.
11	William Pardue	Operations	CS-001-012912- CS-001-013039	Computer report entitled "Accounts Payable Parts Received Vendor Part Fiscal Year 1994" dated January 17, 1995.
11	William Pardue	Operations	CS-001-013040- CS-001-013140	Computer report entitled "Part Master Sorted by Order File" dated February 13, 1991.
11	William Pardue	Operations	CS-001-013141- CS-001-013252	Computer report entitled "Part Master File Inventory Part Number" dated February 8, 1991.
11	William Pardue	Operations	CS-001-013253- CS-001-013321	Computer report entitled "Purchased Parts 1993 Totals by Dollar Description" dated May 3, 1994.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
12	William Pardue	Operations	CS-001-013322-CS-001-013334	Manufacturing Engineering list of areas for concern within plant.
12	William Pardue	Operations	CS-001-013335-CS-001-013337	Cost Center Report dated July 26, 1995.
12	William Pardue	Operations	CS-001-013338-CS-001-013346	1995 Capital Budget.
12	William Pardue	Operations	CS-001-013347	Ledger regarding capital equipment manufacturing for 1994/1995.
12	William Pardue	Operations	CS-001-013348-CS-001-013351	Summary of workplace injuries, Lansdale, Pennsylvania facility.
12	William Pardue	Operations	CS-001-013352-CS-001-013354	Memorandum regarding work center designations.
12	William Pardue	Operations	CS-001-013355-CS-001-013361	Memorandum regarding active products list.
12	William Pardue	Operations	CS-001-013362-CS-001-013366	List of priority products.
12	William Pardue	Operations	CS-001-013367-CS-001-013368	Memorandum regarding ULC listings pending.
12	William Pardue	Operations	CS-001-013369-CS-001-013373	List of product priorities.
12	William Pardue	Operations	CS-001-013374-CS-001-013378	List of product priorities.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
12	William Pardue	Operations	CS-001-013379-CS-001-013392	Memorandum regarding active product list.
12	William Pardue	Operations	CS-001-013393-CS-001-013394	Memorandum regarding new product requests.
12	William Pardue	Operations	CS-001-013395-CS-001-013397	Memorandum regarding Executive Steering Committee meeting minutes.
12	William Pardue	Operations	CS-001-013398-CS-001-013400	1987 UL Project Activity Report.
12	William Pardue	Operations	CS-001-013401	February 19, 1990 list regarding features of "no center load" saddle.
12	William Pardue	Operations	CS-001-013402-CS-001-013431	Central Sprinkler Corporation Executive Steering Committee meeting minutes for June 11, 1990.
12	William Pardue	Operations	CS-001-013432-CS-001-013450	Memorandum regarding Central Sprinkler patents.
12	William Pardue	Operations	CS-001-013451-CS-001-013454	Spreadsheets regarding Central Sprinkler projects and listings.
12	William Pardue	Operations	CS-001-013455-CS-001-013487	Central Sprinkler Corporation Executive Steering Committee meeting minutes dated June 4, 1990.
12	William Pardue	Operations	CS-001-013488	Memorandum regarding sensitivity plunge test.
12	William Pardue	Operations	CS-001-013489-CS-001-013493	Memorandum regarding Flow Control sprinkler diaphragm SM testing.
12	William Pardue	Operations	CS-001-013494-CS-001-013498	Correspondence from Sheraton Hotels regarding Sheraton retrofit.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
12	William Pardue	Operations	CS-001-013499-CS-001-013500	Memorandum regarding UL testing of concealed residential pendant Omega sprinkler.
12	William Pardue	Operations	CS-001-013501-CS-001-013502	Memorandum regarding UL testing of concealed residential pendant Omega sprinkler.
12	William Pardue	Operations	CS-001-013503-CS-001-013506	Research and Development project list.
12	William Pardue	Operations	CS-001-013507-CS-001-013511	Omega sprinkler heads project price list.
12	William Pardue	Operations	CS-001-013512-CS-001-013518	Indirect Labor Tickets for 1993.
12	William Pardue	Operations	CS-001-013519	Record of telephone conference dated November 4, 1990 regarding Flow Control heads in the Library of Congress.
12	William Pardue	Operations	CS-001-013520-CS-001-013522	Operations Meeting minutes dated January 26, 1993.
12	William Pardue	Operations	CS-001-013523-CS-001-013525	Spreadsheet regarding supervalve order status.
12	William Pardue	Operations	CS-001-013526-CS-001-013538	Handwritten notes regarding staff meetings.
12	William Pardue	Operations	CS-001-013539-CS-001-013593	Securities and Exchange Commission Form 10K for fiscal year ended October 31, 1996.
12	William Pardue	Operations	CS-001-013595-CS-001-013635	Product sales report for fiscal year ended 1990.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
13	William Pardue	Operations	CS-001-013636- CS-001-013654	1993 Budget reduction file including organizational chart, memorandum regarding operating expenses, 1993 Capital Budget.
13	William Pardue	Operations	CS-001-013655- CS-001-013692	Projected sales for Fiscal Year 1994.
13	William Pardue	Operations	CS-001-013693- CS-001-013746	Sales Analysis by Kress for Fiscal Year 1993.
13	William Pardue	Operations	CS-001-013747- CS-001-013760	Forecast for period ending July 1992.
13	William Pardue	Operations	CS-001-013761- CS-001-013766	Ledger regarding capital equipment for 1992-1993.
13	William Pardue	Operations	CS-001-013767- CS-001-013788	Schedule attainment report for August 10 to August 16, 1995.
13	William Pardue	Operations	CS-001-013789- CS-001-013790	Vendor Certification for Tundra housing.
13	William Pardue	Operations	CS-001-013791- CS-001-013794	Certificate of Compliance prepared Laboratory Testing, Incorporated.
13	William Pardue	Operations	CS-001-013795- CS-001-013800	Cost comparisons worksheets.
13	William Pardue	Operations	CS-001-013801- CS-001-013802	Sprinkler production versus sales report.
13	William Pardue	Operations	CS-001-013803- CS-001-013811	Engineering project status reports for March 10, 1994.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
13	William Pardue	Operations	CS-001-013812-CS-001-013823	Sales and cost of sales report for month ending June 30, 1983.
13	William Pardue	Operations	CS-001-013824-CS-001-013828	Month-to-date net quantity by product class for June 30, 1983.
13	William Pardue	Operations	CS-001-013829-CS-001-013831	Net sales summary for July 7, 1983.
13	William Pardue	Operations	CS-001-013832-CS-001-013836	Month-to-date net sales by product class for June 30, 1983.
13	William Pardue	Operations	CS-001-013837-CS-001-013838	Ledger regarding material price change on finished goods for June 1983.
13	William Pardue	Operations	CS-001-013839-CS-001-013841	Ledger regarding material price change on finished goods for May 1983.
13	William Pardue	Operations	CS-001-013842-CS-001-013844	Ledger regarding material price change on finished goods for April 1983.
13	William Pardue	Operations	CS-001-013845-CS-001-013847	Ledger regarding material price change on finished goods for March 1983.
13	William Pardue	Operations	CS-001-013848	Sales journal for the day ended March 31, 1983.
13	William Pardue	Operations	CS-001-013849-CS-001-013851	Ledger regarding material price change on finished goods for February 1983.
13	William Pardue	Operations	CS-001-013852-CS-001-013877	Purchase variance by product line by vendor for the month February 1983.
13	William Pardue	Operations	CS-001-013878	Ledger regarding cash analysis projected three months 1983.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
13	William Pardue	Operations	CS-001-013879-CS-001-013881	Ledger regarding material price change on finished goods for January 1983.
13	William Pardue	Operations	CS-001-013882-CS-001-013897	Inventory purchase variance for month January 1983.
13	William Pardue	Operations	CS-001-013898-CS-001-013900	Ledger regarding material price change on finished goods for December 1982.
13	William Pardue	Operations	CS-001-013901-CS-001-013915	Inventory purchase variance for month dated December 1982.
13	William Pardue	Operations	CS-001-013916	Ledger regarding sprinkler direct labor analysis for December 3, 1982.
13	William Pardue	Operations	CS-001-013917-CS-001-013919	Ledger regarding material price change on finished goods for November 1982.
13	William Pardue	Operations	CS-001-013920-CS-001-013933	Report regarding inventory purchase variance for month dated November 1982.
13	William Pardue	Operations	CS-001-013934-CS-001-013936	Ledger regarding material price change on finished goods for October 1982.
13	William Pardue	Operations	CS-001-013937-CS-001-013948	Report regarding inventory purchase variance for month dated October 1982.
13	William Pardue	Operations	CS-001-013949-CS-001-013951	Ledger regarding material price changes on finished goods for September 1982.
13	William Pardue	Operations	CS-001-013952-CS-001-013962	Report regarding inventory purchase variance by month for September 1982.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
13	William Pardue	Operations	CS-001-013963- CS-001-013965	Ledger regarding material price change on finished goods for August 1982.
13	William Pardue	Operations	CS-001-013966- CS-001-013976	Report regarding inventory purchase variance for month dated August 1982.
13	William Pardue	Operations	CS-001-013977- CS-001-013979	Ledger regarding material price change on finished goods for July 1982.
13	William Pardue	Operations	CS-001-013980- CS-001-013986	Report regarding inventory purchase variance for month dated July 1982.
13	William Pardue	Operations	CS-001-013987- CS-001-013989	Ledger regarding material price change on finished goods for June 1982.
13	William Pardue	Operations	CS-001-013990- CS-001-014002	Report regarding inventory purchase variance for month dated June 1982.
13	William Pardue	Operations	CS-001-014003- CS-001-014005	Ledger regarding material price change on finished goods for May 1982.
13	William Pardue	Operations	CS-001-014006- CS-001-014021	Report regarding inventory purchase variance for month dated May 1982.
13	William Pardue	Operations	CS-001-014022- CS-001-014024	Ledger regarding material price change on finished goods for April 1982.
13	William Pardue	Operations	CS-001-014025- CS-001-014040	Report regarding inventory purchase variance for month dated April 1982.
13	William Pardue	Operations	CS-001-014041- CS-001-014043	Ledger regarding material price change on finished goods for March 1982.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
13	William Pardue	Operations	CS-001-014044-CS-001-014063	Report regarding inventory purchase variance for month dated March 1982.
13	William Pardue	Operations	CS-001-014064-CS-001-014066	Ledger regarding material price change on finished goods for February 1982.
13	William Pardue	Operations	CS-001-014067-CS-001-014082	Report regarding inventory purchase variance for month dated February 1982.
13	William Pardue	Operations	CS-001-014083-CS-001-014085	Ledger regarding material price change on finished goods for January 1982.
13	William Pardue	Operations	CS-001-014086-CS-001-014103	Report regarding inventory purchase variance for month dated January 1982.
13	William Pardue	Operations	CS-001-014104-CS-001-014118	Inventory purchase variance for month dated December 1981.
13	William Pardue	Operations	CS-001-014119-CS-001-014129	Report regarding inventory purchase variance for month dated November 1981.
13	William Pardue	Operations	CS-001-014130-CS-001-014131	Ledger regarding material price change on finished goods for November 1981.
13	William Pardue	Operations	CS-001-014132-CS-001-014136	Report regarding trial balance for November 1981.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
14	William Pardue	Operations	CS-001-014137 - CS-001-014158	Month-to-date net sales by product class for invoice date October 31, 1987, dated November 1987.
14	William Pardue	Operations	CS-001-014159	Month-to date transfers from Lansdale for invoice date September 30, 1987.
14	William Pardue	Operations	CS-001-014160 - CS-001-014164	Month-to-date inventory by product class for invoice date September 30, 1987, dated October 1987.
14	William Pardue	Operations	CS-001-014165 - CS-001-014169	Month-to-date net sales by product class invoice shipped to for invoice date September 1987, revised September 30, 1987, dated October 1987.
14	William Pardue	Operations	CS-001-014170 - CS-001-014174	Month-to-date net quantity by product class for invoice date September 30, 1987, dated October 1987.
14	William Pardue	Operations	CS-001-014175 - CS-001-014187	Month-to-date transfers and month-to-date net sales by product class for invoice date August 31, 1987.
14	William Pardue	Operations	CS-001-014188 - CS-001-014197	Month-to-date transfers, month-to-date net sales, month-to-date net quantity by product class reports, for invoice date July 31, 1987.
14	William Pardue	Operations	CS-001-014198 - CS-001-014207	Month-to-date transfer reports, month-to-date net sales by product class reports, month-to-date net quantity by product class reports, for invoice date June 30, 1987.

14	William Pardue	Operations	CS-001-014208	Month-to-date transfers for invoice date May 31, 1987.
14	William Pardue	Operations	CS-001-014209 - CS-001-014216	Month-to-date net sales by product class reports, month-to-date net quantity by product class report for invoice date January 31, 1987.
14	William Pardue	Operations	CS-001-014217 - CS-001-014226	Month-to-date net sales by product class report, month-to-date net quantity by product class report for invoice date January 31, 1998.
14	William Pardue	Operations	CS-001-014227 - CS-001-014248	Month-to-date net sales by product class report, month-to-date net quantity by product class report, sales and cost of sales for the month ending December 1986, change in B.O.H. month end inventory finished goods for month ended December 31, 1986 report for invoice date December 31, 1986.
14	William Pardue	Operations	CS-001-014249 - CS-001-014252	Change in B.O.H. month and inventory finished goods for month ended November 1986.
14	William Pardue	Operations	CS-001-014253 - CS-001-014298	Month-to-date net quantity by product class report and month-to-date transfer report for invoice date March 31, 1988.
14	William Pardue	Operations	CS-001-014299 - CS-001-014310	Month-to-date transfers, month-to-date net sales by product class, month-to-date net quantity by product class report for invoice date 2/29/88.
14	William Pardue	Operations	CS-001-014311 - CS-001-014316	Change in B.O.H. month end inventory for January 31, 1988 for raw materials and finished goods, month-to-date transfers for invoice date January 31, 1988.

14	William Pardue	Operations	CS-001-014317 - CS-001-014337	Month-to-date net sales by product class, month-to-date net quantity by product class, month-to-date net sales by product class, month-to-date transfers report for invoice date December 31, 1987.
14	William Pardue	Operations	CS-001-014338 - CS-001-014348	Month-to-date net sales by product class, month-to-date net quantity by product class, month-to-date transfers report for invoice date November 30, 1987.
14	William Pardue	Operations	CS-001-014349 - CS-001-014637	Raw materials on hand by product class for June 30, 1990, dated July 9, 1990.
14	William Pardue	Operations	CS-001-014638 - CS-001-014642	Raw materials on hand by product class for June 30, 1990, dated July 13, 1990.
14	William Pardue	Operations	CS-001-014643 - CS-001-014647	Raw materials on hand by product class for September 30, 1990, dated October 5, 1990.
14	William Pardue	Operations	CS-001-014648 - CS-001-014652	Raw materials on hand by product class for August 31, 1990, dated September 14, 1990.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
15	William Pardue	Operations	CS-001-014653- CS-001-014654	Sales analysis report for period ending October 1996.
15	William Pardue	Operations	CS-001-014655- CS-001-014658	Shipment in units values report for October 1996.
15	William Pardue	Operations	CS-001-014659- CS-001-014661	Sales analysis for period ending September 1996.
15	William Pardue	Operations	CS-001-014662- CS-001-014673	Sales analysis for period ending August 1996.
15	William Pardue	Operations	CS-001-014674- CS-001-014676	Sales analysis for period ending April 1997.
15	William Pardue	Operations	CS-001-014677- CS-001-014679	Sales analysis for period ending March 1997.
15	William Pardue	Operations	CS-001-014680- CS-001-014682	Sales analysis for period ending February 1997.
15	William Pardue	Operations	CS-001-014683- CS-001-014685	Sales analysis for period ending January 1997.
15	William Pardue	Operations	CS-001-014686- CS-001-014688	Sales analysis for period ending December 1997.
15	William Pardue	Operations	CS-001-014689- CS-001-014691	Sales analysis for period ending November 1997.
15	William Pardue	Operations	CS-001-014692- CS-001-014693	Sales analysis for period ending October 1990.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
15	William Pardue	Operations	CS-001-014694-CS-001-014696	October 1990 production report.
15	William Pardue	Operations	CS-001-014697-CS-001-014700	Raw Material Report for month ended October 30, 1990.
15	William Pardue	Operations	CS-001-014701-CS-001-014702	Sales analysis for period ending September 1990.
15	William Pardue	Operations	CS-001-014703-CS-001-014706	September 1990 production report.
15	William Pardue	Operations	CS-001-014707-CS-001-014708	Raw Material Report for month ended September 30, 1990.
15	William Pardue	Operations	CS-001-014709-CS-001-014710	Sales analysis for period ending August 1990.
15	William Pardue	Operations	CS-001-014711	Raw Materials Report for month ended July 31, 1990.
15	William Pardue	Operations	CS-001-014712-CS-001-014715	July 1990 production report.
15	William Pardue	Operations	CS-001-014716-CS-001-014717	Sales analysis for period ending July 1990.
15	William Pardue	Operations	CS-001-014718-CS-001-014721	June 1990 production report.
15	William Pardue	Operations	CS-001-014722-CS-001-014723	Sales analysis for period ending June 1990.
15	William Pardue	Operations	CS-001-014724	Raw Materials Report for month ended June 30, 1990.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
15	William Pardue	Operations	CS-001-014725- CS-001-014726	Sales analysis for period ending May 1990.
15	William Pardue	Operations	CS-001-014727- CS-001-014729	April 1990 production report.
15	William Pardue	Operations	CS-001-014730- CS-001-014731	Sales analysis for period ending April 1990.
15	William Pardue	Operations	CS-001-014732	Raw Material Report for month ended April 30, 1990.
15	William Pardue	Operations	CS-001-014733- CS-001-014734	Sales analysis for period ended March 1990.
15	William Pardue	Operations	CS-001-014735- CS-001-014741	March 1990 production report.
15	William Pardue	Operations	CS-001-014742- CS-001-014743	Sales analysis for period ended March 1990.
15	William Pardue	Operations	CS-001-014744- CS-001-014746	February 1990 production report.
15	William Pardue	Operations	CS-001-014747- CS-001-014748	Sales analysis for period ended February 1990.
15	William Pardue	Operations	CS-001-014749- CS-001-014750	Finished goods report for month ended January 31, 1990.
15	William Pardue	Operations	CS-001-014751- CS-001-014752	Units shipped for month ending January 31, 1990.
15	William Pardue	Operations	CS-001-014753	Sales and cost of sales report for the month ended January 31, 1990.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
15	William Pardue	Operations	CS-001-014754	Finished goods report for the month ended December 31, 1989.
15	William Pardue	Operations	CS-001-014755	Raw Materials Report for the month ended December 31, 1989.
15	William Pardue	Operations	CS-001-014756-CS-001-014757	Units shipped for month ending December 31, 1989.
15	William Pardue	Operations	CS-001-014758-CS-001-014760	Sales production and quantity by type for the month ended December 31, 1989.
15	William Pardue	Operations	CS-001-014761-CS-001-014762	Sales and cost of sales for the month ended December 31, 1989.
15	William Pardue	Operations	CS-001-014763	Finished goods report for the month ended November 30, 1989.
15	William Pardue	Operations	CS-001-014764	Raw Materials Report for the month ended November 30, 1989.
15	William Pardue	Operations	CS-001-014765	Weekly cash disbursement report for November 1989.
15	William Pardue	Operations	CS-001-014766	Sales and cost of sales for the month ended November 30, 1989.
15	William Pardue	Operations	CS-001-014767	Units shipped for the month ending November 30, 1989.
15	William Pardue	Operations	CS-001-014768-CS-001-014776	Sales analysis for period ending October through August of 1997.
15	William Pardue	Operations	CS-001-014777-CS-001-014778	Flash Sales Report by category for August 1997.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
15	William Pardue	Operations	CS-001-014779- CS-001-014780	Sales analysis for period end of July 1997.
15	William Pardue	Operations	CS-001-014781- CS-001-014798	Sales analysis for periods ending May, June, and July 1997.
15	William Pardue	Operations	CS-001-014799- CS-001-014800	Flash Sales Report for May 1996.
15	William Pardue	Operations	CS-001-014801- CS-001-014803	Sales analysis for period ending April 1996.
15	William Pardue	Operations	CS-001-014804- CS-001-014806	Sales analysis for period ending March 1996.
15	William Pardue	Operations	CS-001-014807- CS-001-014808	Flash Sales Report for March 1996.
15	William Pardue	Operations	CS-001-014809- CS-001-014811	Sales analysis for period ending February 1996.
15	William Pardue	Operations	CS-001-014812- CS-001-014814	Sales analysis for period ending January 1996.
15	William Pardue	Operations	CS-001-014815	Flash Sales Report for January 1996.
15	William Pardue	Operations	CS-001-014816- CS-001-014818	Sales analysis for period ending December 1995.
15	William Pardue	Operations	CS-001-014819- CS-001-014821	Sales analysis for period ending November 1995.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
16	William Pardue	Operations	CS-001-014822- CS-001-014928	Management Reports for the month of October, including customer sales analysis for month ending October; glass bulb Scrap Report, employee advances report, accounts receivable analysis, accounts payable analysis, personnel statistics, inventory by location report, change in BOH month-end inventory, raw materials for month ended October 31, 1992, sales analysis by class/subclass description report, shipment unit values report.
16	William Pardue	Operations	CS-001-014929- CS-001-014965	Management reports for the month of September, including customer sales analysis, product sales by states, accounts receivable analysis, accounts payable analysis, employee advances, scrap, glass bulb scrap, change in BOH month-end inventory, raw materials for month ended September 30, 1992, inventory by location, sales analysis by class/subclass description.
16	William Pardue	Operations	CS-001-014966- CS-001-015003	Management reports for the month of October, including personnel statistics, customer sales analysis, product sales by state, inventory by location, employee advances, scrap, glass bulb scrap, Mikron scrap, change in the BOH month-end inventory raw materials for month ended August 31, 1992, accounts receivable analysis, accounts payable analysis, sales analysis by class/subclass description.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
16	William Pardue	Operations	CS-001-015004- CS-001-015038	Management reports for the month of July, including personnel statistics, change in BOH month-end inventory raw materials for month ending July 31, 1992, inventory by location, customer sales analysis, product sale by state, accounts receivable analysis, accounts payable analysis, employee advances, sales analysis by class/subclass description.
16	William Pardue	Operations	CS-001-015039- CS-001-015068	Management reports for the month of June, including employee advances, scrap, customer sales analysis, product sale by state, change in the BOH month-end inventory raw materials for month ended June 30, 1992, sales analysis by class/subclass description.
16	William Pardue	Operations	CS-001-015069- CS-001-015101	Management reports for the month of May, including employee advances, scrap, glass bulb scrap, customer sales analysis, product sale by state, change in the BOH month-end inventory raw materials for month ended May 31, 1992, inventory by location, sales analysis by class/subclass description.
16	William Pardue	Operations	CS-001-015102- CS-001-015129	Management reports for the month of April, including customer sales analysis, product sale by state, change in BOH month and inventory, raw materials for month ended April 30, 1992, sales analysis by class/subclass description.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
16	William Pardue	Operations	CS-001-015130- CS-001-015162	Management reports for the month of March, including scrap, glass bulb scrap, employee advances, personnel statistics, customer sales analysis, product sale by state, change in BOH month and inventory raw materials, inventory by location, sales analysis by class/subclass description.
16	William Pardue	Operations	CS-001-015163- CS-001-015193	Management reports for the month of February, including scrap, glass bulb scrap, employee advances, customer sales analysis, product sale by state, change in BOH month and inventory raw materials, inventory by location.
16	William Pardue	Operations	CS-001-015194- CS-001-015206	Management reports for the month of January, including cost of sale and inventory analysis, customer sale analysis, product sale by state, scrap, glass bulb scrap, employee advances, change in BOH month and inventory raw materials.
16	William Pardue	Operations	CS-001-015207- CS-001-015238	Management reports for the month of December, including scrap, glass bulb scrap, employee advances, personnel statistics, customer sales analysis, product sale by state, change in BOH month and inventory raw materials, inventory by location, sales analysis by class/subclass description.
16	William Pardue	Operations	CS-001-015239- CS-001-015264	Management reports for the month of November, including scrap, glass bulb scrap, employee advances, customer sales analysis, product sale by state, inventory by location, sales analysis by class/subclass description.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
16	William Pardue	Operations	CS-001-015265- CS-001-015886	Management reports for the months of November, 1992 through October, 1993, including reports on scrap, glass bulb scrap, employee advances, personnel statistics, customer sales analysis, product sale by state, changes in BOH month and inventory raw materials, inventory by location, sales analysis by class/subclass description.
16	William Pardue	Operations	CS-001-015887- CS-001-016634	Management reports for the months of November, 1994 through October, 1995, including reports on scrap, glass bulb scrap, employee advances, personnel statistics, customer sales analysis, product sale by state, changes in BOH month and inventory raw materials, inventory by location, sales analysis by class/subclass description.
16	William Pardue	Operations	CS-001-016635- CS-001-017117	Management reports for the months of November, 1990 through October, 1991, including reports on scrap, glass bulb scrap, employee advances, personnel statistics, customer sales analysis, product sale by state, changes in BOH month and inventory raw materials, inventory by location, sales analysis by class/subclass description.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
17	William Pardue	Operations	CS-001-017118- CS-001-017770	Management report for November 1993 through October 1994, including 1994 inventory analysis cost of sales, accounts payable analysis and entry by location, sales reports, sales analysis per month, shipment unit values reports, employee advances, cost of sales and inventory analysis.
17	William Pardue	Operations	CS-001-017751- CS-001-018017	Financial reports for November 1989 through October 1990, including reports to the Board of Directors, company Balance Sheet.
17	William Pardue	Field Operations	CS-001-018018- CS-001-018501	Management report for November 1986 through October 1987, including units shipped per month, General Ledger entries, inventory by location, accounts payable analysis and direct labor, prepaid expenses and sundry assets, sales and cost of sales per month, shipment and production reports, shipment unit values, product sales by state, sales comparisons, employee advances.
17	William Pardue	Field Operations	CS-001-018502- CS-001-019026	Management report for November 1987 through October 1988, including units shipped per month, General Ledger entries, inventory by location, accounts payable analysis and direct labor, prepaid expenses and sundry assets, sales and cost of sales per month, shipment and production reports, shipment unit values, product sales by state, sales comparisons, employee advances.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
17	William Pardue	Field Operations	CS-001-019027- CS-001-019691	Management reports for November 1988 through October 1989, including units shipped per month, General Ledger entries, inventory by location, accounts payable analysis and direct labor, prepaid expenses and sundry assets, sales and cost of sales per month, shipment and production reports, shipment unit values, product sales by state, sales comparisons, employee advances.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
18	William Pardue	Operations	CS-001-019692-CS-001-019709	Credits by warehouse for May 1995.
18	William Pardue	Operations	CS-001-019710-CS-001-019724	Credits by warehouse for April 1995.
18	William Pardue	Operations	CS-001-019725-CS-001-019739	Credits by warehouse for November 1994.
18	William Pardue	Operations	CS-001-019740	Personnel and payroll statistics for week ending January 11, 1992.
18	William Pardue	Operations	CS-001-019741	Handwritten notes regarding in-house parts dated February 2, 1993.
18	William Pardue	Operations	CS-001-019742-CS-001-019745	Handwritten notes regarding Operations Meeting report dated January 12, 1993.
18	William Pardue	Operations	CS-001-019746	Purchasing report for December 8, 1992.
18	William Pardue	Operations	CS-001-019747	Handwritten notes concerning packing materials, shipping, ESLO dated November 24, 1992.
18	William Pardue	Operations	CS-001-019748-CS-001-019755	Notes for operations meeting held November 24, 1992, November 17, 1992 and October 20, 1992.
18	William Pardue	Operations	CS-001-019756-CS-001-019757	Purchasing reports for November 24, 1992 and November 10, 1992.
18	William Pardue	Operations	CS-001-019758-CS-001-019759	Handwritten notes regarding manufacturing Operations Meeting dated November 3, 1992.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
18	William Pardue	Operations	CS-001-019760- CS-001-019761	Purchasing reports for November 3, 1992 and October 20, 1992.
18	William Pardue	Operations	CS-001-019762- CS-001-019767	Notes for Operations meeting on November 17, 1992 and December 8, 1992.
18	William Pardue	Operations	CS-001-019768- CS-001-019782	Current period schedule attainment report (final) for March 1993.
18	William Pardue	Operations	CS-001-019783	Residential sprinkler cost comparison dated July 10, 1990.
18	William Pardue	Operations	CS-001-019784- CS-001-019793	US Patent #4,465,141, dated August 14, 1984.
18	William Pardue	Operations	CS-001-019794	Handwritten C1-A cost comparison, dated March 30, 1990.
18	William Pardue	Operations	CS-001-019795	Handwritten diagram of Omega R-1 residential sprinkler.
18	William Pardue	Operations	CS-001-019796- CS-001-019807	Central catalogs for Omega EC-20A, Omega C-1A, Omega R-1.
18	William Pardue	Operations	CS-001-019808- CS-001-019810	Memorandum from G.S. Polan to W.J. Pardue regarding Reliables QR/residential sprinkler dated September 23, 1988.
18	William Pardue	Operations	CS-001-019811- CS-001-019820	UL file regarding Omega series residential sprinklers.
18	William Pardue	Operations	CS-001-019821- CS-001-019845	Meeting agenda, discussing Central Manufactured Product, resale products, IFSTA literature.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
18	William Pardue	Operations	CS-001-019846-CS-001-019860	Central Catalog excerpt for Omega HEC-12.
18	William Pardue	Operations	CS-001-019861-CS-001-019911	UL report on residential sprinkler dated November 22, 1982.
18	William Pardue	Operations	CS-001-019912-CS-001-019913	September 1990 memorandum regarding Model M sprinkler update.
18	William Pardue	Operations	CS-001-019914-CS-001-019925	Central Catalog excerpt for Protector M 290; Protector M 587; Protector 587.
18	William Pardue	Operations	CS-001-019926-CS-001-019953	Monthly activity Engineering Diagnostic Reports for months January 1996-July 1996.
18	William Pardue	Operations	CS-001-019954-CS-001-019957	Monthly activity Engineering Diagnostic Reports for December 1995 and November 1995.
18	William Pardue	Operations	CS-001-019957.1-CS-001-019962	Engineering Diagnostic Reports for April 1996 and January 1995.
18	William Pardue	Operations	CS-001-019963-CS-001-019986	Monthly Engineering Diagnostic Summary Reports for October 1995, September 1995, November 1995, March 1995, February 1995 and January 1995.
18	William Pardue	Operations	CS-001-019987-CS-001-020006	Monthly Engineering Diagnostic Summary Reports for November 1994, October 1994, September 1994, and March 1994.
18	William Pardue	Operations	CS-001-020007-CS-001-020008	Monthly Engineering Diagnostic Summary Report for December 1993.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
18	William Pardue	Operations	CS-001-020009- CS-001-020021	1996 Paid Warranty Claims for July, June and May.
18	William Pardue	Operations	CS-001-020022- CS-001-020385	1996 Paid Warranty Claims for April, March, February, January.
18	William Pardue	Operations	CS-001-020386- CS-001-020540	1995 Paid Warranty Claims for January through July.
18	William Pardue	Operations	CS-001-020541- CS-001-020543	Labor Claims for Fiscal Year 1994.
18	William Pardue	Operations	CS-001-020544- CS-001-020556	1994 monthly Paid Warranty claims for August and May.
18	William Pardue	Operations	CS-001-020557- CS-001-020575	Claims Unsettled/Settled Report as of May 1992.
18	William Pardue	Operations	CS-001-020576- CS-001-020579	Monthly Engineering Diagnostic Summary Report, June 1996.
18	William Pardue	Operations	CS-001-020580- CS-001-020776	Labor Efficiency Reports for January to April, 1996 and February to March, May, July and September to December, 1995.
18	William Pardue	Operations	CS-001-020777- CS-001-020789	Shop Floor Labor Reports for December 1994.
18	William Pardue	Operations	CS-001-020790- CS-001-020820	Labor Efficiency Reports for June and July 1996.
18	William Pardue	Operations	CS-001-020821- CS-001-020882	Labor Efficiency by Part Number Reports for February 1995.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
18	William Pardue	Operations	CS-001-020883- CS-001-020901	Labor Efficiency Reports for December 1994.
18	William Pardue	Operations	CS-001-020902- CS-001-021133	1995-1996 Sales Plan: Projected Sales for fiscal year 1996.
18	William Pardue	Operations	CS-001-021134- CS-001-021227	Material/Labor/Overhead Cost Sales Analysis by class/subclass and part for the period ending July, dated August 8, 1996.
18	William Pardue	Operations	CS-001-021228- CS-001-021245	Forecast vs. Actual Production vs. Actual sales units for fiscal year 1994.
18	William Pardue	Operations	CS-001-021246- CS-001-021249	Top 100 parts production report.
18	William Pardue	Operations	CS-001-021250 CS-001-021253	Flash Sales Report #1, dated July 13, 1996.
18	William Pardue	Operations	CS-001-021254 CS-001-021347	Sales analysis by class/subclass and part, dated August 8, 1996.
18	William Pardue	Operations	CS-001-021348 CS-001-021368	Parts with production compared to scrap Report, dated August 9, 1996.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
19	William Pardue	Operations	CS-001-021369	Spread sheet of engineering projects regarding certification of various sprinkler heads.
19	William Pardue	Operations	CS-001-021370-CS-001-021371	Handwritten notes with ledger regarding engineering projects.
19	William Pardue	Operations	CS-001-021372-CS-001-021375	Spread sheets regarding research and development projects.
19	William Pardue	Operations	CS-001-021376-CS-001-021389	Months-to-Date net sales by product class for July 31, 1984.
19	William Pardue	Operations	CS-001-021390	Memorandum regarding BS&A New York approvals.
19	William Pardue	Operations	CS-001-021391	Memorandum regarding World Trade Center.
19	William Pardue	Operations	CS-001-021392-CS-001-021396	Engineering Change Notice with attached engineering drawings for the Omega EC sprinkler head.
19	William Pardue	Operations	CS-001-021397	Memorandum regarding fusible alloy pellets.
19	William Pardue	Operations	CS-001-021398	Memorandum regarding ½ inch Omega horizontal sidewall extended coverage head.
19	William Pardue	Operations	CS-001-021399-CS-001-021400	Memorandum regarding raw material inventory.
19	William Pardue	Operations	CS-001-021401	Memorandum regarding fusible alloy pellets.
19	William Pardue	Operations	CS-001-021402-CS-001-021404	Memorandum regarding wax motor on/off sprinklers.
19	William Pardue	Operations	CS-001-021405-CS-001-021406	Temporary cut sheets for pendant style Omega sprinkler heads.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
19	William Pardue	Operations	CS-001-021407- CS-001-021408	Memorandum regarding ½ inch Omega heads.
19	William Pardue	Operations	CS-001-021409- CS-001-021445	Research & Development project forms.
19	William Pardue	Operations	CS-001-021446- CS-001-021450	Memorandum with attached chart of wrenches.
19	William Pardue	Operations	CS-001-021451- CS-001-021455	Memorandum regarding universal sprinkler wrench with attached chart of wrenches.
19	William Pardue	Operations	CS-001-021456- CS-001-021457	Bill of Materials for ½ inch Censormatic on/off sprinkler.
19	William Pardue	Operations	CS-001-021458- CS-001-021459	Bill of Materials for ½ inch Censormatic on/off sprinkler.
19	William Pardue	Operations	CS-001-021461- CS-001-021463	Inventory stocking report for November 11, 1984.
19	William Pardue	Operations	CS-001-021464- CS-001-021520	Memorandum with attached reports regarding inventory.
19	William Pardue	Operations	CS-001-021521	Diagram of material flow through Central Sprinkler.
19	William Pardue	Operations	CS-001-021522- CS-001-021554	Notes regarding sale of product through Central Sprinkler with attached forms including quality control return awaiting test results form, returned goods evaluations.
19	William Pardue	Operations	CS-001-021555	List of Central Sprinkler products.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
19	William Pardue	Operations	CS-001-021556- CS-001-021573	Notes from product meeting dated May 13, 1987.
19	William Pardue	Operations	CS-001-021574- CS-001-021578	Article entitled *Understanding the New Sprinklers.*
19	William Pardue	Operations	CS-001-021579- CS-001-021584	Central Sprinkler marketing material entitled *Installation Primer & Omega Residential Sprinklers.*
19	William Pardue	Operations	CS-001-021585- CS-001-021588	Central Sprinkler marketing material entitled *Design Example of a Residential Sprinkler System.*
19	William Pardue	Operations	CS-001-021589- CS-001-021592	Central Sprinkler marketing material entitled *Design Example of a Residential Sprinkler System.*
19	William Pardue	Operations	CS-001-021593- CS-001-021610	Central Sprinkler marketing material entitled *Installation Primer & Design Example Omega Residential Sprinklers.*
19	William Pardue	Operations	CS-001-021611- CS-001-021616	Article entitled *Automatic Sprinkler Systems - What's New?*
19	William Pardue	Operations	CS-001-021517- CS-001-021622	Article entitled *Understanding the New Sprinklers.*
19	William Pardue	Operations	CS-001-021623- CS-001-021626	Marketing material for Omega Sprinkler heads.
19	William Pardue	Operations	CS-001-021627- CS-001-021628	Ad for Omega Sprinkler head.
19	William Pardue	Operations	CS-001-021629- CS-001-021659	Cost savings reports for 1994 and 1995.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
19	William Pardue	Operations	CS-001-021660- CS-001-021663	High volume/parts by vendor reports.
19	William Pardue	Operations	CS-001-021664- CS-001-021665	Memorandum regarding Omega plunger housings.
19	William Pardue	Operations	CS-001-021666	Memorandum regarding Omega plunger housing.
19	William Pardue	Operations	CS-001-021667- CS-001-021671	Memorandum regarding cost savings.
19	William Pardue	Operations	CS-001-021672- CS-001-021681	Memorandum regarding cost savings.
19	William Pardue	Operations	CS-001-021682- CS-001-021699	Memorandum and ledgers regarding cost savings.
19	William Pardue	Operations	CS-001-021700- CS-001-021704	Cost reduction ideas file including sample letter to customers and memorandum regarding Omega bodies, as well as engineering hand drawn diagrams of Omega sprinklers.
19	William Pardue	Operations	CS-001-021705- CS-001-021725	Cost reduction projects file including spread sheets, handwritten notes regarding materials cost and cost comparisons.
19	William Pardue	Operations	CS-001-021726- CS-001-022279	Return Authorizations for 1996 - 1998.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
20	William Pardue	Operations	CS-001-022280-CS-001-022285	Omega Sprinkler manufacturing process flow charts.
20	William Pardue	Operations	CS-001-022286-CS-001-022294	Minutes of Executive Management Committee meetings for May 2, 1988, April 25, 1988, April 18, 1988.
20	William Pardue	Operations	CS-001-022295-CS-001-022297	Bill of Materials for Omega R-1 sprinkler with type M pellet.
20	William Pardue	Operations	CS-001-022298-CS-001-022299	Bill of Materials for Omega ½ inch sprinkler with Model M heat collector assembly.
20	William Pardue	Operations	CS-001-022300-CS-001-022301	Bill of Materials for R-1 Omega with Model M pellet.
20	William Pardue	Operations	CS-001-022302-CS-001-022304	Bill of Materials for Omega residential sprinkler pellet type.
20	William Pardue	Operations	CS-001-022305-CS-001-022306	Bill of Materials for Omega ½ inch sprinkler with HEC-12 deflector and Model M heat collector assembly.
20	William Pardue	Operations	CS-001-022307-CS-001-022308	Bill of Materials for Omega C-1 ½ inch pendant sprinkler.
20	William Pardue	Operations	CS-001-022309-CS-001-022310	Bill of Materials for Omega EC-20 ½ inch orifice pendant sprinkler.
20	William Pardue	Operations	CS-001-022311-CS-001-022312	Bill of Materials for Omega C-1A ½ inch orifice pendant sprinkler.
20	William Pardue	Operations	CS-001-022313-CS-001-022314	Bill of Materials for Omega EC-20A ½ inch orifice pendant sprinkler.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
20	William Pardue	Operations	CS-001-022315- CS-001-022316	Bill of Materials for Omega HEC-12 ½ inch orifice horizontal sidewall sprinkler.
20	William Pardue	Operations	CS-001-022317- CS-001-022318	Bill of Materials for Omega ½ inch sprinkler extended coverage, horizontal sidewall with HEC-20 deflector and Model M heat collector assembly.
20	William Pardue	Operations	CS-001-022319- CS-001-022320	Bill of Materials for Omega commercial sprinkler ½ inch Prohibitor pendant with Model M heat collector assembly.
20	William Pardue	Operations	CS-001-022321- CS-001-022322	Bill of Materials for Omega Ident-A-Fire commercial sprinkler or commercial Prohibitor with Model M heat collector assembly with SPDT switch.
20	William Pardue	Operations	CS-001-022323- CS-001-022324	Bill of Materials for Omega ½ inch sprinkler extended coverage pendant Prohibitor with Model M heat collector assembly.
20	William Pardue	Operations	CS-001-022325- CS-001-022326	Bill of Materials for Omega ½ inch sprinkler Ident-A-Fire extended coverage pendant or extended coverage Prohibitor with Model M heat collector assembly.
20	William Pardue	Operations	CS-001-022327	Bill of Materials for ½ inch Omega HEC-12 side wall Prohibitor sprinkler.
20	William Pardue	Operations	CS-001-022328- CS-001-022330	Bill of Materials for Omega Ident-A-Fire ½ inch sprinkler in HEC-12, HEC-20, or HEC-12 Prohibitor version with Model M heat collector assembly.
20	William Pardue	Operations	CS-001-022331- CS-001-022332	Bill of Materials for Omega large orifice with Flow Control deflector.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
20	William Pardue	Operations	CS-001-022333-CS-001-022334	Bill of Materials for Omega 15mm sprinkler Model EC-20.
20	William Pardue	Operations	CS-001-022335-CS-001-022336	Bill of Materials for Omega 15mm sprinkler Model EC-20.
20	William Pardue	Operations	CS-001-022337-CS-001-022339	Bill of Materials for Model M without the heat collector assembly.
20	William Pardue	Operations	CS-001-022340-CS-001-022341	Bill of Materials for Model M without the heat collector assembly.
20	William Pardue	Operations	CS-001-022342-CS-001-022343	Bill of Materials for Model M without the heat collector assembly.
20	William Pardue	Operations	CS-001-022344-CS-001-022345	Bill of Materials for Model M without the heat collector assembly.
20	William Pardue	Operations	CS-001-022346-CS-001-022348	Bill of Materials for Flow Control Model M heat collector assembly.
20	William Pardue	Operations	CS-001-022349-CS-001-022350	Bill of Materials for Flow Control.
20	William Pardue	Operations	CS-001-022351-CS-001-022352	Bill of Materials for snap disc module for Flow Control.
20	William Pardue	Operations	CS-001-022353	Bill of Materials for flush Flow Control automatic sprinkler.
20	William Pardue	Operations	CS-001-022354-CS-001-022355	Bill of Materials for Model FC flush automatic sprinkler.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
20	William Pardue	Operations	CS-001-022356- CS-001-022366	Transfer requirements report for December 1992.
20	William Pardue	Operations	CS-001-022367- CS-001-022376	Schedule attainment report for September 1992.
20	William Pardue	Operations	CS-001-022377- CS-001-022380	Transfer requirements report for December 1992.
20	William Pardue	Operations	CS-001-022381- CS-001-022384	Transfer ledgers for warehouses.
20	William Pardue	Operations	CS-001-022385- CS-001-022387	Schedule attainment report for November.
20	William Pardue	Operations	CS-001-022388	Omega schedule shortfall.
20	William Pardue	Operations	CS-001-022389	Production schedule for Friday, November 27 (second shift).
20	William Pardue	Operations	CS-001-022390- CS-001-022392	Schedule attainment for week of November 20.
20	William Pardue	Operations	CS-001-022393- CS-001-022401	Report listing sprinklers by product description.
20	William Pardue	Operations	CS-001-022402- CS-001-022404	Schedule attainment report for the week of November 13.
20	William Pardue	Operations	CS-001-022405	Omega schedule shortfall report.
20	William Pardue	Operations	CS-001-022406- CS-001-022407	Schedule attainment report for November 13.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
20	William Pardue	Operations	CS-001-022408- CS-001-022416	Consolidated net demand report for November 1992.
20	William Pardue	Operations	CS-001-022417- CS-001-022419	Schedule attainment for week of November 6.
20	William Pardue	Operations	CS-001-022420	Omega schedule shortfall report.
20	William Pardue	Operations	CS-001-022421- CS-001-022428	Schedule attainment report for November 6.
20	William Pardue	Operations	CS-001-022429- CS-001-022431	Schedule attainment for October 16.
20	William Pardue	Operations	CS-001-022432- CS-001-022440	Consolidated net demand report for October 1992.
20	William Pardue	Operations	CS-001-022441- CS-001-022443	Schedule attainment for October 9.
20	William Pardue	Operations	CS-001-022444- CS-001-022445	Schedule attainment for October 30.
20	William Pardue	Operations	CS-001-022446- CS-001-022454	Consolidated net demand report.
20	William Pardue	Operations	CS-001-022455- CS-001-02256	Schedule attainment for October 9.
20	William Pardue	Operations	CS-001-022457- CS-001-022465	Consolidated net demand report for October 1992.
20	William Pardue	Operations	CS-001-022466- CS-001-022468	Schedule attainment for October 2.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
20	William Pardue	Operations	CS-001-022469- CS-001-022470	Schedule attainment for October 2.
20	William Pardue	Operations	CS-001-022471- CS-001-022479	Consolidated net demand report for October 1992.
20	William Pardue	Operations	CS-001-022480- CS-001-022482	Schedule attainment for September 25.
20	William Pardue	Operations	CS-001-022483- CS-001-022485	Schedule attainment for September 25.
20	William Pardue	Operations	CS-001-022486- CS-001-022494	Consolidated net demand report for October 1992.
20	William Pardue	Operations	CS-001-022495- CS-001-022502	Schedule attainment for September 18.
20	William Pardue	Operations	CS-001-022503- CS-001-022510	Consolidated net demand report for September 11, 1992.
20	William Pardue	Operations	CS-001-022511- CS-001-022517	Production adjustment for September 18.
20	William Pardue	Operations	CS-001-022518- CS-001-022532	Schedule attainment for September 11.
20	William Pardue	Operations	CS-001-022533- CS-001-022535	Schedule attainment for September 4.
20	William Pardue	Operations	CS-001-022536- CS-001-022537	Schedule attainment for September 4 (preliminary).

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
20	William Pardue	Operations	CS-001-022538- CS-001-022546	Consolidated net demand report for September 1992.
20	William Pardue	Operations	CS-001-022547- CS-001-022548	Production to warehouse demand report September 3, 1992.
20	William Pardue	Operations	CS-001-022549- CS-001-022551	Schedule attainment for August 28.
20	William Pardue	Operations	CS-001-022552- CS-001-022560	Consolidated net demand report for August 1992.
20	William Pardue	Operations	CS-001-022561- CS-001-022564	Schedule attainment for August 1.
20	William Pardue	Operations	CS-001-022565- CS-001-022568	Schedule attainment for August 14.
20	William Pardue	Operations	CS-001-022569- CS-001-022571	Schedule attainment for August 17.
20	William Pardue	Operations	CS-001-022572- CS-001-022574	Schedule attainment for August 7.
20	William Pardue	Operations	CS-001-022575- CS-001-022577	Schedule attainment for August 7 (second shift).
20	William Pardue	Operations	CS-001-022578- CS-001-022579	Schedule attainment for August 7.
20	William Pardue	Operations	CS-001-022580- CS-001-022608	Month-to-Date net sales for 1990-1992.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
20	William Pardue	Operations	CS-001-022609- CS-001-022619	Executive Management Report .
20	William Pardue	Operations	CS-001-022620	Memorandum regarding Omega o-ring change.
20	William Pardue	Operations	CS-001-022621	Memorandum regarding Omega o-ring change.
20	William Pardue	Operations	CS-001-022622	Memorandum regarding Omega o-ring change meeting.
20	William Pardue	Operations	CS-001-022623- CS-001-022625	Memorandum regarding revised stamp for Omega with silicone o-rings.
20	William Pardue	Operations	CS-001-022626- CS-001-022658	Payroll reports.
20	William Pardue	Operations	CS-001-022659- CS-001-022661	Work center list.
20	William Pardue	Operations	CS-001-022662- CS-001-022664	Reports captioned "Defective Products."
20	William Pardue	Operations	CS-001-022665- CS-001-022706	Operations meeting minutes for 1989.

	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
21	William Pardue	Operations	CS-001-022707- CS-001-024156	Correspondence file including Executive Management Reports, computer reports regarding average weekly requirements, stocking inventory analysis reports, current period schedule attainment reports, master planning schedule, average weekly requirements, finished goods schedule, sprinkler production, Engineering Diagnostic Reports, personnel and payroll statistics, correspondence regarding Hilton Hotels, diagnostic reports.
21	William Pardue	Operations	CS-001-024157- CS-001-024273	Correspondence files including Capital Hilton for trip reports, project location, material and labor sheets from Daniel E. McDaniel Co., Inc., correspondence from Central Sprinkler Co. to Noyes regarding insurance, correspondence from J.C. Moss & Assoc., Inc. regarding insurance, Adjusting Services Unlimited, Inc. correspondence to Central Sprinkler Co. regarding insurance, memorandum regarding Omega sprinklers installed in Hilton Hotels, telephone message slips, handwritten notes, trip reports, correspondence from Automatic Sprinklers Corp. of America to Central Sprinkler Co. regarding Omega style sprinklers installed at the Hilton Hawaiian Village, Return Authorization with attached invoices from Central Sprinkler Co., correspondence from Planning Engineering & Research Energy Management Consultants regarding installation of sprinklers at Imperial Hawaii Resort Hotels, Engineering Diagnostic Report.

	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
21	William Pardue	Operations	CS-001-024274- CS-001-024311	Correspondence file for Tarrytown Town Hilton including telephone message slips, forms from L.J. Coppola, Inc., correspondence with Central Sprinkler Co., trip reports, correspondence with Rolf Jensen & Assoc., Inc., correspondence with L.J. Coppola, Inc.
21	William Pardue	Operations	CS-001-024312- CS-001-024339	Correspondence file for San Francisco Hilton including telephone message slips, correspondence with Automatic Sprinkler Corp. of America, correspondence with Hilton Hotels Corp., memoranda, trip reports.

	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
21	William Pardue	Operations	CS-001-024340- CS-001-024957	Correspondence file for Hilton Hotel including correspondence with Rolf Jensen & Assoc. regarding installation of sprinkler systems in Hilton Hotels, correspndence with Hilton Hotels Corp. regarding installation, handwritten notes regarding sprinkler installation, correspondence from Central Sprinkler Co. regarding status of Hilton projects, Central Sprinkler Co. invoices, construction wages and fringe benefit information, handwritten information regarding Omega sprinkler replacement, telephone message slips, information on field service regarding Omega sprinkler systems, Executive Management Reports, Central Sprinkler Co. current period schedule attainment reports, Central Sprinkler Co. stocking inventory analysis reports, meeting minutes, Operations Meeting minutes, Engineering Diagnostic Reports, sprinkler production reports, sales analysis reports, Central Sprinkler Co. personnel & payroll statistics, articles regarding sprinkler systems, consulting agreements, Return Authorizations, Engineering Diagnostic Reports regarding Omega sprinklers received during field trip to Chicago Hilton, insurance claims information from Transco Insurance Services, insurance information from Noyes Services.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
22	William Pardue	Operations	CS-001-024958- CS-001-025942.4	Personal and payroll statistics for the period June 1992 through November 1995, memoranda on trip reports, tooling procedures, minutes of Operations Meetings, handwritten notes in fiscal year 1997 sales (rolling forecast).
22	William Pardue	Operations	CS-001-025943- CS-001-026176	File entitled "Haddonfield Group Management Consultants Reasonable Expectations" containing report from the Haddonfield group entitled "Reasonable Expectations."
22	William Pardue	Operations	CS-001-026177- CS-001-026449	File entitled "Haddonfield Group Organizational Development" containing Organizational Development report.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-026450- CS-001-026465	Spreadsheet listing properties identified and taking part in the Omega mediation program.
23	William Pardue	Operations	CS-001-026466- CS-001-026471.05	Lists of properties participating in the Omega mediation program and spreadsheets tracking progress of retrofits.
23	William Pardue	Operations	CS-001-026472- CS-001-026474	Facsimile with attached handwritten notes regarding Marriott Courtyards Omega sprinkler changeout.
23	William Pardue	Operations	CS-001-026475	Handwritten notes regarding Omega changeout at the Memphis Airport Marriott.
23	William Pardue	Operations	CS-001-026476- CS-001-026477	Handwritten notes with attached correspondence from Fire Systems Sprinkler Company, Inc. regarding the Omega changeout for various Marriott Hotels.
23	William Pardue	Operations	CS-001-026478	Handwritten notes regarding Omega changeouts for Marriott Hotels in Atlanta, Georgia.
23	William Pardue	Operations	CS-001-026478.01	Handwritten notes regarding Omega changeouts for various Marriott Hotels in Alabama.
23	William Pardue	Operations	CS-001-026479- CS-001-026480	Lists of properties participating in the Omega remediation program.
23	William Pardue	Operations	CS-001-026481- CS-001-026482	Lists of Marriott properties participating in the Omega remediation program with handwritten notes and highlights faxed from Marriott International
23	William Pardue	Operations	CS-001-026483- CS-001-026483.17	Spreadsheets of properties participating in the Omega remediation program tracking status of retrofit.
23	William Pardue	Operations	CS-001-026483.18- CS-001-026484.05	Lists of properties participating in the Omega remediation program.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-026485- CS-001-026486.05	Spreadsheets of properties participating in the Omega remediation program.
23	William Pardue	Operations	CS-001-026487- CS-001-026491	Omega to-do lists, some with handwritten notes.
23	William Pardue	Operations	CS-001-026492- CS-001-026493	Correspondence to Marriott International regarding take-outs for GBR/QR replacements of Omega sprinklers dated August 19, 1996.
23	William Pardue	Operations	CS-001-026494	Memorandum regarding contractors for Omega remedy.
23	William Pardue	Operations	CS-001-026495	Memorandum regarding Marriott Courtyard procedures.
23	William Pardue	Operations	CS-001-026496.01- CS-001-026496.02	Lists of Marriott properties participating in Omega remediation program.
23	William Pardue	Operations	CS-001-026496.03- CS-001-026496.08	Spreadsheets of hotels participating in the Marriott remediation program.
23	William Pardue	Operations	CS-001-026497- CS-001-026501	Omega file for the Comfort Inn in West Hazleton, Pennsylvania, including the Omega test data sheet, Omega return authorization order form, a fax cover sheet to the building owner and an Omega questionnaire.
23	William Pardue	Operations	CS-001-026502- CS-001-026503	Newspaper articles regarding the Omega sprinkler.
23	William Pardue	Operations	CS-001-026504- CS-001-026514	Article entitled "The Omega Sprinkler Head: Performance Testing in Fairfax County" in the magazine Fire Engineering, February 1998.
23	William Pardue	Operations	CS-001-026515- CS-001-026546	Omega return authorization list for September 9, 1997.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-026547-CS-001-026549	Return authorization list for VA Medical Centers dated May 28, 1997.
23	William Pardue	Operations	CS-001-026550-CS-001-026562	Omega open order report for September 9, 1997.
23	William Pardue	Operations	CS-001-026563-CS-001-026564	Omega activity reports.
23	William Pardue	Operations	CS-001-026565-CS-001-026639	Central Sprinkler fax cover sheets attaching Omega information sheets.
23	William Pardue	Operations	CS-001-026640-CS-001-026654	Sample changeout letters with attached form letters and Omega information.
23	William Pardue	Operations	CS-001-026655-CS-001-026657	Letters to building owners regarding Omega testing.
23	William Pardue	Operations	CS-001-026658-CS-001-026660	Omega file for Green Eleven of Leisure from Silver Springs, Maryland, including Omega testing summary and Omega test data sheets.
23	William Pardue	Operations	CS-001-026661-CS-001-026662	Omega file for Transitional Living Center in Hamilton, Ohio, including Omega testing summary and Omega test data sheets.
23	William Pardue	Operations	CS-001-026663-CS-001-026665	Omega file for Able Engineering Services, San Francisco, California, including Omega testing summary and Omega test data sheets.
23	William Pardue	Operations	CS-001-026666	Engineering Diagnostic Report for Model H head.
23	William Pardue	Operations	CS-001-026667-CS-001-026668	Omega file for Calfox, Inc., San Francisco, California, including Omega testing summary and Omega test data sheets.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-026669- CS-001-026670	Omega file for Danvers Courtyard, Danvers, Massachusetts, including Omega testing summary and Omega test data sheet.
23	William Pardue	Operations	CS-001-026671- CS-001-026672	Omega file for Crown Plaza Park 55, San Francisco, California, including Omega testing summary and Omega test data sheet.
23	William Pardue	Operations	CS-001-026673- CS-001-026674	Omega file for Park Place Rental Condominiums, Walnut Creek, California, including Omega testing summary and Omega test data sheet.
23	William Pardue	Operations	CS-001-026675- CS-001-026676	Omega file for Henrico County Adult Detention, Richmond, Virginia, including Omega testing summary and Omega test data sheet.
23	William Pardue	Operations	CS-001-026677- CS-001-026678	Omega file for Beacon Management, Chicago, Illinois, including Omega testing summary and Omega test data sheet.
23	William Pardue	Operations	CS-001-026679- CS-001-026680	Omega file for Western Correctional Institution, Cumberland, Maryland, including Omega testing summary and Omega test data sheet.
23	William Pardue	Operations	CS-001-026681- CS-001-026682	Omega file for Pinellas Juvenile Detention Center, Clearwater, Florida, including Omega testing summary and Omega test data sheet.
23	William Pardue	Operations	CS-001-026683	Omega test summary for Loma Alta Towers in Daphna, Alabama.
23	William Pardue	Operations	CS-001-026684- CS-001-026686	Correspondence to Holiday Inn, Chicago City Center, with attached Omega testing summary and Omega test data sheet.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-026687-CS-001-026689	Correspondence to Beacon Management, Chicago, Illinois, attaching Omega testing summary and Omega test data sheet.
23	William Pardue	Operations	CS-001-026690-CS-002-026692	Correspondence to Crown Plaza Park 55, San Francisco, California, attaching Omega testing summary and Omega test data sheet.
23	William Pardue	Operations	CS-001-026693-CS-001-026695	Correspondence to Henrico County Adult Detention Center, attaching Omega testing summary and Omega test data sheet.
23	William Pardue	Operations	CS-001-026696-CS-001-026698	Correspondence to Western Correctional Institute in Cumberland, Maryland, attaching Omega testing summary and Omega test data sheet.
23	William Pardue	Operations	CS-001-026699-CS-001-026701	Correspondence to Green Fire Systems in Conyers, Georgia, attaching Omega testing summary and Omega test data sheet.
23	William Pardue	Operations	CS-001-026702	Correspondence to the GSA in Washington, D.C. regarding the Census Bureau building.
23	William Pardue	Operations	CS-001-026703	Correspondence to Fox Plaza in San Francisco, California, regarding the Omega testing for the Fox Plaza building.
23	William Pardue	Operations	CS-001-026704-CS-001-026713	Report on C-1A sprinklers installed at 100 Pine Street, San Francisco, California, including Omega test data sheet, diagnostic report of Dr. Victor Greenhut.
23	William Pardue	Operations	CS-001-026714	Correspondence to Apex Fire Protection in Surrey, British Columbia, regarding Vancouver Public Library.
23	William Pardue	Operations	CS-001-026715	Correspondence to Clay Smith regarding Cortland Housing Authority.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-026716	Correspondence to Canem Systems in Richmond, British Columbia, regarding Omega testing for the Library Square building.
23	William Pardue	Operations	CS-001-026717	Correspondence to First Market Tower in San Francisco, California, regarding testing of Omega sprinkler heads.
23	William Pardue	Operations	CS-001-026718	Correspondence to Valley Hospital in Seattle, Washington, regarding testing of Model M sprinklers.
23	William Pardue	Operations	CS-001-026719	Correspondence to Northwest Community Hospital in Arlington Heights, Illinois, regarding testing of sprinklers from the Northwest Community Hospital.
23	William Pardue	Operations	CS-001-026720	Correspondence to City of Virginia Beach regarding testing of sprinklers in Virginia Beach City Jail.
23	William Pardue	Operations	CS-001-026721	Correspondence to Masters, Inc. in Gaithersburg, Maryland, regarding Omega sprinkler information.
23	William Pardue	Operations	CS-001-026722	Correspondence to Parks and Recreations Department of Chesapeake, Virginia, regarding sprinklers at the police station and detention center.
23	William Pardue	Operations	CS-001-026723- CS-001-026725	Correspondence to the Bedford VA Medical Center with attached Omega test data sheets.
23	William Pardue	Operations	CS-001-026726- CS-001-026757	Omega Training Handbook for Supervisors.
23	William Pardue	Operations	CS-001-026758- CS-001-026760	Spreadsheets regarding Omega changeout audit.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-026761-CS-001-026784	Omega reserve file, including handwritten notes regarding Omega head replacement analysis, spreadsheets regarding cost analysis, spreadsheet regarding units sold in thousands, spreadsheet regarding projected Marriott costs and billings, memorandum regarding Omega controls, handwritten spreadsheets regarding Omega rework analysis, spreadsheet regarding Omega program reserve, spreadsheet regarding remedy costs, spreadsheet regarding returned heads analysis, spreadsheet regarding lists of jobs not invoiced, handwritten notes regarding results to date, memorandum regarding Omega changeout costs, flow chart of Omega rework activity.
23	William Pardue	Operations	CS-001-026785-CS-001-026788	File of results of Omega activity tests, including Engineering Diagnostic Reports, Omega test data sheets and correspondence to the Valley Hospital in Seattle, Washington, regarding testing of Model M sprinklers.
23	William Pardue	Operations	CS-001-026789-CS-001-026795	Dewey Ballantine Flow Control sprinkler file, including correspondence from Factory Mutual, a facsimile from Dewey Ballantine to William Pardue, correspondence from Central to Dewey Ballantine regarding the Tishman-Speyer properties replacement of sprinklers in 21st floor computer room, handwritten correspondence and correspondence from Tishman-Speyer to Dewey Ballantine.
23	William Pardue	Operations	CS-001-026796-CS-001-026810	Properties with Omegas database file, including spreadsheets of properties with Omega sprinklers, including test results.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-026811- CS-001-026823	First Mailing to Building Owners file, including Omega meeting minutes, notes, sample letters to building owners, sample questionnaires to building owners, fax cover sheet to Dewey Ballantine, correspondence from Tishman-Speyer to Dewey Ballantine, correspondence from Factory Mutual to Tishman-Speyer, agenda for Omega meeting, and questionnaire regarding Omega sprinklers filled out by Prime Hospitality Corp.
23	William Pardue	Operations	CS-001-026824- CS-001-026833	Salt Lake City Corp. file, including Factory Mutual test results, handwritten notes, faxed correspondence from Central Sprinkler to Sprinkler Contractors.
23	William Pardue	Operations	CS-001-026834- CS-001-026835	Receiver slip with attached Omega C-1A sprinkler head changeout test results, received April 17, 1997.
23	William Pardue	Operations	CS-001-026836- CS-001-026859	Receiver slips for Omega sprinkler heads, some with attached test results.
23	William Pardue	Operations	CS-001-026860- CS-001-026861	Correspondence from Compass Management and Leasing, Inc. regarding testing of Omega sprinklers.
23	William Pardue	Operations	CS-001-026862- CS-001-026927	Receiver slips, some with attached test results, others with attached building owner questionnaires regarding Omega changeout procedures.
23	William Pardue	Operations	CS-001-026928- CS-001-026935	Sea World file, including correspondence from Fire Sprinkler Systems Company to Sea World regarding sprinkler head replacement, fax cover sheets from Fire Sprinkler Systems Company to Central Sprinkler, Engineering Diagnostic Report for Model M sprinklers returned from Sea World, Omega test data sheets, Return Authorization and receiver slip for sprinkler heads received from Sea World on December 3, 1996.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-026936-CS-001-027024	Receive slips for customer returns, some with attached test results and correspondence to and from building owners.
23	William Pardue	Operations	CS-001-027025	Fax cover sheet regarding Omega sprinkler bulletins.
23	William Pardue	Operations	CS-001-027026	Correspondence from Fire Sprinkler Systems Company to Central Sprinkler regarding Amelia Island Ritz Carlton.
23	William Pardue	Operations	CS-001-027027-CS-001-027029	Handwritten notes with attached reports regarding Omega parts.
23	William Pardue	Operations	CS-001-027030-CS-001-027034	Singer Island file, including Return Authorization, Marriott International retrofit project spreadsheet, e-mail regarding Singer Island sprinkler heads, correspondence from Marriott International regarding sprinkler replacement project, correspondence from Central regarding sprinkler heads at Singer Island.
23	William Pardue	Operations	CS-001-027035-CS-002-027039	Southern Pines file, including Return Authorization, Marriott International retrofit project spreadsheet, faxed copy of the Omega HEC-12 cut sheets and C-1A cut sheets.
23	William Pardue	Operations	CS-001-027040-CS-001-027041	Atlanta Downtown Fairfield file, including Return Authorization and Marriott International retrofit project spreadsheet.
23	William Pardue	Operations	CS-001-027042-CS-001-027048	Memorandum regarding Marriott Omega jobs with attached lists of properties participating in the Omega remediation program, with handwritten notes.
23	William Pardue	Operations	CS-001-027049-CS-001-027053	Memorandum regarding Omega sprinklers.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-027054-CS-001-027061	Correspondence from Marriott International regarding letter agreement with letter agreement attached.
23	William Pardue	Operations	CS-001-027062-CS-001-027068	Memorandum regarding installer agreement with installer agreement attached.
23	William Pardue	Operations	CS-001-027069-CS-001-027070	Handwritten note with Omega changeout procedures blank form attached.
23	William Pardue	Operations	CS-001-027071-CS-001-027072	Omega to-do list.
23	William Pardue	Operations	CS-001-027073-CS-001-027074	Correspondence to Great Lakes Plumbing and Heating Company regarding Omega sprinklers.
23	William Pardue	Operations	CS-001-027075-CS-001-027076	Memorandum regarding Marriott Courtyard procedures.
23	William Pardue	Operations	CS-001-027077	Handwritten notes regarding sprinkler replacement schedule.
23	William Pardue	Operations	CS-001-027078	Memorandum regarding Omega changeout wrench.
23	William Pardue	Operations	CS-001-027079-CS-001-027083	Memorandum regarding GB sprinkler Omega retrofit with GB cut sheets attached.
23	William Pardue	Operations	CS-001-027084-CS-001-027088	Omega cut sheets.
23	William Pardue	Operations	CS-001-027089-CS-001-027091	Faxed correspondence from Marriott Corporation regarding the sprinkler replacement project.
23	William Pardue	Operations	CS-001-027092	Memorandum regarding GB sprinkler for the Omega retrofit.
23	William Pardue	Operations	CS-001-027093-CS-001-027096	Glass Bulb cut sheets.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-027097- CS-001-027117	Handwritten notes regarding the Marriott Hotel retrofit.
23	William Pardue	Operations	CS-001-027118- CS-001-027124	Calusa Harbor Senior Living Services/Fire Sprinkler Systems, Inc. file, containing correspondence to the Fire Marshal for Ft. Myers, Florida, the GB cut sheet and memorandum regarding use of the GB for Omega replacements.
23	William Pardue	Operations	CS-001-027125- CS-001-027193	Receiver slips, some with test results attached.
23	William Pardue	Operations	CS-001-027194- CS-001-027205	Return Authorization list dated December 1, 1996.
23	William Pardue	Operations	CS-001-027206- CS-001-027216	Spreadsheet regarding Omega replacement sprinklers, with handwritten notes attached, Return Authorizations, Marriott retrofit material requisition spreadsheet, cut sheets for Quick Response Extended Coverage Application and an Omega RA order form blank attached.
23	William Pardue	Operations	CS-001-027217	Omega test result form letter.
23	William Pardue	Operations	CS-001-027218	Retrofit Project Job Information Sheet submitted by the Renaissance in Denver, Colorado.
23	William Pardue	Operations	CS-001-027219	Correspondence from Marriott International regarding the Omega remediation program.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-027220- CS-001-027252	Correspondence from Marriott International regarding Central Omega sprinkler heads at Renaissance properties with Retrofit Project Job Information Sheets, Omega RA order forms, Central Sprinkler shipping documents, receiver slips, Omega database printouts, Engineering Diagnostic Reports, and Omega test data sheets attached.
23	William Pardue	Operations	CS-001-027253- CS-001-027255	Correspondence from Marriott International regarding Central Omega sprinkler heads at the Costa Mesa Residence, with fax cover sheets attached.
23	William Pardue	Operations	CS-001-027256- CS-001-027257	Omega RA order form for Marina Del Ray, Ritz Carlton, with Retrofit Information Sheet attached.
23	William Pardue	Operations	CS-001-027258	Correspondence from Marriott International regarding Central Omega heads.
23	William Pardue	Operations	CS-001-027259- CS-001-027266	Retrofit Information Sheets with attached fax cover sheet and handwritten correspondence.
23	William Pardue	Operations	CS-001-027267	Correspondence from Marriott International regarding Omega remediation program.
23	William Pardue	Operations	CS-001-027268	Correspondence from Marriott International regarding sprinkler replacement project.
23	William Pardue	Operations	CS-001-027269- CS-001-027269.01	Correspondence from Marriott International regarding sprinkler replacement project.
23	William Pardue	Operations	CS-001-027270	Memorandum regarding St. Louis sprinkler system installers.
23	William Pardue	Operations	CS-001-027271- CS-001-027272	Correspondence from the Ritz Carlton Laguna Niguel regarding sprinkler head return.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-027273	Correspondence to Marriott International regarding Renaissance hotels update.
23	William Pardue	Operations	CS-001-027274-CS-001-027276	Handwritten note regarding Marriott Courtyard heads, with attached receiver slip.
23	William Pardue	Operations	CS-001-027277-CS-001-027288	Marriott International receiver slips.
23	William Pardue	Operations	CS-001-027288.01	Handwritten note regarding Marriott services.
23	William Pardue	Operations	CS-001-027289	Receiver slip.
23	William Pardue	Operations	CS-001-027290-CS-001-027294	Return Authorization for Rochester Marriott Airport, with Central Sprinkler shipping documents attached.
23	William Pardue	Operations	CS-001-027295	Marriott Properties status report.
23	William Pardue	Operations	CS-001-027296-CS-001-027300	Return Authorization for Brighton Courtyard, with Central Sprinkler shipping documents attached.
23	William Pardue	Operations	CS-001-027301-CS-001-027312	Invoice from Fire Sprinkler Systems Company, Inc. for replacement of heads at residence in Altemonte Springs, invoice for removal of heads from Riverside Village in Ft. Myers, Florida, a fax regarding sprinkler head changeout with attached Omega RA order form, handwritten notes, Retrofit Information Sheet, a fax from the Marriott Residence Inn, correspondence from Marriott International regarding the retrofit of Omega heads at Renaissance Hotels, fax cover sheets regarding the retrofit forms, and a Central Sprinkler shipping document attached.
23	William Pardue	Operations	CS-001-027313	Central Sprinkler shipping document.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-027314- CS-001-027319	Return Authorization for the Tarrytown Courtyard Inn, with attached Marriott International retrofit project spreadsheet, chart faxed from the Tarrytown Courtyard, building layout for the Tarrytown Courtyard, correspondence from Marriott International regarding address of the Tarrytown Courtyard, and a receiver slip for sprinkler heads returned from the Tarrytown Marriott Courtyard.
23	William Pardue	Operations	CS-001-027320	Correspondence from Marriott International regarding Central Omega heads.
23	William Pardue	Operations	CS-001-027321- CS-001-027340	Return Authorization for Marriott Mystic, Rhode Island, with attached Marriott International retrofit project spreadsheet, Retrofit Project Job Information Sheets, faxes from Marriott International, handwritten notes, and Central Sprinkler shipping documents attached.
23	William Pardue	Operations	CS-001-027341- CS-001-027373	Fairfield Inns file, including correspondence from Sage Hospital regarding inspection of Fairfield Hotels, Omega RA order forms, Retrofit Information Sheets, building owner questionnaires, sprinkler system hydraulic calculations questionnaire, faxes from the Fairfield Inn, handwritten notes regarding sprinkler heads needed for retrofit, photocopies of photographs of sprinkler heads, correspondence from Augusta Fire Protection regarding the inspection of the Fairfield Inn, with attached report of inspection, with attached Omega identification sheets, Retrofit Project Job Information Sheets, and correspondence from the County of Spotsylvania.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-027374- CS-001-027431	Marriotts Done by Central Sprinkler Company Crew file, including Marriott International Retrofit Project Spreadsheet, Return Authorizations, Retrofit Project Job Information Sheets, correspondence from individual Marriott Courtyard hotels, Omega cut sheet, Central Sprinkler shipping documents, receiver slips, Fairfax County Fire and Rescue Department Omega Sprinkler Head Survey, Fairfax County Fire and Rescue Department correspondence regarding Omega Sprinkler System Hydraulic Calculations Worksheet, Building Owner Questionnaire filled out by the Ritz Carlton, Purchase Order from Delmonte Corporation, handwritten note regarding scheduling of retrofit, handwritten correspondence from the Delmonte Corporation regarding types of Omegas identified at various Courtyard hotels, Omega test result form letter.
23	William Pardue	Operations	CS-001-027432- CS-001-027439	Sheraton Hotels file, including memorandum regarding the Hawaii Sheraton changeout work to be performed by Premier Fire Protection, correspondence from Premier Fire Protection and the Sheraton Waikiki Hotel, and spreadsheet regarding the Omega changeout costs for Sheraton hotels performed by Premier Fire Protection.
23	William Pardue	Operations	CS-001-027440- CS-001-027465	Report format development, including memorandum regarding new Omega report format/procedure, informational form letter regarding Omega sprinkler heads, memorandum regarding Omega diagnostic engineering reports, form Omega report, handwritten draft form letter regarding Omega test results.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-027466- CS-001-027494	Omega Inquiry Cover Letter file, including draft Omega informational letters, draft Omega test data sheets, draft Omega testing summaries, draft building owners questionnaire.
23	William Pardue	Operations	CS-001-027495- CS-002-027514	Omega database printout.
23	William Pardue	Operations	CS-001-027515- CS-001-027524	Omega database spreadsheet.
23	William Pardue	Operations	CS-001-027525- CS-001-027529	Diagnostic report prepared by Dr. Victor Greenhut regarding St. Joseph property.
23	William Pardue	Operations	CS-001-027530- CS-001-027534	Diagnostic report prepared by Dr. Victor Greenhut regarding AMA State building.
23	William Pardue	Operations	CS-001-027535- CS-001-027539	Diagnostic report prepared by Dr. Victor Geenhut regarding Buffalo Psychiatric Center.
23	William Pardue	Operations	CS-001-027540- CS-001-027544	Underwriters Laboratories report on special services investigation to conduct operational tests on Central Sprinkler Company Model C-1 and M automatic sprinkler.
23	William Pardue	Operations	CS-001-027545- CS-001-027556	Spreadsheet of Omega properties sent building owner letters.
23	William Pardue	Operations	CS-001-027557- CS-001-027577	Omega head count by state spreadsheet dated October 28, 1997.
23	William Pardue	Operations	CS-001-027578- CS-001-027595	Omega head count by state spreadsheet dated October 14, 1997.
23	William Pardue	Operations	CS-001-027596- CS-001-027606	Omega head count by state spreadsheet dated August 26, 1997.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-027607- CS-001-027616	Omega test record dated March 7, 1997.
23	William Pardue	Operations	CS-001-027616.01- CS-001-027616.04	Marriott static pressure test results dated July 21, 1997.
23	William Pardue	Operations	CS-001-027617	Omega database record for Calfox, Inc.
23	William Pardue	Operations	CS-001-027618- CS-001-027621	Omega database record for Yorkshire Knolls with Omega RA order form and correspondence from Tri-State Fire Protection Services attached.
23	William Pardue	Operations	CS-001-027622- CS-001-027624	Omega RA order form for Western Bank building with fax cover sheets attached.
23	William Pardue	Operations	CS-001-027625	Sprinkler System Hydraulic Calculations Worksheet for Western Bank building.
23	William Pardue	Operations	CS-001-027626- CS-001-027633	Omega database records for Western Bank building and Evans Catamaran.
23	William Pardue	Operations	CS-001-027634- CS-001-027635	Business card for Evans Hotels, with attached fax cover sheet.
23	William Pardue	Operations	CS-001-027636	Correspondence to Evans Hotels regarding Catamaran Hotel.
23	William Pardue	Operations	CS-001-027637- CS-001-027646	Engineering Diagnostic Reports for Schmidt Fire Protection Properties, some with attached Omega test data sheets.
23	William Pardue	Operations	CS-001-027647- CS-001-027650	Correspondence from Evans Hotels regarding Omega sprinkler heads, with correspondence from Arkwright Insurance Company attached.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-027651- CS-001-027652	Correspondence from counsel for Cabrillo Square Apartments and the Catamaran Hotel regarding Omega sprinkler heads installed in clients' buildings.
23	William Pardue	Operations	CS-001-027653- CS-001-027656	Faxes with attached Central Sprinkler shipping documents and Omega RA order forms to Fire Marshal for Evans Catamaran Resort Hotel jurisdiction.
23	William Pardue	Operations	CS-001-027657- CS-001-027658	Correspondence from counsel for Cabrillo Square Apartments and the Catamaran Hotel regarding Omega sprinkler heads installed in clients' buildings.
23	William Pardue	Operations	CS-001-027659	Omega RA order form for the Cabrillo Square Apartments.
23	William Pardue	Operations	CS-001-027660- CS-001-027664	Engineering Diagnostic Report for Schmidt Fire Protection regarding the Evans Hotel properties with Omega test data sheets attached.
23	William Pardue	Operations	CS-001-027665- CS-001-027670	Engineering Diagnostic Reports for Evans Hotel with Omega test data sheets attached.
23	William Pardue	Operations	CS-001-027671- CS-001-027678	Engineering Diagnostic Reports for Evans Hotel with Omega test data sheets attached.
23	William Pardue	Operations	CS-001-027679- CS-001-027690	Omega steel pipe system sampling procedure worksheets for Schmidt Fire Protection, with Omega database record, Return Authorization, fax cover sheets attached.
23	William Pardue	Operations	CS-001-027691- CS-001-027693	Telephone message slips and Omega database records for Chapperal Fire Protection.
23	William Pardue	Operations	CS-001-027694- CS-001-027697	Omega database record with handwritten notes, Return Authorization and Central Sprinkler shipping documents attached for Able Engineering Services.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-027698- CS-001-027701	Omega database record for Chester Mental Health Center and Henderson's Wharf.
23	William Pardue	Operations	CS-001-027702- CS-001-027706	Omega database record for Henrico County Detention with building owner questionnaire, Return Authorization, and Central Sprinkler shipping documents attached.
23	William Pardue	Operations	CS-001-027707- CS-001-027709	Handwritten note regarding Marrick property with Omega RA order form and Omega database record attached.
23	William Pardue	Operations	CS-001-027710- CS-001-027711	Omega database records for Insignia and Nebraska Fire Sprinkler.
23	William Pardue	Operations	CS-001-027712- CS-001-027713	Omega database record for Prince William Hospital with Return Authorization attached.
23	William Pardue	Operations	CS-001-027714	Omega database record for Renaissance Mayflower Hotel.
23	William Pardue	Operations	CS-001-027715- CS-001-027718	Building owner questionnaire for Vaca Valley Hospital with Return Authorization, shipping documents and Omega database record attached.
23	William Pardue	Operations	CS-001-027719	Omega database record for the Greens at Leisure World II.
23	William Pardue	Operations	CS-001-027720- CS-001-027726	Return Authorization for Pinellas Juvenile Detention Center, with attached shipping documents, fax cover sheets.
23	William Pardue	Operations	CS-001-027726.01- CS-001-027726.04	Fax with attached Engineering Diagnostic Report, Omega database records regarding Pinellas Juvenile Detention Center.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-027727	Handwritten note regarding Omega van.
23	William Pardue	Operations	CS-001-027728- CS-001-027730	Correspondence from the State of Maryland Office of the State Fire Marshal regarding cease and desist order.
23	William Pardue	Operations	CS-001-027731	Correspondence from the State of Delaware Office of State Fire Marshal regarding Omega sprinklers.
23	William Pardue	Operations	CS-001-027732- CS-001-027734	Correspondence from the State of Maryland Office of the State Fire Marshal regarding cease and desist order.
23	William Pardue	Operations	CS-001-027735- CS-001-027736	Article regarding Consumer Product Safety Commission dated November 20, 1997.
23	William Pardue	Operations	CS-001-027737- CS-001-027738	Article regarding Consumer Product Safety Commission downloaded from the Internet on November 20, 1997.
23	William Pardue	Operations	CS-001-027739- CS-001-027741	Engineering change notice with attached Omega sprinkler testing protocol and Associated Press article.
23	William Pardue	Operations	CS-001-027742- CS-001-027743	Omega sprinkler testing protocol with attached engineering change notice.
23	William Pardue	Operations	CS-001-027744- CS-001-027749	Underwriters Laboratories letter to American Fire Sprinkler Association members with Underwriters Laboratories news releases and fax cover sheet from Inland Fire Protection, Inc. attached.
23	William Pardue	Operations	CS-001-027750- CS-001-027753	Correspondence from State of Washington, Washington State Patrol to Health Care Facilities Administrators regarding the Omega sprinkler head with fax cover sheet attached.
23	William Pardue	Operations	CS-001-027754- CS-001-027756	Handwritten note regarding Omega marketing material with marketing material attached.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-027757- CS-001-027759	Correspondence from Central to Automatic Fire Sprinklers, Inc. regarding Omega testing protocol.
23	William Pardue	Operations	CS-001-027760- CS-001-027762	Correspondence from Central to Automatic Fire Sprinklers, Inc. regarding Omega test protocol.
23	William Pardue	Operations	CS-001-027763	List regarding Omega building code key.
23	William Pardue	Operations	CS-001-027764- CS-001-027768	Correspondence from Viking Corporation to fire officials with statement regarding the Omega brand fire sprinkler issue, memorandum from the City of Tucson and memorandum to BOMA International members attached.
23	William Pardue	Operations	CS-001-027769- CS-001-027771	Correspondence from the State of Alabama Department of Insurance to all fire protection sprinkler contractors licensed in Alabama regarding Omega sprinkler heads, with attached survey and fax cover sheet.
23	William Pardue	Operations	CS-001-027772- CS-001-027775	Correspondence from Illinois Department of Human Services with attached copy of letter from Central Sprinkler to Great Lakes Plumbing and Heating and letter from Great Lakes Plumbing and Heating to the State of Illinois Capital Development Board regarding the Omega sprinkler head.
23	William Pardue	Operations	CS-001-027776- CS-001-027779	E-mail regarding Omega sprinkler heads with Central Sprinkler wrench index and Central Sprinkler headguard an water shield index attached.
23	William Pardue	Operations	CS-001-027780- CS-001-027784	Omega database totals spreadsheet dated July 14, 1997.
23	William Pardue	Operations	CS-001-027785- CS-001-027796	Articles regarding the Omega sprinkler head dated July 22 in Firetalk Magazine.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-027797-CS-001-027798	Memorandum to BOMA International members regarding Omega sprinkler heads with fax cover sheet from the Fire Protection Center attached.
23	William Pardue	Operations	CS-001-027799	Electronic mail regarding the Omega sprinkler.
23	William Pardue	Operations	CS-001-027800-CS-001-027801	Handwritten note with building owner questionnaire attached.
23	William Pardue	Operations	CS-001-027802	Blank Omega changeout procedures worksheet.
23	William Pardue	Operations	CS-001-027803	Omega sprinkler testing protocol.
23	William Pardue	Operations	CS-001-027804-CS-001-027835	Articles from other publications and press releases regarding the Omega sprinkler head.
23	William Pardue	Operations	CS-001-027836	Blank Omega changeout procedures worksheet.
23	William Pardue	Operations	CS-001-027837-CS-001-027838	Fax cover sheet from Pozzo Construction Company with attached correspondence from the Office of Statewide Health Planning and Development, Chief Fire Marshal Report for Los Angeles.
23	William Pardue	Operations	CS-001-027839-CS-001-027845	Omega database printout by state, prepared May 23, 1997.
23	William Pardue	Operations	CS-001-027845.01-CS-001-027845.07	Omega database printout prepared May 23, 1997.
23	William Pardue	Operations	CS-001-027846-CS-001-027848	Manual check request form with attached invoice from Premier Fire Protection for changeout of Omega sprinkler heads at the Oklahoma Publishing building.
23	William Pardue	Operations	CS-001-027849	Correspondence from Central Sprinkler to Ayood & Perry regarding identification of Omega sprinkler heads with silicone o-rings.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-027850 CS-001-027854	Underwriters Laboratories report on special services investigation to conduct operational tests on Central Sprinkler Company Model C-1, C-1A, EC-20, EC-20A, HEC-12, HEC-20, R-1 and Flow Control automatic sprinklers for the Hilton Hotels Corporation of Beverly Hills, California.
23	William Pardue	Operations	CS-001-027855- CS-001-027856	Spreadsheet regarding Vince's Starts.
23	William Pardue	Operations	CS-001-027857- CS-001-027858	Underwriters Laboratories press release.
23	William Pardue	Operations	CS-001-027859- CS-001-027861	Memorandum regarding Premier Fire Protection/Sheraton Hotels.
23	William Pardue	Operations	CS-001-027862	Random Omega testing spreadsheet.
23	William Pardue	Operations	CS-001-027863- CS-001-027867	DB printout dated May 5, 1997.
23	William Pardue	Operations	CS-001-027868- CS-001-027869	Random Omega testing spreadsheets.
23	William Pardue	Operations	CS-001-027870- CS-001-027884	Test record spreadsheet dated May 22, 1997.
23	William Pardue	Operations	CS-001-027885- CS-001-027886	Omega rework reserve analysis.
23	William Pardue	Operations	CS-001-027887- CS-001-027895	Open Items Omega Changeout Board Meeting Issues report, with attached Marriott rework reserve analysis, handwritten notes regarding Omega analysis, Omega crew synopsis, spreadsheet regarding Vince's Starts and fax from RJA regarding Tysons Corner rework.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-027896- CS-001-027897	Memorandum regarding Omega information for quarterly report with attached schedules for April 30, 1997 quarter.
23	William Pardue	Operations	CS-001-027898	Correspondence from Underwriters Laboratories regarding test results for C-1 and Model M sprinklers submitted by Spears Manufacturing Company.
23	William Pardue	Operations	CS-001-027899- CS-001-027901	Correspondence from Central Sprinkler to Christa, Porter, Turner regarding Omega sprinklers installed in the Monroe Community Hospital.
23	William Pardue	Operations	CS-001-027915- CS-001-027916	Memorandum regarding EPDM o-rings, with attached fax cover sheet.
23	William Pardue	Operations	CS-001-027917- CS-001-027925	Omega meeting minutes for May 13, 1997.
23	William Pardue	Operations	CS-001-027926- CS-001-027932	Memorandum regarding control review of Omega changeout program.
23	William Pardue	Operations	CS-001-027933- CS-001-027934	Omega sprinkler head identification sheets.
23	William Pardue	Operations	CS-001-027935	Correspondence from Central Sprinkler to Marriott International regarding Renaissance Hotels.
23	William Pardue	Operations	CS-001-027936	Spreadsheet regarding test results for certain properties.
23	William Pardue	Operations	CS-001-027937	Spreadsheet regarding test results for certain properties.
23	William Pardue	Operations	CS-001-027938- CS-001-027942	Correspondence from the Navy Federal Credit Union to Central Sprinkler regarding Fairfax County notice of violation.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-027943- CS-001-027949	Underwriters Laboratories letter to American Fire Sprinkler Association members with news release, correspondence from the State of Washington, Washington State Patrol, and fax cover sheet from Inland Fire Protection, Inc. attached.
23	William Pardue	Operations	CS-001-027950- CS-001-027969	Marriott Jobs file, containing installer agreement, correspondence from D&C Fire Protection, Inc., invoices from D&C Fire Protection, , D&C Fire Protection weekly payroll reports.
23	William Pardue	Operations	CS-001-027970- CS-001-028049	Test Kits Sent file, containing shipping documents for test kits and replacement heads.
23	William Pardue	Operations	CS-001-028050- CS-001-028087	Properties That Need Test Kits Ordered file, including retrofit information sheet, Omega RA order forms, building owner questionnaires, and Sprinkler Systems Hydraulic Calculations Worksheets, Omega database records, correspondence from sprinkler system installers, Omega test kits spreadsheets, and handwritten list regarding Flow Controls dated September 30, 1997.
23	William Pardue	Operations	CS-001-028088- CS-001-028104	Order Forms file, containing blank Omega RA order forms.
23	William Pardue	Operations	CS-001-028105- CS-001-028133	Omega Retro Forms file, containing Omega Retrofit Project Job Information Worksheets.
23	William Pardue	Operations	CS-001-028134- CS-001-028297	Test Kits Ordered file, completed worksheets, Omega RA order forms, Sprinkler Systems Hydraulic Calculation Worksheets, and correspondence from property owners regarding the Omega remediation program.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-028298	Incoming questionnaires spreadsheet dated February 28, 1997.
23	William Pardue	Operations	CS-001-028299- CS-001-028303	Correspondence from Central Sprinkler to Spears Manufacturing regarding Omega information with attached correspondence regarding the Vancouver Public Library and retrofit worksheets.
23	William Pardue	Operations	CS-001-028304- CS-001-028308	Omega test kits spreadsheet with handwritten notes.
23	William Pardue	Operations	CS-001-028309	Omega test data sheet for Henderson's Wharf.
23	William Pardue	Operations	CS-001-028310- CS-001-028311	Omega testing summary for Chester Mental Health Center with Omega test data sheet attached.
23	William Pardue	Operations	CS-001-028312- CS-001-028314	Omega testing summary for R. Jensen with attached Omega test data sheets.
23	William Pardue	Operations	CS-001-028315- CS-001-028316	Omega testing summary for Vaca Valley Hospital with attached Omega test data sheet.
23	William Pardue	Operations	CS-001-028317- CS-001-028318	Omega testing summary for Green Eleven of Leisure World of Maryland with attached Omega test data sheets.
23	William Pardue	Operations	CS-001-028319- CS-001-028320	Omega testing summary for Spokane VA Memorial Arena with attached Omega test data sheet.
23	William Pardue	Operations	CS-001-028321- CS-001-028322	Omega testing summary for Secaucus Meadowlands Courtyard with attached Omega test data sheet.
23	William Pardue	Operations	CS-001-028323	Engineering Diagnostic Report for Continental Management, Inc.
23	William Pardue	Operations	CS-001-028324- CS-001-028329	Marriott static pressure test results spreadsheet dated May 6, 1997.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-028330- CS-001-028335	Marriott static pressure test results spreadsheet dated May 6, 1997.
23	William Pardue	Operations	CS-001-028336- CS-001-028342	Marriott Omega project start completion date spreadsheet with attached fax from Alpha Sprinkler, Inc. regarding Omegas returned to Central Sprinkler.
23	William Pardue	Operations	CS-001-028343- CS-001-028345	List of Omegas returned to Central with attached correspondence from Alpha Sprinkler, Inc.
23	William Pardue	Operations	CS-001-028346- CS-001-028367	Omega sprinkler replacement project records recording number and type of heads changed, drywall cuts and miscellaneous building shutdowns.
23	William Pardue	Operations	CS-001-028368	Memorandum regarding delays, cleaning and extras.
23	William Pardue	Operations	CS-001-028369	Omega replacement notification of delay or deviation from policy worksheet.
23	William Pardue	Operations	CS-001-028370	Brendle Sprinkler Company correspondence regarding the Marriott Courtyard in Huntsville, Alabama.
23	William Pardue	Operations	CS-001-028371	Invoice from Brendle Sprinkler Company for labor and expenses to replace Omega heads.
23	William Pardue	Operations	CS-001-028372	Brendle Sprinkler Company invoice for labor and expenses to replace Omega heads.
23	William Pardue	Operations	CS-001-028373- CS-001-028382	Correspondence from Alpha Sprinkler regarding incidental charges.
23	William Pardue	Operations	CS-001-028383- CS-001-028446	Central Sprinkler shipping documents.
23	William Pardue	Operations	CS-001-028447- CS-001-028448	Omega marketing materials.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-028449- CS-001-028501	Omega cut sheets.
23	William Pardue	Operations	CS-001-028502- CS-001-028505	Return Authorization for Charlotte University Courtyard, with attached Marriott International retrofit project spreadsheet, correspondence from Marriott Courtyard and shipping documents attached.
23	William Pardue	Operations	CS-001-028506- CS-001-028510	Handwritten note with attached Return Authorization for the Raleigh Cary Courtyard, with attached Marriott International retrofit project spreadsheet and Central Sprinkler shipping documents attached.
23	William Pardue	Operations	CS-001-028511- CS-001-028517	Correspondence from Alpha Sprinkler, Inc., with billing summaries and head counts attached.
23	William Pardue	Operations	CS-001-028518- CS-001-028521	Return Authorization for Charlotte South Park Courtyard with Marriott International retrofit project spreadsheets, handwritten notes and Central Sprinkler shipping documents attached.
23	William Pardue	Operations	CS-001-028522- CS-001-028528	Handwritten note regarding glass bulbs with Return Authorization from Atlanta Macon Courtyard, Marriott International retrofit project spreadsheet, Central Sprinkler shipping documents, e-mail and fax attached.
23	William Pardue	Operations	CS-001-028529- CS-001-028533	Correspondence from Alpha Sprinkler attaching billing summaries and head counts.
23	William Pardue	Operations	CS-001-028534- CS-001-028537	Marriott Omega project start completion dates spreadsheet with attached handwritten lists of properties.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-028538- CS-001-028546	Return Authorization for Atlanta Perimeter Center Courtyard, with attached Marriott International retrofit project spreadsheet, Central Sprinkler shipping documents attached.
23	William Pardue	Operations	CS-001-028547- CS-001-028557	Handwritten note regarding GB sprinklers with attached authorization, Marriott International retrofit project spreadsheet, Central Sprinkler shipping documents attached.
23	William Pardue	Operations	CS-001-028558- CS-001-028559	Fax from Marriott International regarding sprinkler replacement project.
23	William Pardue	Operations	CS-001-028560- CS-001-028562	Return Authorization for Raleigh Durham Airport Courtyard with attached Marriott International retrofit project spreadsheet and Central Sprinkler shipping documents attached.
23	William Pardue	Operations	CS-001-028563- CS-001-028565	Return Authorization for the Raleigh RTP Airport with attached Marriott International retrofit project spreadsheet and Central Sprinkler shipping documents attached.
23	William Pardue	Operations	CS-001-028566- CS-001-028568	Return Authorization for the Fayetteville Courtyard with attached Marriott International retrofit project spreadsheet and Central Sprinkler shipping documents attached.
23	William Pardue	Operations	CS-001-028569- CS-001-028571	Return Authorization for the Greensboro Courtyard with attached telephone message slip and Marriott International retrofit project spreadsheet attached.
23	William Pardue	Operations	CS-001-028572- CS-001-028573	Central Sprinkler shipping documents.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-028574- CS-001-028579	Telephone message slip with attached Return Authorization for the Atlanta Cumberland Ramada Inn.
23	William Pardue	Operations	CS-001-028580- CS-001-028585	Return Authorization for the Rosewell Courtyard with attached Marriott International retrofit project spreadsheet and Central Sprinkler shipping documents.
23	William Pardue	Operations	CS-001-028586- CS-001-028596	Return Authorization for the Atlanta Airport North Courtyard with attached Marriott International retrofit project spreadsheet and Central Sprinkler shipping documents.
23	William Pardue	Operations	CS-001-028597- CS-001-028603	Return Authorization for Atlanta Midtown Suites with attached Marriott International retrofit project spreadsheet and Central Sprinkler shipping documents.
23	William Pardue	Operations	CS-001-028604- CS-001-028607	Return Authorization for the Atlanta Midtown Courtyard with attached Marriott International retrofit project spreadsheet and Central Sprinkler shipping documents.
23	William Pardue	Operations	CS-001-028608- CS-001-028617	Correspondence from Alpha Sprinkler regarding Omega project.
23	William Pardue	Operations	CS-001-028618- CS-001-028629	Handwritten notes with attached Return Authorization for the Charlotte Arrowood Courtyard, Marriott International retrofit project spreadsheet and Central Sprinkler shipping documents.
23	William Pardue	Operations	CS-001-028630- CS-001-028632	Marriott International retrofit project spreadsheet for the Atlanta Gwinnett Mall Courtyard, with attached Return Authorization and invoice from D&C Fire Protection.
23	William Pardue	Operations	CS-001-028633- CS-001-028634	Central Sprinkler shipping documents.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-028635- CS-001-028638	Return Authorization for the Greenville, South Carolina Courtyard, with attached Marriott International retrofit project spreadsheet, correspondence from Marriott International and handwritten note.
23	William Pardue	Operations	CS-001-028639	Invoice from Brendle Sprinkler Company for labor and expenses to replace Omega heads.
23	William Pardue	Operations	CS-001-028640- CS-001-028643	Handwritten note with attached Return Authorization from the Charlotte North Residence Inn, Marriott International retrofit project spreadsheet and Central Sprinkler shipping documents.
23	William Pardue	Operations	CS-001-028644- CS-001-028656	Handwritten note with attached Return Authorization from the Lexington Courtyard, Marriott International retrofit project spreadsheet, Central Sprinkler shipping documents, Baton Rouge Courtyard Return Authorization, Marriott International retrofit project spreadsheet and shipping documents as well as correspondence from Mid-South Fire Protection regarding Marriott retrofit.
23	William Pardue	Operations	CS-001-028657- CS-001-028658	Return Authorization for the Arrowood Courtyard attaching Central Sprinkler shipping documents.
23	William Pardue	Operations	CS-001-028659- CS-001-028667	Return Authorization for the Huntsville Courtyard attaching Marriott International retrofit project spreadsheet, Central Sprinkler shipping documents and correspondence from Brendle Sprinkler Company.
23	William Pardue	Operations	CS-001-028668- CS-001-028673	Return Authorization for the Montgomery Residence Inn attaching Marriott International retrofit project spreadsheet, e-mail, fax and Central Sprinkler shipping documents.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-028674- CS-001-028679	Return Authorization for the Birmingham Hoover Courtyard attaching Marriott International retrofit project spreadsheet and Central Sprinkler shipping documents.
23	William Pardue	Operations	CS-001-028680- CS-001-028682	Northwest Fire Protection invoices for Marriott retrofits.
23	William Pardue	Operations	CS-001-028683- CS-001-028710	Handwritten note attaching Return Authorization from Memphis Airport Courtyard, Marriott International retrofit project spreadsheet, Central Sprinkler shipping documents, correspondence from Central Sprinkler, attaching Omega cut sheets.
23	William Pardue	Operations	CS-001-028711- CS-001-028713	Return Authorization for the Little Rock Courtyard, attaching Central Sprinkler shipping documents.
23	William Pardue	Operations	CS-001-028714- CS-001-028719	Return Authorization for the Oklahoma City Courtyard, attaching Central Sprinkler shipping documents, Central Sprinkler consignment agreement.
23	William Pardue	Operations	CS-001-028720- CS-001-028721	Miscellaneous Central Sprinkler shipping documents.
23	William Pardue	Operations	CS-001-028722- CS-001-028725	Correspondence from Northwest Fire Protection, Inc. regarding a fire sprinkler proposal to changeout the Omega sprinkler heads in the Little Rock Marriott Hotel.
23	William Pardue	Operations	CS-001-028726- CS-001-028730	Correspondence from Northwest Fire Protection, Inc. regarding letter agreement for changeout of Omega sprinkler heads at Marriott Courtyards in Memphis, Nashville, Baton Rouge and Dallas.
23	William Pardue	Operations	CS-001-028731- CS-001-028736	Return Authorization for Spartanburg Courtyard with attached Marriott International retrofit project spreadsheet and Central Sprinkler shipping documents.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-028737- CS-001-028739	Return Authorization for Columbia Northwest Courtyard attaching Marriott International retrofit project spreadsheet and Central Sprinkler shipping documents.
23	William Pardue	Operations	CS-001-028740- CS-001-028747	Handwritten note attaching Return Authorization for Calusa Harbor Senior Living Services, attaching Marriott International retrofit project spreadsheet, handwritten notes, Central Sprinkler shipping documents.
23	William Pardue	Operations	CS-001-028748- CS-001-028752	Return Authorization for the Amelia Island Marriott, with attached handwritten notes and Central Sprinkler shipping documents.
23	William Pardue	Operations	CS-001-028753- CS-001-028757	Return Authorization for the Jacksonville Courtyard, with attached e-mail and Central Sprinkler shipping documents.
23	William Pardue	Operations	CS-001-028758- CS-001-028760	Return Authorization for the Ft. Lauderdale Plantation Courtyard, attaching Central Sprinkler shipping documents.
23	William Pardue	Operations	CS-001-028761- CS-001-028768	Return Authorization for the Tallahassee Courtyard, attaching Marriott International retrofit project spreadsheet and Central Sprinkler shipping documents.
23	William Pardue	Operations	CS-001-028769- CS-001-028774	Return Authorization for the West Palm Beach Courtyard, attaching Marriott International retrofit project spreadsheet and Central Sprinkler shipping documents.
23	William Pardue	Operations	CS-001-028775- CS-001-028781	Return Authorization for the Orlando International Drive Courtyard, attaching handwritten notes, Marriott International retrofit project spreadsheet and Central Sprinkler shipping documents.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-028782- CS-001-028785	Return Authorization for the Orlando Airport Courtyard, attaching Central Sprinkler shipping documents.
23	William Pardue	Operations	CS-001-028786- CS-001-028787	Return Authorization for Marriott Courtyard, with Central Sprinkler shipping documents attached.
23	William Pardue	Operations	CS-001-028788- CS-001-028795	Return Authorization for the St. Petersburg Clearwater Courtyard, attaching Marriott International retrofit project spreadsheet and Central Sprinkler shipping documents.
23	William Pardue	Operations	CS-001-028796- CS-001-028799	Handwritten notes regarding test kits returned from various Marriott properties.
23	William Pardue	Operations	CS-001-028800- CS-001-028811	Receiver slips and Central Sprinkler shipping documents.
23	William Pardue	Operations	CS-001-028812	Fire Sprinkler Systems Company, Inc. correspondence regarding Calusa Harbor, Ft. Myers, Florida.
23	William Pardue	Operations	CS-001-028813	Fax to the Fire Marshal for Ft. Myers regarding Marriott Courtyard in Ft. Myers, Florida.
23	William Pardue	Operations	CS-001-028814- CS-001-028823	Telephone message slip with attached correspondence to Fire Sprinkler Systems, Inc. regarding Marriott retrofit and attaching Central Sprinkler marketing materials.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-028824- CS-001-028867	File containing handwritten notes, inspection reports for the County of Fairfax, Omega RA order forms, correspondence from property owners, correspondence from Underwriter Laboratories regarding Omega operating pressures, fax cover sheets, correspondence from Rolf Jensen regarding testing of Omega sprinklers, a report on sprinklers installed at the Ventry Apartments in Fairfax County, Virginia, Engineering Diagnostic Reports, Omega test data sheets, receiver slips, Rolf Jensen spreadsheet regarding sprinkler sample log dated August 22, 1997.
23	William Pardue	Operations	CS-001-028867.01	Spreadsheet regarding Fairfax County Omega sprinkler head testing program.
23	William Pardue	Operations	CS-001-028868- CS-001-028885	Handwritten note with attached Omega database records, Omega testing summary, Omega test data sheets, fax cover sheets, correspondence from the County of Los Angeles Fire Department, Underwriters Laboratories report and Return Authorization for Casta Real Apartments in Panorama City, California.
23	William Pardue	Operations	CS-001-028886- CS-001-028908	Omega database record for the Columbia Arms Hotel with attached Return Authorization, building owner questionnaire, Sprinkler System Hydraulic Calculations Worksheet, hydraulics summary sheet, correspondence from Affordable Fire Protection, Columbia Arms flow test results, fax cover sheet attaching Omega information and correspondence from Central Sprinkler regarding the Omega sprinkler heads installed at the Columbia Arms Apartments.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-028909- CS-001-028914	Correspondence from Central Sprinkler to the GSA regarding the Census Bureau Building, attaching Omega test data sheets and fax cover sheets.
23	William Pardue	Operations	CS-001-028915- CS-001-028936	Omega database record for the Fox Plaza attaching building owner questionnaire, Sprinkler System Hydraulic Calculations Worksheet, fax cover sheets, correspondence to Cosco Fire Protection, Inc., correspondence from Calfox, Inc. to Cosco Fire, fax cover sheets, Omega test data sheets, Return Authorization, Omega testing summary.
23	William Pardue	Operations	CS-001-028937- CS-001-028943	Omega database record for the Owens Landing Condominiums, attaching Omega test data sheet, building owner questionnaire, Sprinkler System Hydraulic Calculations Worksheet, Omega database for the Nebraska Fire Sprinkler Company with Return Authorizations.
23	William Pardue	Operations	CS-001-028944- CS-001-028945	Omega database record for the Loma Alta Towers, attaching Omega RA order form.
23	William Pardue	Operations	CS-001-028946- CS-001-028949	Omega database record for Henderson's Wharf, attaching Omega RA order form, building owner questionnaires.
23	William Pardue	Operations	CS-001-028950- CS-001-028953	Omega database record for the Chester Mental Health Center, attaching Return Authorization, building owner questionnaire and Central Sprinkler shipping document.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-028954- CS-001-028969	Omega database record for the Western Correctional Institute, attaching correspondence from the Western Correctional Institute Department of Public Safety and Correctional Service, Gipe Associates, Central Sprinkler correspondence to building owners, building owner questionnaires, Omega RA order forms, Sprinkler System Hydraulic Calculations Worksheet and diagrams.
23	William Pardue	Operations	CS-001-028970- CS-001-029010	Omega database record for Insignia at 100 Pine Street in San Francisco, California, attaching handwritten notes, building owner questionnaire, fax cover sheets, diagnostic report prepared by Dr. Greenhut, Underwriters Laboratories report, receiver slips, Omega testing summary, Omega test data sheet and draft report on C-1A sprinklers installed at 100 Pine Street, San Francisco, California.
23	William Pardue	Operations	CS-001-029011- CS-001-029025	Telephone message slip with attached handwritten notes and Omega database record for the California Center LLP, attaching building owner questionnaire, Return Authorization, Sprinkler System Hydraulic Calculations Worksheet, sprinkler system density sheet, Omega Return Authorization order form, Central Sprinkler shipping documents, Omega testing summaries, Omega test data sheets, and Return Authorization.
23	William Pardue	Operations	CS-001-029026- CS-001-029027	Marriott Properties status report prepared September 4, 1997 with attached handwritten notes.
23	William Pardue	Operations	CS-001-029028- CS-001-029031	Omega test data sheet for Pinellas Juvenile Detention Center, with attached fax cover sheets and Omega RA order form.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
23	William Pardue	Operations	CS-001-029032- CS-001-029053	Correspondence from Inn Ventures, Inc. regarding Omega fire sprinkler heads in the Residence Inn by Marriott in Lake Union, Seattle, Washington, attaching room survey, fax cover sheets, Sprinkler System Hydraulic Calculations Worksheet, Omega identification sheets, additional correspondence, Residence Inn by Marriott Omega fire sprinkler spreadsheet, Omega RA order forms, additional memorandum regarding Omega sprinklers at the Residence Inn in Seattle Downtown, Central Sprinkler spreadsheet listing Omega properties.
23	William Pardue	Operations	CS-001-029054- CS-001-029060	Memorandum regarding control review of Omega changeout program.
23	William Pardue	Operations	CS-001-029061- CS-001-029063	Omega Program Reserve report.
23	William Pardue	Operations	CS-001-029064	General Ledger account balances and adjustments for Omega changeout audit report.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
24	William Pardue	Operations	CS-001-029065- CS-001-029087	Articles regarding the Omega sprinkler head.
24	William Pardue	Operations	CS-001-029088	Spread sheet of Omega changeout audit.
24	William Pardue	Operations	CS-001-029089	Spread sheet regarding Omega sprinkler heads in Fairfax schools.
24	William Pardue	Operations	CS-001-029090- CS-001-029097	Notes and spread sheet regarding Omega changeout.
24	William Pardue	Operations	CS-001-029098- CS-001-029099	Letters to property owners regarding Omega tests.
24	William Pardue	Operations	CS-001-029100- CS-001-029110	Spread sheet regarding Omega test record.
24	William Pardue	Operations	CS-001-029111- CS-001-029115	Memorandum regarding Omega sprinklers.
24	William Pardue	Operations	CS-001-029116- CS-001-029127	Spread sheet regarding Omega test record.
24	William Pardue	Operations	CS-001-029128- CS-001-029130	Form regarding Omega test results.
24	William Pardue	Operations	CS-001-029131- CS-001-029136	Published materials regarding Omega sprinklers.
24	William Pardue	Operations	CS-001-029137- CS-001-029138	Engineering drawings regarding Omega sprinkler heads.
24	William Pardue	Operations	CS-001-029139- CS-001-029149	Letter to insurer regarding Omega sprinklers.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
24	William Pardue	Operations	CS-001-029150	Spread sheet regarding remedies.
24	William Pardue	Operations	CS-001-029151- CS-001-029152	Printout of database screen.
24	William Pardue	Operations	CS-001-029153- CS-001-029166	Information packet regarding Omega sprinklers.
24	William Pardue	Operations	CS-001-029167	Omega sprinkler testing protocol.
24	William Pardue	Operations	CS-001-029168	Engineering Change Notice for Omega testing form.
24	William Pardue	Operations	CS-001-029169- CS-001-029221	Omega Training Handbook for Supervisors.
24	William Pardue	Operations	CS-001-029222	Handwritten notes regarding Omega sprinkler heads.
24	William Pardue	Operations	CS-001-029223- CS-001-029248	Engineering drawings of various Omega sprinklers and Omega sprinkler parts.
24	William Pardue	Operations	CS-001-029249- CS-001-029276	Central Sprinkler marketing materials regarding Omega sprinklers.
24	William Pardue	Operations	CS-001-029277- CS-001-029285	Information packet regarding Omega sprinklers.
24	William Pardue	Operations	CS-001-029286- CS-001-029296	Central Sprinkler marketing materials regarding Omega sprinklers.
24	William Pardue	Operations	CS-001-029297- CS-001-029330	Information packets and forms regarding Omega sprinkler.
24	William Pardue	Operations	CS-001-029331- CS-001-029348	Central Sprinkler marketing materials regarding Omega sprinkler heads.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
24	William Pardue	Operations	CS-001-029350- CS-001-029781	Quality Scorecards for 1996-1998.
24	William Pardue	Operations	CS-001-029782- CS-001-029905	Weekly Scrap Reports for 1996 and 1997.
24	William Pardue	Operations	CS-001-029906- CS-001-029923	Parts with production compared to scrap report for December 1996.
24	William Pardue	Operations	CS-001-029924- CS-001-029925	Memorandum regarding Omega sprinklers in Boulder, Colorado.
24	William Pardue	Operations	CS-001-029926	Memorandum regarding model C-1 brass sprinkler.
24	William Pardue	Operations	CS-001-029927	Memorandum regarding C-1 Omega sprinkler.
24	William Pardue	Operations	CS-001-029928	Memorandum regarding C-1 Omega sprinkler.
24	William Pardue	Operations	CS-001-029929- CS-001-029930	Memorandum with attachment regarding Omega EC-20 activation in Greenborough, New York.
24	William Pardue	Operations	CS-001-029931	Memorandum regarding Omega HEC-12 activation.
24	William Pardue	Operations	CS-001-029932	Memorandum regarding Omega C-1 field research.
24	William Pardue	Operations	CS-001-029934- CS-001-029947	Memorandum with attachment regarding HEC-12 activation.
24	William Pardue	Operations	CS-001-029948	Memorandum regarding HEC-12 activation.
24	William Pardue	Operations	CS-001-029949- CS-001-029950	Memorandum regarding Omega R-1 activation.
24	William Pardue	Operations	CS-001-029951- CS-001-029954	Quality Control memoranda.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
24	William Pardue	Operations	CS-001-029955-CS-001-029957	Memorandum regarding Omega activation.
24	William Pardue	Operations	CS-001-029958-CS-001-029960	Memorandum regarding Omega activation.
24	William Pardue	Operations	CS-001-029961-CS-001-029963	Memorandum regarding Omega activation.
24	William Pardue	Operations	CS-001-029964-CS-001-029965	Memorandum regarding Omega residential sprinkler leakage.
24	William Pardue	Operations	CS-001-029966	Correspondence from insurance broker regarding claim experience report.
24	William Pardue	Operations	CS-001-029967-CS-001-029981	Claim experience report prepared by insurance broker for 1980-1981.
24	William Pardue	Operations	CS-001-029982-CS-001-029983	Ledger regarding product liability coverage lists.
24	William Pardue	Operations	CS-001-029984-CS-001-030036	Claims experience reports for 1983, 1984 product liability policies.
24	William Pardue	Operations	CS-001-030037	Claims experience reports for 1984, 1985 product liability insurance policies.
24	William Pardue	Operations	CS-001-030095-CS-001-030168	Claims experience reports for 1985, 1986 product liability insurance policies.
24	William Pardue	Operations	CS-001-030169	Memorandum regarding manufacturing projects.
24	William Pardue	Operations	CS-001-030170	Memorandum regarding Omega guide pins.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
24	William Pardue	Operations	CS-001-030171- CS-001-030174	Memorandum with attachments regarding model M sprinkler marking wrench status.
24	William Pardue	Operations	CS-001-030175	Memorandum regarding initial production of model M sprinkler.
24	William Pardue	Operations	CS-001-030176- CS-001-030177	Memorandum with attachment regarding CPVC.
24	William Pardue	Operations	CS-001-030178	Memorandum regarding model M sprinkler.
24	William Pardue	Operations	CS-001-030179- CS-001-030180	Correspondence with Factory Mutual regarding witnessing tests at Taiwan factory locations.
24	William Pardue	Operations	CS-001-030181	Memorandum regarding activation of model FC sprinkler at Pacific Power & Light.
24	William Pardue	Operations	CS-001-030182- CS-001-030184	Telephone message slips and notes regarding Livermore National Laboratories.
24	William Pardue	Operations	CS-001-030186	Memorandum regarding results of Flow Control tests conducted by Livermore Lab.
24	William Pardue	Operations	CS-001-030187	Handwritten ledger regarding production vs. sale of sprinkler for 1993.
24	William Pardue	Operations	CS-001-030188- CS-001-030190	Sprinkler production report.
24	William Pardue	Operations	CS-001-030191- CS-001-030197	Year-to-date sale history for March 1994.
24	William Pardue	Operations	CS-001-030198- CS-001-030200	Master planning schedule for September 1994.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
24	William Pardue	Operations	CS-001-030201- CS-001-030204	Sprinkler production report.
24	William Pardue	Operations	CS-001-030205- CS-001-030207	Master planning schedule for September 1994.
24	William Pardue	Operations	CS-001-030208	Master planning schedule for May 1994.
24	William Pardue	Operations	CS-001-030209- CS-001-030213	Sprinkler production report.
24	William Pardue	Operations	CS-001-030214- CS-001-030217	Sprinkler production report.
24	William Pardue	Operations	CS-001-030218- CS-001-030220	Sprinkler production report.
24	William Pardue	Operations	CS-001-030221	Sprinkler production report.
24	William Pardue	Operations	CS-001-030222- CS-001-030225	Master planning schedule for July 1994.
24	William Pardue	Operations	CS-001-030226- CS-001-030227	Master planning schedule for July 1994.
24	William Pardue	Operations	CS-001-030228- CS-001-030235	Sprinkler production vs. sales report.
24	William Pardue	Operations	CS-001-030236- CS-001-030261	Sales inventory forecast for July 13, 1994.
24	William Pardue	Operations	CS-001-030262- CS-001-030283	Sales inventory forecast for June 1994.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
24	William Pardue	Operations	CS-001-030284- CS-001-030289	Master planning schedule for June 1994.
24	William Pardue	Operations	CS-001-030290- CS-001-030291	Master planning schedule for June 1994.
24	William Pardue	Operations	CS-001-030292- CS-001-030297	Master planning schedule for June 1994.
24	William Pardue	Operations	CS-001-030298- CS-001-030305	Master planning schedule for May 1994.
24	William Pardue	Operations	CS-001-030306- CS-001-030307	Sprinkler production vs. sales report.
24	William Pardue	Operations	CS-001-030308- CS-001-030324	Sprinkler production reports.
24	William Pardue	Operations	CS-001-030325- CS-001-030346	Schedule attainment report for May 1994.
24	William Pardue	Operations	CS-001-030347- CS-001-030350	Sprinkler production report.
24	William Pardue	Operations	CS-001-030350.01- CS-001-030350.04	List of Central Sprinkler products by part number.
24	William Pardue	Operations	CS-001-030351- CS-001-030353	Sprinkler production report.
24	William Pardue	Operations	CS-001-030354- CS-001-030359	Sprinkler production report with attached notes.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
24	William Pardue	Operations	CS-001-030360-CS-001-030368	Sprinkler production report.
24	William Pardue	Operations	CS-001-030369-CS-001-030372	Sprinkler production report.
24	William Pardue	Operations	CS-001-030373-CS-001-030376	Schedule production report.
24	William Pardue	Operations	CS-001-030377-CS-001-030383	Master planning schedule for April 1994.
24	William Pardue	Operations	CS-001-030384-CS-001-030386	Personnel and payroll statistics for September 5, 1987.
24	William Pardue	Operations	CS-001-030387-CS-001-030398	Weekly direct labor analysis for week of July 23, 1990.
24	William Pardue	Operations	CS-001-030399-CS-001-030412	Weekly direct labor analysis for week of October 23, 1989.
24	William Pardue	Operations	CS-001-030413-CS-001-030425	Weekly direct labor analysis for week of May 22, 1989.
24	William Pardue	Operations	CS-001-030426-CS-001-030430	Personnel and payroll statistics for week of April 15, 1990.
24	William Pardue	Operations	CS-001-030431-CS-001-030450	Personnel and payroll statistics for May 20, 1990, May 21, 1988, May 20, 1989, May 26, 1990, and March 21, 1991.
24	William Pardue	Operations	CS-001-030451-CS-001-030494	Weekly direct labor analysis report for week of April 23, 1990.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
24	William Pardue	Operations	CS-001-030495- CS-001-030548	Weekly operations summary for April and May 1995.
24	William Pardue	Operations	CS-001-030549- CS-001-030613	Sprinkler production vs. sales reports for fiscal 1995.
24	William Pardue	Operations	CS-001-030614	Central Sprinkler sprinkler activation chart.
24	William Pardue	Operations	CS-001-030615- CS-001-030617	Memorandum regarding cost production reports.
24	William Pardue	Operations	CS-001-030618- CS-001-030635	Spread sheets regarding product placement.
24	William Pardue	Operations	CS-001-030636- CS-001-030649	Cost of raw materials reports for 1993 compared to present.
24	William Pardue	Operations	CS-001-030650- CS-001-030671	Personnal and payroll statistics reports.
24	William Pardue	Operations	CS-001-030672- CS-001-030677	Schedule of payment reports for January 21.
24	William Pardue	Operations	CS-001-030678- CS-001-030777	Fiscal year 1996 production summaries.
24	William Pardue	Operations	CS-001-030778- CS-001-030996	Fax cover sheets transmitting Omega information .
24	William Pardue	Operations	CS-001-030997- CS-001-030999	Draft report regarding Omega sprinklers removed from the Comfort Inn in Portsmouth, New Hampshire.
24	William Pardue	Operations	CS-001-031000- CS-001-031002	Draft report on C-1A sprinklers installed at Comfort Inn in Portsmouth, New Hampshire.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
24	William Pardue	Operations	CS-001-031003- CS-001-031005	Engineering Diagnostic Reports for HEC-12 sprinkler head.
24	William Pardue	Operations	CS-001-031006- CS-001-031020	Reports prepared by Dr. Victor Greenhut regarding Omega sprinkler residue.
24	William Pardue	Operations	CS-001-031021- CS-001-031024	Return Authorizations for Omega sprinkler heads.
24	William Pardue	Operations	CS-001-031025- CS-001-031035	Internal movement cards, Return Authorizations and correspondence regarding the Omega sprinklers removed from the Comfort Inn in Portsmouth, New Hampshire.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
25	William Pardue	Operations	CS-001-031036	Schedule attainment report for week of February 26, 1998-March 4, 1998.
25	William Pardue	Operations	CS-001-031037- CS-001-031074	Schedule attainment report by warehouse for February 1998.
25	William Pardue	Operations	CS-001-031075- CS-001-031080	Schedule attainment report for February 1998.
25	William Pardue	Operations	CS-001-031081- CS-001-031119	Schedule attainment report by warehouse for January 15-January 21, 1998.
25	William Pardue	Operations	CS-001-031120- CS-001-031140	Current Sales/Product Forecast based on sales through December 1997, dated January 13, 1998.
25	William Pardue	Operations	CS-001-031141- CS-001-031143	Weekly production demand by monthly forecast for August through November of 1997.
25	William Pardue	Operations	CS-001-031144- CS-001-031155	Parts charts organized by customer name, part number and order or quantity dated January 234, 1998.
25	William Pardue	Operations	CS-001-031155.1	Schedule attainment report for week of January 22, 1998-January 28, 1998.
25	William Pardue	Operations	CS-001-031156- CS-001-031157	Memorandum dated March 17, 1998 concerning CPSC administrative proceeding.
25	William Pardue	Operations	CS-001-031158	Weekly production demand by monthly forecast for February 22, 1998.
25	William Pardue	Operations	CS-001-031159- CS-001-031161	Scrap report for March 10, 1998.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
25	William Pardue	Operations	CS-001-031162- CS-001-031190	Management Report for February 23 and February 16 of 1998.
25	William Pardue	Operations	CS-001-031191- CS-001-031202	Correspondence to City of New York concerning installation of Omega series sprinklers.
25	William Pardue	Operations	CS-001-031203- CS-001-031285	January 1998 production report.
25	William Pardue	Operations	CS-001-031286- CS-001-031292	Current period schedule attainment report for February 1998.
25	William Pardue	Operations	CS-001-031293- CS-001-031315	Labor Efficiency for the months of November 1993 through September 1994.
25	William Pardue	Operations	CS-001-031316- CS-001-031332	Labor Efficiency for the month of October 1994.
25	William Pardue	Operations	CS-001-031333- CS-001-031349	Labor Efficiency for the month of June 1997.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
25	William Pardue	Operations	CS-001-031350- CS-001-031366	Labor Efficiency for the month of April 1997.
25	William Pardue	Operations	CS-001-031367- CS-001-031382	Labor Efficiency for the month of July 1997.
25	William Pardue	Operations	CS-001-031383- CS-001-031397	Labor Efficiency for the month of August 1996.
25	William Pardue	Operations	CS-001-031398- CS-001-031414	Labor Efficiency for the month of February 1997.
25	William Pardue	Operations	CS-001-031415- CS-001-031430	Labor Efficiency for the month of March 1997.
25	William Pardue	Operations	CS-001-031431- CS-001-031446	Labor Efficiency for the month of January 1997.
25	William Pardue	Operations	CS-001-031447- CS-001-031461	Labor Efficiency for the month of December 1996.
25	William Pardue	Operations	CS-001-031462- CS-001-031477	Labor Efficiency for the month of November 1996.
25	William Pardue	Operations	CS-001-031478- CS-001-031494	Labor Efficiency for the month of October 1996.
25	William Pardue	Operations	CS-001-031495- CS-001-031509	Labor Efficiency for the month of September 1996.
25	William Pardue	Operations	CS-001-031510- CS-001-031515	Labor Efficiency for the month of September 1992.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
25	William Pardue	Operations	CS-001-031516- CS-001-031523	Labor Efficiency for the month of August 1992.
25	William Pardue	Operations	CS-001-031524- CS-001-031534	Manufacturing Efficiency by product type and style report dated October 2, 1992.
25	William Pardue	Operations	CS-001-031535- CS-001-031551	Labor Efficiency for the month of September 1997.
25	William Pardue	Operations	CS-001-031552- CS-001-031555	Monthly hours report by department for the month of September 1997.
25	William Pardue	Operations	CS-001-031556- CS-001-031567	Monthly hours report by department for the month of September 1997.
25	William Pardue	Operations	CS-001-031568- CS-001-031581	Executive Management Reports dated March 16, 1998.
25	William Pardue	Operations	CS-001-031582- CS-001-031593	Executive Management Reports dated January 13, 1998.
25	William Pardue	Operations	CS-001-031594- CS-001-031605	Executive Management Reports dated January 5, 1998.
25	William Pardue	Operations	CS-001-031606- CS-001-031616	Executive Management Reports dated December 15, 1997.
25	William Pardue	Operations	CS-001-031616.1- CS-001-031616.10	Executive Management Reports dated January 19, 1998.
25	William Pardue	Operations	CS-001-031617- CS-001-031625	Executive Management Reports dated January 13, 1998.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
25	William Pardue	Operations	CS-001-031626- CS-001-031714	Sales analysis by class\sub class and part, period ending February 1998.
25	William Pardue	Operations	CS-001-031715- CS-001-031803	Material\labor\overhead cost sales analysis by class\sub class and part, period ending February 1998.
25	William Pardue	Operations	CS-001-031804- CS-001-031902	Finished goods report dated January 27, 1998.
25	William Pardue	Operations	CS-001-031903- CS-001-031988	Material\labor\overhead cost sales analysis by class\sub class and part, period ending December 1997.
25	William Pardue	Operations	CS-001-031989- CS-001-032074	Sales analysis by class/sub class and part, period ending December 1997.
25	William Pardue	Operations	CS-001-032075- CS-001-032208	Notebook excerpts dated August 15, 1997 to November of 1997.
25	William Pardue	Operations	CS-001-032209- CS-001-032384	Notebook excerpts dated January of 1997 to August 1997.
25	William Pardue	Operations	CS-001-032385- CS-001-032391	Projected fiscal year 1997 sales by part, dated October 17, 1996.
25	William Pardue	Operations	CS-001-032392- CS-001-032436	Sales budget summary report.
25	William Pardue	Operations	CS-001-032436.01- CS-001-032436.12	Engineering Diagnostic Reports and memorandum dated May 17, 1993.
25	William Pardue	Operations	CS-001-032437	Engineering Diagnostic Reports for 1997.
25	William Pardue	Operations	CS-001-032438- CS-001-032550	1997 Customer Return file.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
25	William Pardue	Operations	CS-001-032551- CS-001-032553	Engineering Diagnostic Reports for July and August of 1997.
25	William Pardue	Operations	CS-001-032554- CS-001-032558	Monthly Engineering Diagnostic Report Summary for February 1998.
25	William Pardue	Operations	CS-001-032559- CS-001-032596	Monthly Engineering Diagnostic Report Summaries for the months of December 1997, November 1997, October 1997, August 1997, July 1997, May 1997, April 1997, March 1997, and February 1997.
25	William Pardue	Operations	CS-001-032597- CS-001-032661	Monthly Engineering Diagnostic Reports Summary for 1997 except for June of 1997.
25	William Pardue	Operations	CS-001-032662- CS-001-032673	Monthly Engineering Diagnostic Report Summaries for December 1996, October 1996, and September 1996.
25	William Pardue	Operations	CS-001-032673.01	Handwritten memorandum dated November 1996.
25	William Pardue	Operations	CS-001-032674- CS-001-032678	Engineering Diagnostic Reports for October 1996 and November 1996.
25	William Pardue	Operations	CS-001-032679- CS-001-032727	1997 Paid Warranty Claims Report for the months of April through October 1997.
25	William Pardue	Operations	CS-001-032727.1- CS-001-032802	1997 Paid Warranty Claims Report for the months of January through October.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
25	William Pardue	Operations	CS-001-032803- CS-001-032824	1996 Paid Warranty Claims report for the months of November and December.
25	William Pardue	Operations	CS-001-032825- CS-001-032836	1998 Paid Warranty Claims report for February.
25	William Pardue	Operations	CS-001-032837- CS-001-032851	1997 Paid Warranty Claims reports for December and November.
25	William Pardue	Operations	CS-001-032852- CS-001-032862	1998 Paid Warranty Claims reports for February.
25	William Pardue	Operations	CS-001-032863- CS-001-032875	1997 Paid Warranty Claims report for November and December.
25	William Pardue	Operations	CS-001-032876- CS-001-032898	1996 Paid Warranty Claims reports for the months of October, September and August.
25	William Pardue	Operations	CS-001-032899	Engineering Diagnostic Reports for August 1996.
25	William Pardue	Operations	CS-001-032900- CS-001-032903	Memorandum dated June 20, 1997 concerning Premiere Fire Protection.
25	William Pardue	Operations	CS-001-032904	Memorandum concerning Valley General dated March 20, 1997.
25	William Pardue	Operations	CS-001-032905- CS-001-032918	Executive Management Reports dated March 23, 1998.
25	William Pardue	Operations	CS-001-032919	Schedule attainment summary for the week of March 12, 1998.
25	William Pardue	Operations	CS-001-032920	Monthly Engineering Diagnostic Return Report.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
25	William Pardue	Operations	CS-001-032921	Schedule attainment summary for week of February 19, 1998.
25	William Pardue	Operations	CS-001-032922-CS-001-032926	Monthly Engineering Diagnostic Report Summary for January 1998.
25	William Pardue	Operations	CS-001-032927-CS-001-032931	1998 Paid Warranty Claims Report for January.
25	William Pardue	Operations	CS-001-032932-CS-001-032948	Return Authorization spreadsheet.
25	William Pardue	Operations	CS-001-032949-CS-001-032955	Newspaper articles on the CPSC .
25	William Pardue	Operations	CS-001-032956-CS-001-032966	Executive Management Reports for July 1996.
25	William Pardue	Operations	CS-001-032967-CS-001-033005	Production reports for March 1998.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
26	William Pardue	Operations	CS-001-033006- CS-001-033220	Report entitled "Manufacturing Warehouse, June 1995."
26	William Pardue	Operations	CS-001-033221- CS-001-033323	Report entitled "Purchased Raw Material Usage for January."
26	William Pardue	Operations	CS-001-033324- CS-001-033351	Report entitled "Class/Subclass Listings."
26	William Pardue	Operations	CS-001-033352- CS-001-033416	Report entitled "Inventory Costs of Raw Materials in Manufacturing Warehouse."
26	William Pardue	Operations	CS-001-033417- CS-001-033428	Parts list.
26	William Pardue	Operations	CS-001-033429- CS-001-033486	Report entitled "Month-to-Date Net Sales by Product Class -- Consignment."
26	William Pardue	Operations	CS-001-033487- CS-001-033544	Report entitled "Month-to-Date Net Sales by Product Class -- Summary."
26	William Pardue	Operations	CS-001-033545- CS-001-033602	Report entitled "Month-to-Date Net Sales by Product Class -- Warehouses."
26	William Pardue	Operations	CS-001-033603- CS-001-033660	Report entitled "Month-to-Date Net Sales Quantity by Product Class -- Summary."
26	William Pardue	Operations	CS-001-033661- CS-001-033718	Report entitled "Month-to-Date Net Sales Quantity by Product Class -- Consignment."
26	William Pardue	Operations	CS-001-033719- CS-001-033776	Report entitled "Month-to-Date Net Sales Quantity by Product Class -- Warehouses."

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
26	William Pardue	Operations	CS-001-033777- CS-001-033801	Report entitled "Month-to-Date Net Sales Quantity by Product Class -- Summary."
26	William Pardue	Operations	CS-001-033802- CS-001-033853	Report entitled "Month-to-Date Net Sales by Product Class -- Summary."
26	William Pardue	Operations	CS-001-033854- CS-001-033904	Report entitled "Month-to-Date Net Sales by Product Class -- Consignment as of March 1994."
26	William Pardue	Operations	CS-001-033905- CS-001-033955	Report entitled "Month-to-Date Net Sales by Product Class -- Warehouses as of March 1994."
26	William Pardue	Operations	CS-001-033956- CS-001-034006	Report entitled "Month-to-Date Net Sales Quantity by Product Class -- Consignment as of March 1994."
26	William Pardue	Operations	CS-001-034007- CS-001-034057	Report entitled "Month-to-Date Net Sales Quantity by Product Class -- Warehouses as of March 1994."
26	William Pardue	Operations	CS-001-034058- CS-001-034114	Report entitled "Month-to-Date Net Sales Quantity by Product Class -- Consignment as of February 1994."
26	William Pardue	Operations	CS-001-034115- CS-001-034153	Report entitled "Month-to-Date Net Sales Quantity by Product Class -- Warehouses as of February 1994."
26	William Pardue	Operations	CS-001-034154- CS-001-034192	Report entitled "Month-to-Date Net Sales Quantity by Product Class -- Summary as of February 1994."
26	William Pardue	Operations	CS-001-034193- CS-001-034231	Report entitled "Month-to-Date Net Sales Quantity by Product Class -- Consignment as of February 1994."
26	William Pardue	Operations	CS-001-034232- CS-001-034270	Report entitled "Month-to-Date Net Sales Quantity by Product Class -- Warehouses as of February 1994."

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
26	William Pardue	Operations	CS-001-034271- CS-001-034310	Report entitled "Month-to-Date Net Sales by Product Class -- Summary as of January 1994."
26	William Pardue	Operations	CS-001-034311- CS-001-034350	Report entitled "Month-to-Date Net Sales by Product Class -- Consignment as of January 1994."
26	William Pardue	Operations	CS-001-034351- CS-001-034390	Report entitled "Month-to-Date Net Sales by Product Class -- Warehouses as of January 1994."
26	William Pardue	Operations	CS-001-034391- CS-001-034430	Report entitled "Month-to-Date Net Sales by Product Class -- Summary as of January 1994."
26	William Pardue	Operations	CS-001-034431- CS-001-034470	Report entitled "Month-to-Date Net Sales Quantity by Product Class -- Consignment as of January 1994."
26	William Pardue	Operations	CS-001-034471- CS-001-034510	Report entitled "Month-to-Date Net Sales Quantity by Product Class -- Warehouses as of January 1994."
26	William Pardue	Operations	CS-001-034511- CS-001-034520	Report entitled "Month-to-Date Net Sales Quantity by Product Class -- Summary as of December 1994."
26	William Pardue	Operations	CS-001-034521- CS-001-034594	Report entitled "Month-to-Date Net Sales Quantity by Product Class -- Consignment as of December 1993."
26	William Pardue	Operations	CS-001-034595- CS-001-034631	Report entitled "Month-to-Date Net Sales by Product Class -- Summary as of December 1993."
26	William Pardue	Operations	CS-001-034632- CS-001-034668	Report entitled "Month-to-Date Net Sales by Product Class -- Consignment as of December 1993."
26	William Pardue	Operations	CS-001-034669- CS-001-034705	Report entitled "Month-to-Date Net Sales by Product Class -- Warehouses as of December 1993."

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
26	William Pardue	Operations	CS-001-034706- CS-001-034747	Report entitled "Month-to-Date Net Sales Quantity by Product Class -- Summary as of November 1993."
26	William Pardue	Operations	CS-001-034748- CS-001-034759	Report, expense summary for Operations Administration Department for month ending December 1993.
26	William Pardue	Operations	CS-001-034760- CS-001-034774	Report forecasts versus actual production versus actual sales units fiscal year 1994.
26	William Pardue	Operations	CS-001-034775- CS-001-034790	Report forecasts versus actual production versus actual sales units fiscal year 1994.
26	William Pardue	Operations	CS-001-034791- CS-001-034806	Report forecasts versus actual production versus actual sales units fiscal year 1994.
26	William Pardue	Operations	CS-001-034807- CS-001-034816	Report forecasts versus actual production versus actual sales units fiscal year 1994.
26	William Pardue	Operations	CS-001-034817- CS-001-034832	Report forecasts versus actual production versus actual sales units fiscal year 1994.
26	William Pardue	Operations	CS-001-034833- CS-001-034843	Report forecasts versus actual production versus actual sales units fiscal year 1994.
26	William Pardue	Operations	CS-001-034844- CS-001-034852	Report forecasts versus actual production versus actual sales units fiscal year 1994.
26	William Pardue	Operations	CS-001-034853- CS-001-034860	Production report for fiscal year 1994.
26	William Pardue	Operations	CS-001-034861- CS-001-034925	April 1994 Production Report, only parts with production reported against them.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
26	William Pardue	Operations	CS-001-034926- CS-001-034973	March 1994 Production Report with or without production reported against them.
26	William Pardue	Operations	CS-001-034974- CS-001-035036	February 1994 Production Reports, only parts with production reported against them.
26	William Pardue	Operations	CS-001-034037- CS-001-035097	February 1994 Production Report, only parts with production reported against them.
26	William Pardue	Operations	CS-001-035098	January 1994 Production Report, parts that account for 80 percent dollar value inventory.
26	William Pardue	Operations	CS-001-035099- CS-001-035157	February 1994 Product Report, only parts with production reported against them.
26	William Pardue	Operations	CS-001-035158- CS-001-035160	January 1994 Production Report, parts that account for 80 percent dollar value inventory.
26	William Pardue	Operations	CS-001-035161- CS-001-035221	January 1994 Production Report, only parts with production reported against them.
26	William Pardue	Operations	CS-001-035222- CS-001-035281	January 1994 Production Report, only parts with production reported against them.
26	William Pardue	Operations	CS-001-035282- CS-001-035343	December 1993 Production Report, only parts with production reported against them.
26	William Pardue	Operations	CS-001-035344- CS-001-035405	December 1993 Production Report, only parts with production reported against them.
26	William Pardue	Operations	CS-001-035406- CS-001-035458	Fiscal 1993 final sales analysis by class/subclass description.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
26	William Pardue	Operations	CS-001-035459-CS-001-035512	Report entitled "Year-to-Date Quantity by Product Class as of October 1987."
26	William Pardue	Operations	CS-001-035513-CS-001-035527	Report entitled "Year-to-Date Quantity by Part Number, High-Low."
26	William Pardue	Operations	CS-001-035528-CS-001-035542	Report entitled "Year-to-Date Quantity by Part Number, High-Low."
26	William Pardue	Operations	CS-001-035543-CS-001-035602	Production Reports for fiscal 1993.
26	William Pardue	Operations	CS-001-035603-CS-001-035628	Report on quantities of parts.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
27	William Pardue	Operations	CS-001-035629-CS-001-035682	May 1994 Production Report - Only parts with production reported against them.
27	William Pardue	Operations	CS-001-035683-CS-001-035736	May 1994 Production Report - Only parts with production reported against them.
27	William Pardue	Operations	CS-001-035737-CS-001-036040	Part Master File Inventory List.
27	William Pardue	Operations	CS-001-036041	Sprinkler description sheet.
27	William Pardue	Operations	CS-001-036042	Sprinkler description sheet.
27	William Pardue	Operations	CS-001-036043-CS-001-036052	Index of Sprinklers.
27	William Pardue	Operations	CS-001-036053	Sprinkler description sheet.
27	William Pardue	Operations	CS-001-036054-CS-001-036058	Sprinkler description sheet.
27	William Pardue	Operations	CS-001-036059-CS-001-036065	Sprinkler description sheet.
27	William Pardue	Operations	CS-001-036066-CS-001-036069	Shipment Quantity Report.
27	William Pardue	Operations	CS-001-036070	Summary of raw material and finished goods by products class report.
27	William Pardue	Operations	CS-001-036071-CS-001-036076	Annual shipment quantity by Fiscal Year as of October 31, 1989 Report.
27	William Pardue	Operations	CS-001-036077	Sales in units for R-1 and HEC-12 Omega Report.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
27	William Pardue	Operations	CS-001-036078- CS-001-036079	Month-to-Date Net Sales Quantity by Product Class Summary as of January 1991.
27	William Pardue	Operations	CS-001-036080- CS-001-036086	Units shipped for months ending January 31, 1990.
27	William Pardue	Operations	CS-001-036087- CS-001-036090	Shipment Quantity Report dated October 31, 1988.
27	William Pardue	Operations	CS-001-036091- CS-001-036095	Year-to-Date Quantity by Product Class Report, invoice date October 31, 1987.
27	William Pardue	Operations	CS-001-036096- CS-001-036134	Year-to-Date Net Sales by Product Class, invoice date October 13, 1987.
27	William Pardue	Operations	CS-001-036135- CS-001-036140	Annual Shipment Quantity by Fiscal Year as of August 31, 1988.
27	William Pardue	Operations	CS-001-036141- CS-001-036155	Production Report for Fiscal Year ending 1987.
27	William Pardue	Operations	CS-001-036156- CS-001-036157	Analysis of Units Sold by Quarter for first six months of 1988.
27	William Pardue	Operations	CS-001-036158- CS-001-036172	Year-to-Date Quantity by Part Number, invoice date October 31, 1987.
27	William Pardue	Operations	CS-001-036173- CS-001-036187	Year-to-Date Quantity by Part Number, invoice date October 31, 1987.
27	William Pardue	Operations	CS-001-036188- CS-001-036189	Month-to-Date Transfers from Lansdale, invoice date July 31, 1987.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
27	William Pardue	Operations	CS-001-036190- CS-001-036191	Month-to-Date Transfers from Lansdale, invoice date August 31, 1987.
27	William Pardue	Operations	CS-001-036192- CS-001-036193	Month-to-Date Net Quantity by Product Class, invoice date August 31, 1987.
27	William Pardue	Operations	CS-001-036194- CS-001-036195	Month-to-Date Net Quantity by Product Class, invoice date July 31, 1987.
27	William Pardue	Operations	CS-001-036196- CS-001-036210	Catalog of Fire Protection Products from Central Sprinkler.
27	William Pardue	Operations	CS-001-036211- CS-001-036216	Annual Shipment Quantity by Fiscal Year as of October 31, 1989.
27	William Pardue	Operations	CS-001-036217- CS-001-036224	Production Report for Fiscal Year 1993.
27	William Pardue	Operations	CS-001-036225- CS-001-036230	Summary Page in Units dated January 1990.
27	William Pardue	Operations	CS-001-036231	Sprinkler Production Versus Sales Report.
27	William Pardue	Operations	CS-001-036232	Memorandum on Units to be Produced.
27	William Pardue	Operations	CS-001-036233	Memorandum on Units to be Produced.
27	William Pardue	Operations	CS-001-036234- CS-001-036241	Memorandum regarding Management Review - Quality System.
27	William Pardue	Operations	CS-001-036242- CS-001-036250	Executive Management Report.
27	William Pardue	Operations	CS-001-036251- CS-001-036252	Customer Discount Sheet.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
27	William Pardue	Operations	CS-001-036253- CS-001-036254	Customer Returns by Product Line for Last Two Fiscal Years - Inspected by Engineering Report.
27	William Pardue	Operations	CS-001-036255- CS-001-036256	Customer Returns for Past Two Fiscal Years - Inspected by Engineering.
27	William Pardue	Operations	CS-001-036257- CS-001-036272	Returns by Part Number Report.
27	William Pardue	Operations	CS-001-036273- CS-001-036274	Engineering Report for week ending September 16, 1994.
27	William Pardue	Operations	CS-001-036275	Engineering Report for week ending August 26, 1994.
27	William Pardue	Operations	CS-001-036276	Engineering Report for week ending August 19, 1994.
27	William Pardue	Operations	CS-001-036277	Engineering Report for week ending August 12, 1994.
27	William Pardue	Operations	CS-001-036278	Engineering Returns for July 6, 1994 through July 30, 1994.
27	William Pardue	Operations	CS-001-036279	Engineering Report for week ending July 29, 1994.
27	William Pardue	Operations	CS-001-036280- CS-001-036281	Engineering Report for week ending July 22, 1994.
27	William Pardue	Operations	CS-001-036282- CS-001-036283	Engineering Report for week ending July 15, 1994.
27	William Pardue	Operations	CS-001-036284- CS-001-036285	Engineering Report for week ending July 8, 1994.
27	William Pardue	Operations	CS-001-036286- CS-001-036287	Engineering Report for week ending June 24, 1994.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
27	William Pardue	Operations	CS-001-036288- CS-001-036289	Engineering Report for week ending June 10, 1994.
27	William Pardue	Operations	CS-001-036290- CS-001-036294	Engineering Report for week ending May 27, 1994.
27	William Pardue	Operations	CS-001-036295- CS-001-036299	Engineering Report for week ending May 9, 1994.
27	William Pardue	Operations	CS-001-036300- CS-001-036301	Engineering Report for week ending April 22, 1994.
27	William Pardue	Operations	CS-001-036302	Non-Conformance Report Log.
27	William Pardue	Operations	CS-001-036303- CS-001-036304	Engineering Report for week ending April 2, 1994.
27	William Pardue	Operations	CS-001-036305- CS-001-036306	Engineering Report for week ending March 26, 1994.
27	William Pardue	Operations	CS-001-036307- CS-001-036308	Engineering Report for week ending March 19, 1994.
27	William Pardue	Operations	CS-001-036309- CS-001-036310	Engineering Report for week ending March 12, 1994.
27	William Pardue	Operations	CS-001-036311- CS-001-036312	Engineering Report for week ending March 5, 1994.
27	William Pardue	Operations	CS-001-036313- CS-001-036314	Engineering Report for week ending February 8, 1994.
27	William Pardue	Operations	CS-001-036315- CS-001-036316	Engineering Report for week ending February 9, 1994.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
27	William Pardue	Operations	CS-001-036317-CS-001-036318	Engineering Report for week ending February 12, 1994.
27	William Pardue	Operations	CS-001-036319	Engineering Report for week ending February 5, 1994.
27	William Pardue	Operations	CS-001-036320	Material labors and legal fees for returned products Report.
27	William Pardue	Operations	CS-001-036321-CS-001-036334	Weekly Customer Service reports from April, 1994 through June, 1994.
27	William Pardue	Operations	CS-001-036335-CS-001-036336	Customer Returns from Fiscal Year 1993 and Fiscal Year 1994 - Inspected by Engineering Report.
27	William Pardue	Operations	CS-001-036337	Customer Service summary of returns.
27	William Pardue	Operations	CS-001-036338-CS-001-036421	Production Report for Fiscal Year 1992.
27	William Pardue	Operations	CS-001-036422-CS-001-036434	Report on Cost Descriptions.
27	William Pardue	Operations	CS-001-036435-CS-001-036458	Production Report for Fiscal Year 1991.
27	William Pardue	Operations	CS-001-036459-CS-001-036481	Production Report for Fiscal Year 1990.
27	William Pardue	Operations	CS-001-036482-CS-001-036487	Production Report for Fiscal Year 1989.
27	William Pardue	Operations	CS-001-036488-CS-001-036517	Raw Materials on Hand Reports from October, 1990 to March, 1991.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
27	William Pardue	Operations	CS-001-036518- CS-001-036522	Annual Shipment Quantity by Fiscal Year as of October 31, 1989.
27	William Pardue	Operations	CS-001-036523- CS-001-036555	Sales Forecast for Fiscal Year 1991 Report.
27	William Pardue	Operations	CS-001-036556- CS-001-036623	Raw Materials Report.
27	William Pardue	Operations	CS-001-036624	Month-to-Date Transfers from Lansdale, invoice date January 31, 1990.
27	William Pardue	Operations	CS-001-036625- CS-001-036640	Month-to-Date BOH by Product Class Summary.
27	William Pardue	Operations	CS-001-036641- CS-001-036642	Change in BOH Month End Inventory Report.
27	William Pardue	Operations	CS-001-036643- CS-001-036701	Month-to-Date Net Sales Quantity by Product Class Summary Reports for June 1990 through August 1990.
27	William Pardue	Operations	CS-001-036702- CS-001-036740	Month-to-Date Inventory Reports.
27	William Pardue	Operations	CS-001-036741- CS-001-037325	Month-to-Date Net Sales Quantity by Product Class Reports from January 1993 through November 1993.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
28	William Pardue	Operations	CS-001-037326- CS-001-037936	Month-to-Date Net Sales Quantity by Product Class reports for June 1992 through December 1992.
28	William Pardue	Operations	CS-001-037937- CS-001-038091	Raw materials reports.
28	William Pardue	Operations	CS-001-038092- CS-001-038131	Month-to-Date Net Sales Quantity reports for August 1992.
28	William Pardue	Operations	CS-001-038132- CS-001-038288	Parts list.
28	William Pardue	Operations	CS-001-038289- CS-001-038355	Product selling/shipping warehouse analysis for 1992 and 1993.
28	William Pardue	Operations	CS-001-038356- CS-001-038381	Raw materials on hand as of June 30, 1992 report.
28	William Pardue	Operations	CS-001-038382- CS-001-038406	Product selling/shipping warehouse analysis September 1992.
28	William Pardue	Operations	CS-001-038407- CS-001-038419	Labor efficiency report for September 1993.
28	William Pardue	Operations	CS-001-038420- CS-001-038430	Raw materials report.
28	William Pardue	Operations	CS-001-038431- CS-001-038460	Finished Goods report for February 1993.
28	William Pardue	Operations	CS-001-038461	Average daily production report.
28	William Pardue	Operations	CS-001-038462- CS-001-038478	Shop floor labor report for July 1993.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
28	William Pardue	Operations	CS-001-038479- CS-001-038495	Labor efficiency report.
28	William Pardue	Operations	CS-001-038496- CS-001-038532	Schedule attainment report for January and February.
28	William Pardue	Operations	CS-001-038533- CS-001-038553	Production schedules for February 1993 through March 1993.
28	William Pardue	Operations	CS-001-038554- CS-001-038560	Schedule attainment report for April 1993.
28	William Pardue	Operations	CS-001-038561- CS-001-038588	Raw materials subclass report dated March 1993.
28	William Pardue	Operations	CS-001-038589- CS-001-038647	Raw materials values reports from March 1993.
28	William Pardue	Operations	CS-001-038648- CS-001-038689	Shop floor labor report.
28	William Pardue	Operations	CS-001-038690- CS-001-038704	Consolidated net demand report.
28	William Pardue	Operations	CS-001-038705- CS-001-038708	Weekly production schedule report.
28	William Pardue	Operations	CS-001-038709- CS-001-038713	Schedule attainment report for July.
28	William Pardue	Operations	CS-001-038714- CS-001-038718	Production schedule report for July.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
28	William Pardue	Operations	CS-001-038719- CS-001-038723	Production schedule for July.
28	William Pardue	Operations	CS-001-038724- CS-001-038730	Production schedule for July.
28	William Pardue	Operations	CS-001-038731- CS-001-038734	Production schedule for July.
28	William Pardue	Operations	CS-001-038735- CS-001-038747	Consolidated net demand report.
28	William Pardue	Operations	CS-001-038748- CS-001-038749	Assembly D/L hours required report for July.
28	William Pardue	Operations	CS-001-038750- CS-001-038935	Net demand reports for June and July 1993.
28	William Pardue	Operations	CS-001-038936- CS-001-038938	Schedule attainment reports for July.
28	William Pardue	Operations	CS-001-038939- CS-001-038952	Consolidated net demand report for July 1992.
28	William Pardue	Operations	CS-001-038953- CS-001-038963	Material transfers for August 1992.
28	William Pardue	Operations	CS-001-038964	Transfer schedule to be shipped by August 7, 1992.
28	William Pardue	Operations	CS-001-038965- CS-001-038977	Production report for August 1992.
28	William Pardue	Operations	CS-001-038978- CS-001-039867	Production reports for 1993.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
29	William Pardue	Operations	CS-001-039868- CS-001-039924	January 1993 Production Report, Only Parts With Production Reported Against Them.
29	William Pardue	Operations	CS-001-039925- CS-001-039983	February 1993 Production Report, Only Parts With Production Reported Against Them.
29	William Pardue	Operations	CS-001-039984- CS-001-040046	March 1993 Production Report, Only Parts With Production Reported Against Them.
29	William Pardue	Operations	CS-001-040047- CS-001-040113	April 1993 Production Report, Only Parts With Production Reported Against Them.
29	William Pardue	Operations	CS-001-040113.1- CS-001-040113.7	April 1993 Production Report, Parts That Account for 80% Dollar Value Inventory.
29	William Pardue	Operations	CS-001-040114- CS-001-040153	April 1993 Production Report, With or Without Production Reported Against Them.
29	William Pardue	Operations	CS-001-040154- CS-001-040204	May 1993 Production Report, Without or Without Production Reported Against Them.
29	William Pardue	Operations	CS-001-040205- CS-001-040211	May 1993 Production Report, Parts That Account for 80% Dollar Value Inventory.
29	William Pardue	Operations	CS-001-040212- CS-001-040225	May 1993 Production Report, With or Without Production Reported Against Them.
29	William Pardue	Operations	CS-001-040226- CS-001-040256	May 1993 Production Report, With or Without Production Reported Against Them.
29	William Pardue	Operations	CS-001-040257- CS-001-040324	May 1993 Production Report, Only Parts With Production Reported Against Them.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
29	William Pardue	Operations	CS-001-040325- CS-001-040331	June 1993 Production Report, Parts That Account for 80% Dollar Value Inventory.
29	William Pardue	Operations	CS-001-040332- CS-001-040387	January 1993 Production Report, With or Without Production Reported Against Them.
29	William Pardue	Operations	CS-001-040388- CS-001-040443	January 1993 Production Report, Only Parts With Production Reported Against Them.
29	William Pardue	Operations	CS-001-040444- CS-001-040498	December 1992 Production Report, Only Parts With Production Reported Against Them.
29	William Pardue	Operations	CS-001-040499- CS-001-040553	January Production Report, Only Parts With Production Reported Against Them.
29	William Pardue	Operations	CS-001-040554- CS-001-040560	March 1993 Production Report, Parts That Account for 80% Dollar Value Inventory.
29	William Pardue	Operations	CS-001-040561- CS-001-040613	November 1992 Production Report, Only Parts With Production Reported Against Them.
29	William Pardue	Operations	CS-001-040614- CS-001-040619	October 1992 Production Report, Parts That Account for 80% Dollar Value Inventory.
29	William Pardue	Operations	CS-001-040620- CS-001-040669	June 1992 Production Report, Only Parts With Production Reported Against Them.
29	William Pardue	Operations	CS-001-040670- CS-001-040714	June 1992 Production Report, Only Parts With Production Reported Against Them.
29	William Pardue	Operations	CS-001-040715- CS-001-040766	June 1992 Production Report, Only Parts With Production Reported Against Them.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
30	Chuck Kitts	Purchasing	CS002-000001-CS002-000004	Omega Project Meeting Minutes for February and March 1998.
30	Chuck Kitts	Purchasing	CS002-000005-CS002-000006	Memorandum regarding customer service support.
30	Chuck Kitts	Purchasing	CS002-000007-CS002-000008	Memorandum regarding auxiliary spring kit inventory.
30	Chuck Kitts	Purchasing	CS002-000009-CS002-000014	Omega Project Meeting Minutes for January 1998.
30	Chuck Kitts	Purchasing	CS002-000015-CS002-000016	Memorandum regarding retrofit spring kit cup.
30	Chuck Kitts	Purchasing	CS002-000017-CS002-000021	Omega Project Meeting Minutes for December 1997.
30	Chuck Kitts	Purchasing	CS002-000022-CS002-000025	Omega Project Meeting Minutes for November 1997.
30	Chuck Kitts	Purchasing	CS002-000026	Handwritten memorandum on Omega sprinkler head.
30	Chuck Kitts	Purchasing	CS002-000027-CS002-000029	Omega Meeting agenda, November 1997.
30	Chuck Kitts	Purchasing	CS002-000030	Report of weekly log of Omega heads identified by test kit, listed by model number.
30	Chuck Kitts	Purchasing	CS002-000031-CS002-000035	Omega Parts Meeting Minutes and agenda, November 1997.
30	Chuck Kitts	Purchasing	CS002-000036	Weekly log of Omega heads identifed by test kit, listed by model number.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
30	Chuck Kitts	Purchasing	CS002-000037	Memorandum regarding Adjustable Concealed spring kit.
30	Chuck Kitts	Purchasing	CS002-000038-CS002-000042	Omega Project Meeting Minutes for November 1997.
30	Chuck Kitts	Purchasing	CS002-000043	Omega test result summary.
30	Chuck Kitts	Purchasing	CS002-000044-CS002-000046	Omega Project Meeting Minutes for October 1997.
30	Chuck Kitts	Purchasing	CS002-000047	Omega test result summary.
30	Chuck Kitts	Purchasing	CS002-000048-CS002-000055	Omega Meeting agenda, October 29, 1997.
30	Chuck Kitts	Purchasing	CS002-000056-CS002-000063	Omega Activity Report, week ending October 25, 1997.
30	Chuck Kitts	Purchasing	CS002-000064-CS002-000065	Omega Meeting agenda, October 29, 1997.
30	Chuck Kitts	Purchasing	CS002-000066-CS002-000067	Omega Activity Report, week ending October 25, 1997.
30	Chuck Kitts	Purchasing	CS002-000068-CS002-000070	Omega Activity Report, week ending October 18, 1997.
30	Chuck Kitts	Purchasing	CS002-000071-CS002-000073	Memoranda regarding weekly Omega Activity meetings and reports.
30	Chuck Kitts	Purchasing	CS002-000074-CS002-000078	Handwritten notes regarding Omega meeting.
30	Chuck Kitts	Purchasing	CS002-000079-CS002-000081	Purchase orders.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
30	Chuck Kitts	Purchasing	CS002-000082-CS002-000083	Handwritten notes regarding priorities.
30	Chuck Kitts	Purchasing	CS002-000084-CS002-000085	Memoranda regarding Omegas needed for upcoming change out.
30	Chuck Kitts	Purchasing	CS002-000086-CS002-000091	Sprinkler technical notes from the National Sprinkler Association.
30	Chuck Kitts	Purchasing	CS002-000092-CS002-000094	Omega Meeting Minutes from May 13, 1997.
30	Chuck Kitts	Purchasing	CS002-000095	Memoranda regarding Omegas needed for upcoming change outs.
30	Chuck Kitts	Purchasing	CS002-000096-CS002-000143	Inventory analysis reports as of October 31, 1997.
30	Chuck Kitts	Purchasing	CS002-000144-CS002-000175	Transfer exception quantities report dated August 10, 1997.
30	Chuck Kitts	Purchasing	CS002-000176-CS002-000301	Physical inventory variance report, September 1997.
30	Chuck Kitts	Purchasing	CS002-000302-CS002-000625	Part Master File inventory report dated September 5, 1997.
30	Chuck Kitts	Purchasing	CS002-000626-CS002-000682	Daily Quality Control Incoming Inspection Logs for March 1998.
30	Chuck Kitts	Purchasing	CS002-000683-CS002-000715	Daily Quality Control Incoming Inspection Logs for February 1998.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
30	Chuck Kitts	Purchasing	CS002-000716-CS002-000722	Material Outage Management Reports.
30	Chuck Kitts	Purchasing	CS002-000723-CS002-000879	Lansdale Manufacturing receipts by receipt date reports, December 1997 through March 1998.
30	Chuck Kitts	Purchasing	CS002-000880	Material Outage Management Report dated December 12, 1997.
30	Chuck Kitts	Purchasing	CS002-000881-CS002-000975	Lansdale Manufacturing receipts by receipt date reports for November 1997 and December 1997.
30	Chuck Kitts	Purchasing	CS002-000976-CS002-000988	Memorandum regarding Engineering Change Request dated November 1997.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
31	Chuck Kitts	Purchasing	CS-002-000989-CS-002-001001	Memoranda regarding Engineering Change Request, February 1997.
31	Chuck Kitts	Purchasing	CS-002-001002-CS-002-001009	Memorandum regarding Engineering Change Request, June 1996.
31	Chuck Kitts	Purchasing	CS-002-001010-CS-002-001035	Engineering Change Request, May 1996.
31	Chuck Kitts	Purchasing	CS-002-001036-CS-002-001047	Engineering Change Request, April 1996.
31	Chuck Kitts	Purchasing	CS-002-001048-CS-002-001078	Engineering Change Request, February 1996.
31	Chuck Kitts	Purchasing	CS-002-001079-CS-002-001114	Engineering Change Request, December 1995.
31	Chuck Kitts	Purchasing	CS-002-001115-CS-002-001135	Engineering Change Request, November 1995.
31	Chuck Kitts	Purchasing	CS-002-001136-CS-002-001153	Quality Score Card for November 1997.
31	Chuck Kitts	Purchasing	CS-002-001154-CS-002-001155	Vendor quality audit report.
31	Chuck Kitts	Purchasing	CS-002-001156-CS-002-001160	Paid Warranty Claims for January 1998.
31	Chuck Kitts	Purchasing	CS-002-001161-CS-002-001168	Paid Warranty Claims for October 1997.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
31	Chuck Kitts	Purchasing	CS-002-001169-CS-002-001177	Paid Warranty Claims for September 1997.
31	Chuck Kitts	Purchasing	CS-002-001178-CS-002-001187	Paid Warranty Claims for August 1997.
31	Chuck Kitts	Purchasing	CS-002-001188-CS-002-001192	Paid Warranty Claims for April 1997.
31	Chuck Kitts	Purchasing	CS-002-001193-CS-002-001197	Paid Warranty Claims for March 1997.
31	Chuck Kitts	Purchasing	CS-002-001198-CS-002-001203	Paid Warranty Claims for February 1997.
31	Chuck Kitts	Purchasing	CS-002-001204-CS-002-001212	Paid Warranty Claims for January 1997.
31	Chuck Kitts	Purchasing	CS-002-001213-CS-002-001305	Vendor Incoming Inspection Logs for 1997.
31	Chuck Kitts	Purchasing	CS-002-001306-CS-002-001307	Memorandum regarding inventory of Non-Conformance Reports and First Article Inspections.
31	Chuck Kitts	Purchasing	CS-002-001308-CS-002-001327	Vendor Incoming Inspection Logs for 1996.
31	Chuck Kitts	Purchasing	CS-002-001328-CS-002-001331	Vendor Incoming Inspection Logs for November 1995.
31	Chuck Kitts	Purchasing	CS-002-001332-CS-002-001346	Engineering Change Request, September 1997.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
31	Chuck Kitts	Purchasing	CS-002-001347- CS-002-001564	Composition notebook containing personal notes of Chuck Kitts.
31	Chuck Kitts	Purchasing	CS-002-001565- CS-002-001567	Report from DuPont.
31	Chuck Kitts	Purchasing	CS-002-001568- CS-002-001570	Memoranda regarding Lee Brask Company.
31	Chuck Kitts	Purchasing	CS-002-001571- CS-002-001573	Company statements regarding Omega sprinkler.
31	Chuck Kitts	Purchasing	CS-002-001574- CS-002-001612	Articles regarding Omega.
31	Chuck Kitts	Purchasing	CS-002-001613- CS-002-001756	Schedule transfer variance reports for February and March 1998.
31	Chuck Kitts	Purchasing	CS-002-001757- CS-002-001765	Project Proposals for AC auxiliary ejection spring assembly.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
32	Jim Alexander	Purchasing	CS-003-000001- CS-003-000209	Warehouse Balance File for the month of March 1998.
32	Jim Alexander	Purchasing	CS-003-000210- CS-003-000292	Warehouse Balance File for the month of February 1998.
32	Jim Alexander	Purchasing	CS-003-000293- CS-003-000297	Warehouse Balance Values for November 15, 1997.
32	Jim Alexander	Purchasing	CS-003-000298- CS-003-000298.4 (unmarked)	Warehouse Balance File for February 18, 1998.
32	Jim Alexander	Purchasing	CS-003-000299- CS-003-000390	Warehouse Balance File for January 1998.
32	Jim Alexander	Purchasing	CS-003-000391- CS-003-000458	Sub-Assembly Parts Requirements for Forecasted Items for February 20, 1998.
32	Jim Alexander	Purchasing	CS-003-000459- CS-003-000541	Warehouse Balance File for February 18, 1998.
32	Jim Alexander	Purchasing	CS-003-000542- CS-003-000613	Component Parts Requirements for Forecasted Items for the month of February 1998.
32	Jim Alexander	Purchasing	CS-003-000614- CS-003-000656	Warehouse Balance File for February 20, 1998.
32	Jim Alexander	Purchasing	CS-003-000657- CS-003-000727	Component Parts Requirements for Forecasted Items dated February 24, 1998.
32	Jim Alexander	Purchasing	CS-003-000728- CS-003-000770	Warehouse Balance File for February 24, 1998.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
32	Jim Alexander	Purchasing	CS-003-000771-CS-003-000828	Warehouse Balance Files for March 1998.
32	Jim Alexander	Purchasing	CS-003-000829-CS-003-000878	Component Parts Requirements for Forecasted Items for March 19, 1998.
32	Jim Alexander	Purchasing	CS-003-000879-CS-003-000880	List of parts numbers.
32	Jim Alexander	Purchasing	CS-003-000881-CS-003-000882	Warehouse Balance Values for March 14, 1998.
32	Jim Alexander	Purchasing	CS-003-000883-CS-003-000883.2 (unmarked)	Phantom Purchase Orders and Related Manufacturing Orders dated January 24, 1998.
32	Jim Alexander	Purchasing	CS-003-000884-CS-003-000887	Material Transferred information.
32	Jim Alexander	Purchasing	CS-003-000888-CS-003-000894	Inventory Analysis information.
32	Jim Alexander	Purchasing	CS-003-000895-CS-003-000898	"Parts With No Current MRP Requirements Show Average Weekly Usage Since the Beginning of 1996" Report.
32	Jim Alexander	Purchasing	CS-003-000899-CS-003-000900	Warehouse Balance File for January 30, 1998
32	Jim Alexander	Purchasing	CS-003-000901-CS-003-000905	Material Retrieved Report.
32	Jim Alexander	Purchasing	CS-003-000905a	Handwritten notes.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
32	Jim Alexander	Purchasing	CS-003-000906-CS-003-000908	Material Retrieved Report.
32	Jim Alexander	Purchasing	CS-003-000909-CS-003-000921	Correspondence from the City of New York Department of Buildings to Central Sprinkler Company dated March 31, 1995.
32	Jim Alexander	Purchasing	CS-003-000922	Memorandum dated August 2, 1994 regarding Annual Physical Inventory.
32	Jim Alexander	Purchasing	CS-003-000923-CS-003-000934	Cost Reduction Report.
32	Jim Alexander	Purchasing	CS-003-000935-CS-003-000940	Selected Vendor History by Part Number for 1993.
32	Jim Alexander	Purchasing	CS-003-000941	High Volume Parts by Vendor.
32	Jim Alexander	Purchasing	CS-003-000942-CS-003-000947	Purchase Order Receipts by Vendor dated January 2, 1997.
32	Jim Alexander	Purchasing	CS-003-000948-CS-003-000959	Purchase Order Receipts by Vendor dated November 18, 1996.
32	Jim Alexander	Purchasing	CS-003-000960	Handwritten notes regarding parts.
32	Jim Alexander	Purchasing	CS-003-000960.1-CS-003-000960.5	Correspondence from Ansonia Copper and Brass, Inc.
32	Jim Alexander	Purchasing	CS-003-000961-CS-003-000965	Quotation from Millford Automatics, Inc. dated August 27, 1991.
32	Jim Alexander	Purchasing	CS-003-000966-CS-003-000969	Memorandum regarding R1 EC-20A C-1A Residential Omega sprinklers.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
32	Jim Alexander	Purchasing	CS-003-000970- CS-003-000971	Memorandum dated October 8, 1986 regarding Omega C-1A EC-20A dust cover versus installation wrench.
32	Jim Alexander	Purchasing	CS-003-000972	Memorandum regarding 1½ inch Omega heads with M Heat Collector Assembly.
32	Jim Alexander	Purchasing	CS-003-000973- CS-003-000974	Sprinkler Wrench Chart.
32	Jim Alexander	Purchasing	CS-003-000975	Memorandum regarding Freon Spot Extinguisher Ball.
32	Jim Alexander	Purchasing	CS-003-000976- CS-003-000986	Memorandums regarding Cost Savings Report.
32	Jim Alexander	Purchasing	CS-003-000987	Vendor Quotation.
32	Jim Alexander	Purchasing	CS-003-000988- CS-003-000995	Cost Reductions by Product Class Report dated March 2, 1985.
32	Jim Alexander	Purchasing	CS-003-000996- CS-003-000997	Raw Material Inventory of New Products dated January 10, 1983.
32	Jim Alexander	Purchasing	CS-003-000998- CS-003-001009	Purchase Order Receipts by Vendor Report.
32	Jim Alexander	Purchasing	CS-003-001010- CS-003-001012	Memoranda to all warehouses from Jim Alexander.
32	Jim Alexander	Purchasing	CS-003-001013- CS-003-001015	Fax from Central Sprinkler Company to warehouse managers.
32	Jim Alexander	Purchasing	CS-003-001016	Handwritten notes.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
32	Jim Alexander	Purchasing	CS-003-001017- CS-003-001021	1996 Paid Warranty Claims.
32	Jim Alexander	Purchasing	CS-003-001022- CS-003-001026	Wrench and Head Guard "Cheat Sheets."
32	Jim Alexander	Purchasing	CS-003-001027	Memorandum regarding Non-Conformance Reports 1996.
32	Jim Alexander	Purchasing	CS-003-001028	Memorandum dated June 11, 1996.
32	Jim Alexander	Purchasing	CS-003-001029- CS-003-001032	1996 Paid Warranty Claims.
32	Jim Alexander	Purchasing	CS-003-001033- CS-003-001035	Trip Report of Visit to Orange County, California, August 18 and 19, 1992.
32	Jim Alexander	Purchasing	CS-003-001036- CS-003-001038	Memorandum Regarding MOD F Freon Head dated August 12, 1988.
32	Jim Alexander	Purchasing	CS-003-001039	Flow Control Parts Status Report.
32	Jim Alexander	Purchasing	CS-003-001040	Memorandum regarding Flow Control snap disc component cost dated February 5, 1988.
32	Jim Alexander	Purchasing	CS-003-001041	Memorandum regarding Omega Style sprinklers installed within copper systems.
32	Jim Alexander	Purchasing	CS-003-001042	Memorandum regarding Model C-1 and EC-20 Omega sprinklers.
32	Jim Alexander	Purchasing	CS-003-001043- CS-003-001045	Memorandum regarding housing for Omega sprinklers.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
32	Jim Alexander	Purchasing	CS-003-001046-CS-003-001047	Memorandum regarding Product Review Committee Meeting.
32	Jim Alexander	Purchasing	CS-003-001048	Memorandum regarding stealite bearing discs, reviewed July 3, 1985.
32	Jim Alexander	Purchasing	CS-003-001049	Correspondence from Central Sprinkler Corporation regarding compression strength barriers.
32	Jim Alexander	Purchasing	CS-003-001050-CS-003-001058	Month-to-Date Net Quantity by Product Class Report.
32	Jim Alexander	Purchasing	CS-003-001059	Memorandum regarding fusible alloy pellets.
32	Jim Alexander	Purchasing	CS-003-001060-CS-003-001062	Handwritten chart regarding sprinklers dated February 1988.
32	Jim Alexander	Purchasing	CS-003-001063-CS-003-001065	Handwritten chart regarding sprinkler sales/inventory dated November 10, 1987.
32	Jim Alexander	Purchasing	CS-003-001066-CS-003-001068	Handwritten chart regarding sprinklers dated December 10, 1987.
32	Jim Alexander	Purchasing	CS-003-001069-CS-003-001258	Current Period Schedule Attainment Reports for August, July and June of 1997.
32	Jim Alexander	Purchasing	CS-003-001259-CS-003-001307	Component Part Requirements for Forecasted Items for August 1996.
32	Jim Alexander	Purchasing	CS-003-001308-CS-003-001309	Materials Shortages Report dated August 8, 1996.
32	Jim Alexander	Purchasing	CS-003-001310-CS-003-001494	Component Parts Requirements for Forecasted Items for the months April, May, July and August of 1996.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
32	Jim Alexander	Purchasing	CS-003-001495- CS-003-001495.1	Inventory Status-Top Dollar Items dated March 25, 1998.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
33	Rich Hobbs	Purchasing	CS-004-000001- CS-004-000102	File containing Daily Quality Control Incoming Inspection Logs, manufacturing reports and material Outage reports.
33	Rich Hobbs	Purchasing	CS-004-000103- CS-004-000127	File containing Monthly Engineering Diagnostic Summary Reports for April 1997, minutes of the Management Review meeting March 1997, daily Quality Control Incoming Inspection Logs for March 1997, 1997 Paid Warranty Claims for February, Requests for Deviation or Waivers for February 1997, Non-Conformance Report for February 1997.
33	Rich Hobbs	Purchasing	CS-004-000128- CS-004-000172	File containing Non-Conformance Reports, Quality Control Incoming Inspection Logs, Requests for Deviation or Waiver, warehouse excess inventory reports, management review quality system report, Corrective Action Requests, and Engineering Diagnostic Reports.
33	Rich Hobbs	Purchasing	CS-004-000173- CS-004-000257	Memorandum concerning inventory management and inventory value analysis reports.
33	Rich Hobbs	Purchasing	CS-004-000258- CS-004-000399	Physical inventory variance reports.
33	Rich Hobbs	Purchasing	CS-004-000400- CS-004-000440	E&O Review report.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
33	Rich Hobbs	Purchasing	CS-004-000441- CS-004-000771	File containing expedite list, weekly operation summary reports, current parts requirements reports, cost savings engineering reports, testing reports, customer part description, cost reduction reports, weekly Scrap Reports, 1996 Paid Warranty Claims reports, manufacturing reports, physical inventory results, Quality Scorecards, material shortage reports, Non-Conformance Reports, Corrective Action Requests, memorandum regarding O-ring change, Flash Sales Reports, master department\workcenter listing.
33	Rich Hobbs	Purchasing	CS-004-000772- CS-004-000875	Omega activity reports, Omega Project Meeting Minutes for months of November 1997 through March 1998.
33	Rich Hobbs	Purchasing	CS-004-000876- CS-004-000892	Daily Quality Control Incoming Inspection Log for October 1995.
33	Rich Hobbs	Purchasing	CS-004-000893- CS-004-000956	Daily Quality Control Incoming Inspection Logs for November 1995 and December 1995.
33	Rich Hobbs	Purchasing	CS-004-000957- CS-004-001119	Daily Quality Control Incoming Inspection Logs for January and February 1996.
33	Rich Hobbs	Purchasing	CS-004-001120- CS-004-001325	Daily Quality Control Incoming Inspection Logs for March and April 1996.
33	Rich Hobbs	Purchasing	CS-004-001326- CS-004-001554	Daily Quality Control Incoming Inspection Logs for May and June 1996.
33	Rich Hobbs	Purchasing	CS-004-001555- CS-004-001680	Daily Quality Control Incoming Inspection Logs for July 1996.

BOX	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
34	Rich Hobbs	Purchasing	CS-004-001681-CS-004-001683	Receipt by receipt date report for August 1, 1996.
34	Rich Hobbs	Purchasing	CS-004-001684-CS-004-001686	Quality Control Incoming Inspection Log dated August 2, 1996.
34	Rich Hobbs	Purchasing	CS-004-001687	Daily Quality Control Incoming Inspection Log dated August 3, 1996.
34	Rich Hobbs	Purchasing	CS-004-001688-CS-004-001690	Receipt by receipt date report for August 5, 1996.
34	Rich Hobbs	Purchasing	CS-004-001691-CS-004-001693	Daily Quality Control Incoming Inspection Log dated August 6, 1996.
34	Rich Hobbs	Purchasing	CS-004-001694-CS-004-001696	Receipt by receipt date report for August 6, 1996.
34	Rich Hobbs	Purchasing	CS-004-001697-CS-004-001698	Daily quality receiving inspection log for August 7, 1996.
34	Rich Hobbs	Purchasing	CS-004-001699-CS-004-001701	Receipt by receipt date report for August 7, 1996.
34	Rich Hobbs	Purchasing	CS-004-001702-CS-004-001706	Daily Quality Control Incoming Inspection Log for August 8, 1996.
34	Rich Hobbs	Purchasing	CS-004-001707-CS-004-001708	Receipt by receipt date report for August 8, 1996.
34	Rich Hobbs	Purchasing	CS-004-001709-CS-004-001710	Daily Quality Control Incoming Inspection Log.

BOX	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
34	Rich Hobbs	Purchasing	CS-004-001711-CS-004-001713	Receipt by receipt date report for August 9, 1996.
34	Rich Hobbs	Purchasing	CS-004-001714-CS-004-001715	Daily Quality Control Incoming Inspection Log for August 12, 1996.
34	Rich Hobbs	Purchasing	CS-004-001716-CS-004-001718	Receipt by receipt date report for August 12, 1996.
34	Rich Hobbs	Purchasing	CS-004-001719-CS-004-001723	Daily Quality Control Incoming Inspection Log for August 13, 1996.
34	Rich Hobbs	Purchasing	CS-004-001724-CS-004-001726	Receipt by receipt date report for August 13, 1996.
34	Rich Hobbs	Purchasing	CS-004-001727	Daily Quality Control Incoming Inspection Log for August 14, 1996.
34	Rich Hobbs	Purchasing	CS-004-001728-CS-004-001731	Receipt by receipt date report for August 14, 1996.
34	Rich Hobbs	Purchasing	CS-004-001732-CS-004-001733	Daily Quality Control Incoming Inspection Log for August 15, 1996.
34	Rich Hobbs	Purchasing	CS-004-001734-CS-004-001736	Receipt by receipt date report for August 15, 1996.
34	Rich Hobbs	Purchasing	CS-004-001737	Daily Quality Control Incoming Inspection Log for August 16, 1996.
34	Rich Hobbs	Purchasing	CS-004-001738-CS-004-001740	Receipt by receipt date report for August 16, 1996.

BOX	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
34	Rich Hobbs	Purchasing	CS-004-001741	Daily Quality Control Incoming Inspection Log for August 17, 1996.
34	Rich Hobbs	Purchasing	CS-004-001742	Daily Quality Control Incoming Inspection Log for August 19, 1996.
34	Rich Hobbs	Purchasing	CS-004-001743-CS-004-001745	Material Outage Management Report dated August 19, 1996.
34	Rich Hobbs	Purchasing	CS-004-001746-CS-004-001747	Receipt by receipt date report for August 19, 1996.
34	Rich Hobbs	Purchasing	CS-004-001748-CS-004-001749	Daily Quality Control Incoming Inspection Log for August 20, 1996.
34	Rich Hobbs	Purchasing	CS-004-001950-CS-004-001752	Receipt by receipt date report for August 20, 1996.
34	Rich Hobbs	Purchasing	CS-004-001753-CS-004-001757	Daily Quality Control Incoming Inspection Log for August 21, 1996.
34	Rich Hobbs	Purchasing	CS-004-001758-CS-004-001759	Receipt by receipt date report for August 21, 1996.
34	Rich Hobbs	Purchasing	CS-004-001760-CS-004-001765	Quality Control Incoming Inspection Log for August 22, 1996.
34	Rich Hobbs	Purchasing	CS-004-001766-CS-004-001768	Receipt by receipt date report for August 22, 1996.
34	Rich Hobbs	Purchasing	CS-004-001769-CS-004-001772	Daily Quality Control Incoming Inspection Log for August 23, 1996.

BOX	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
34	Rich Hobbs	Purchasing	CS-004-001773-CS-004-001775	Receipt by receipt date report for August 23, 1996.
34	Rich Hobbs	Purchasing	CS-004-001776	Daily Quality Control Incoming Inspection Log for August 24, 1996.
34	Rich Hobbs	Purchasing	CS-004-001777-CS-004-001779	Daily Quality Control Incoming Inspection Log for August 26, 1996.
34	Rich Hobbs	Purchasing	CS-004-001780-CS-004-001781	Receipt by receipt date report for August 26, 1996.
34	Rich Hobbs	Purchasing	CS-004-001782	Daily Quality Control Incoming Inspection Log for August 27, 1996.
34	Rich Hobbs	Purchasing	CS-004-001783-CS-004-001785	Receipt by receipt date report for August 27, 1996.
34	Rich Hobbs	Purchasing	CS-004-001786-CS-004-001787	Daily Quality Control Incoming Inspection Log for August 28, 1996.
34	Rich Hobbs	Purchasing	CS-004-001788-CS-004-001790	Receipt by receipt date report for August 28, 1996.
34	Rich Hobbs	Purchasing	CS-004-001791-CS-004-001793	Receipt by receipt date report for August 29, 1996.
34	Rich Hobbs	Purchasing	CS-004-001794-CS-004-001795	Daily Quality Control Incoming Inspection Log for August 29, 1996.
34	Rich Hobbs	Purchasing	CS-004-001796	Daily Quality Control Incoming Inspection Log for August 31, 1996.

BOX	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
34	Rich Hobbs	Purchasing	CS-004-001797	Daily Quality Control Incoming Inspection Log for September 3, 1996.
34	Rich Hobbs	Purchasing	CS-004-001798	Receipt by receipt date report for September 3, 1996.
34	Rich Hobbs	Purchasing	CS-004-001799-CS-004-001800	Receipt by receipt date report for September 3, 1996.
34	Rich Hobbs	Purchasing	CS-004-001801-CS-004-001806	Daily Quality Control Incoming Inspection Log for August 5, 1996.
34	Rich Hobbs	Purchasing	CS-004-001807-CS-004-001809	Receipt by receipt date report for August 5, 1996.
34	Rich Hobbs	Purchasing	CS-004-001810-CS-004-001818	Daily Quality Control Incoming Inspection Log for September 6, 1996.
34	Rich Hobbs	Purchasing	CS-004-001819-CS-004-001821	Receipt by receipt date report for September 6, 1996.
34	Rich Hobbs	Purchasing	CS-004-001822-CS-004-001825	Daily Quality Control Incoming Inspection Log for September 10, 1996.
34	Rich Hobbs	Purchasing	CS-004-001826-CS-004-001828	Receipt by receipt date report for September 10, 1996.
34	Rich Hobbs	Purchasing	CS-004-001829-CS-004-001831	Daily Quality Control Incoming Inspection Log for September 11, 1996.
34	Rich Hobbs	Purchasing	CS-004-001832-CS-004-001835	Receipt by receipt date report for September 11, 1996.
34	Rich Hobbs	Purchasing	CS-004-001836-CS-004-001838	Daily Quality Control Incoming Inspection Log for September 12, 1996.

BOX	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
34	Rich Hobbs	Purchasing	CS-004-001839-CS-004-001842	Receipt by receipt date report for September 12, 1996.
34	Rich Hobbs	Purchasing	CS-004-001843-CS-004-001846	Daily Quality Control Incoming Inspection Log for September 13, 1996.
34	Rich Hobbs	Purchasing	CS-004-001847-CS-004-001850	Receipt by receipt date report for September 13, 1996.
34	Rich Hobbs	Purchasing	CS-004-001851	Daily Quality Control Incoming Inspection Log for September 14, 1996.
34	Rich Hobbs	Purchasing	CS-004-001852-CS-004-001853	Daily Quality Control Incoming Inspection Log for September 16, 1996.
34	Rich Hobbs	Purchasing	CS-004-001854-CS-004-001857	Receipt by receipt date report for September 16, 1996.
34	Rich Hobbs	Purchasing	CS-004-001858-CS-004-001861	Receipt by receipt date report for September 17, 1996.
34	Rich Hobbs	Purchasing	CS-004-001862-CS-004-001863	Daily Quality Control Incoming Inspection Log for September 18, 1996.
34	Rich Hobbs	Purchasing	CS-004-001864-CS-004-001865	Daily Quality Control Incoming Inspection Log for September 19, 1996.
34	Rich Hobbs	Purchasing	CS-004-001866-CS-004-001868	Receipt by receipt date report for September 16, 1996.
34	Rich Hobbs	Purchasing	CS-004-001869-CS-004-001870	Daily Quality Control Incoming Inspection Log for September 20, 1996.

BOX	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
34	Rich Hobbs	Purchasing	CS-004-001871-CS-004-001874	Receipt by receipt date report for September 20, 1996.
34	Rich Hobbs	Purchasing	CS-004-001875-CS-004-001877	Daily Quality Control Incoming Inspection Log for September 23, 1996.
34	Rich Hobbs	Purchasing	CS-004-001878-CS-004-001881	Receipt by receipt date report for September 23, 1996.
34	Rich Hobbs	Purchasing	CS-004-001882-CS-004-001886	Daily Quality Control Incoming Inspection Log for September 24, 1996.
34	Rich Hobbs	Purchasing	CS-004-001887-CS-004-001891	Receipt by receipt date report for September 24, 1996.
34	Rich Hobbs	Purchasing	CS-004-001892-CS-004-001895	Daily Quality Control Incoming Inspection Log for September 25, 1996.
34	Rich Hobbs	Purchasing	CS-004-001896	Daily Quality Control Incoming Inspection Log for September 26, 1996.
34	Rich Hobbs	Purchasing	CS-004-001897-CS-004-001899	Daily Quality Control Incoming Inspection Log for September 30, 1996.
34	Rich Hobbs	Purchasing	CS-004-001900-CS-004-001903	Daily Quality Control Incoming Inspection Log for October 1, 1996.
34	Rich Hobbs	Purchasing	CS-004-001904-CS-004-001913	Receipt by receipt date report for October 1, 1996.
34	Rich Hobbs	Purchasing	CS-004-001914-CS-004-001918	Daily Quality Control Incoming Inspection Log for October 2, 1996.

BOX	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
34	Rich Hobbs	Purchasing	CS-004-001919- CS-004-001921	Receipt by receipt date report for October 2, 1996.
34	Rich Hobbs	Purchasing	CS-004-001922- CS-004-001926	Daily Quality Control Incoming Inspection Log for October 3, 1996.
34	Rich Hobbs	Purchasng	CS-004-001927- CS-004-001928	Daily Quality Control Incoming Inspection Log for October 4, 1996.
34	Rich Hobbs	Purchasing	CS-004-001929- CS-004-001931	Daily Quality Control Incoming Inspection Log for October 7, 1996.
34	Rich Hobbs	Purchasing	CS-004-001932- CS-004-001934	Receipt by receipt date report for October 7, 1996.
34	Rich Hobbs	Purchasing	CS-004-001935- CS-004-001939	Receipt by receipt date report for October 4, 1996.
34	Rich Hobbs	Purchasing	CS-004-001940- CS-004-001947	Daily Quality Control Incoming Inspection Log for October 8, 1996.
34	Rich Hobbs	Purchasing	CS-004-001948- CS-004-001949	Material Outage Management Report for October 8, 1996.
34	Rich Hobbs	Purchasing	CS-004-001950- CS-004-001955	Receipt by receipt date report October 8, 1996.
34	Rich Hobbs	Purchasing	CS-004-001956- CS-004-001958	Daily Quality Control Incoming Inspection Log for October 9, 1996.
34	Rich Hobbs	Purchasing	CS-004-001959- CS-004-001960	Receipt by receipt date report for October 9, 1996.

BOX	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
34	Rich Hobbs	Purchasing	CS-004-001961-CS-004-001964	Daily Quality Control Incoming Inspection Log for October 10, 1996.
34	Rich Hobbs	Purchasing	CS-004-001965-CS-004-001968	Receipt by receipt date report for October 10, 1996.
34	Rich Hobbs	Purchasing	CS-004-001969-CS-004-001970	Daily Quality Control Incoming Inspection Log for October 11, 1996.
34	Rich Hobbs	Purchasing	CS-004-001971-CS-004-001973	Receipt by receipt date report for October 11, 1996.
34	Rich Hobbs	Purchasing	CS-004-001974-CS-004-001982	Daily Quality Control Incoming Inspection Log for October 14, 1996.
34	Rich Hobbs	Purchasing	CS-004-001983	Material Outage Management Report dated October 14, 1996.
34	Rich Hobbs	Purchasing	CS-004-001984-CS-004-001989	Receipt by receipt date report for October 14, 1996.
34	Rich Hobbs	Purchasing	CS-004-001990-CS-004-001994	Daily Quality Control Incoming Inspection Log for October 15, 1996.
34	Rich Hobbs	Purchasing	CS-004-001995	Material Outage Management Report dated October 15, 1996.
34	Rich Hobbs	Purchasing	CS-004-001996-CS-004-002000	Receipt by receipt date report for October 15, 1996.
34	Rich Hobbs	Purchasing	CS-004-002001-CS-004-002003	Daily Quality Control Incoming Inspection Log dated October 16, 1996.

BOX	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
34	Rich Hobbs	Purchasing	CS-004-002004- CS-004-002006	Receipt by receipt date report for October 16, 1996.
34	Rich Hobbs	Purchasing	CS-004-002007- CS-004-002010	Daily Quality Control Incoming Inspection Log dated October 17, 1996.
34	Rich Hobbs	Purchasing	CS-004-002011- CS-004-002013	Receipt by receipt date report for October 17, 1996.
34	Rich Hobbs	Purchasing	CS-004-002014	Material Outage Management Report for October 17, 1996.
34	Rich Hobbs	Purchasing	CS-004-002015- CS-004-002018	Receipt by receipt date report for October 18, 1996.
34	Rich Hobbs	Purchasing	CS-004-002019- CS-004-002022	Daily Quality Control Incoming Inspection Log dated October 21, 1996.
34	Rich Hobbs	Purchasing	CS-004-002023- CS-004-002036	Daily Quality Control Incoming Inspection Log dated October 19, 1996.
34	Rich Hobbs	Purchasing	CS-004-002027- CS-004-002030	Receipt by receipt date report for October 21, 1996.
34	Rich Hobbs	Purchasing	CS-004-002031- CS-004-002034	Daily Quality Control Incoming Inspection Log dated October 22, 1996.
34	Rich Hobbs	Purchasing	CS-004-002035- CS-004-002037	Receipt by receipt date report for October 22, 1996.
34	Rich Hobbs	Purchasing	CS-004-002038- CS-004-002039	Daily quality control receiving inspection law for October 23, 1996.

BOX	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
34	Rich Hobbs	Purchasing	CS-004-002040-CS-004-002044	Receipt by receipt date report for October 23, 1996.
34	Rich Hobbs	Purchasing	CS-004-002045-CS-004-002046	Material Outage Management Report for October 23, 1996.
34	Rich Hobbs	Purchasng	CS-004-002047-CS-004-002050	Daily Quality Control Incoming Inspection Log for October 24, 1996.
34	Rich Hobbs	Purchasing	CS-004-002051-CS-004-002053	Daily Quality Control Incoming Inspection Log for October 25, 1996.
34	Rich Hobbs	Purchasing	CS-004-002054-CS-004-002057	Receipt by receipt date report for October 25, 1996.
34	Rich Hobbs	Purchasing	CS-004-002058-CS-004-002062	Receipt by receipt date report for October 28, 1996.
34	Rich Hobbs	Purchasing	CS-004-002063-CS-004-002065	Receipt by receipt date report for October 29, 1996.
34	Rich Hobbs	Purchasing	CS-004-002066-CS-004-002071	Daily Quality Control Incoming Inspection Log for October 30, 1996.
34	Rich Hobbs	Purchasing	CS-004-002072-CS-004-002073	Material Outage Management Report for October 30, 1996.
34	Rich Hobbs	Purchasing	CS-004-002074-CS-004-002078	Receipt by receipt date report for October 30, 1996.
34	Rich Hobbs	Purchasing	CS-004-002079-CS-004-002085	Daily Quality Control Incoming Inspection Log for October 31, 1996.

BOX	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
34	Rich Hobbs	Purchasing	CS-004-002086-CS-004-002088	Receipt by receipt date report for October 31, 1996.
34	Rich Hobbs	Purchasing	CS-004-002089-CS-004-002090	Material Outage Management Report for October 31, 1996.
34	Rich Hobbs	Purchasing	CS-004-002091-CS-004-002092	Material Outage Management Report for November 11, 1996.
34	Rich Hobbs	Purchasing	CS-004-002093-CS-004-002096	Daily Quality control Incoming Inspection Log for November 11, 1996.
34	Rich Hobbs	Purchasing	CS-004-002097-CS-004-002100	Receipt by receipt date report for November 11, 1996.
34	Rich Hobbs	Purchasing	CS-004-002101-CS-004-002104	Daily Quality Control Incoming Inspection Log for November 12, 1996.
34	Rich Hobbs	Purchasing	CS-004-002105-CS-004-002110	Daily Quality Control Incoming Inspection Log for November 13, 1996.
34	Rich Hobbs	Purchasing	CS-004-002111-CS-004-002112	Material Outage Management Report dated November 13, 1996.
34	Rich Hobbs	Purchasing	CS-004-002113-CS-004-002117	Receipt by receipt date report for November 12, 1996.
34	Rich Hobbs	Purchasing	CS-004-002118-CS-004-002120	Receipt by receipt date report for November 13, 1996.
34	Rich Hobbs	Purchasing	CS-004-002121-CS-004-002123	Daily Quality Control Incoming Inspection Log for November 14, 1996.

34	Rich Hobbes	Purchasing	CS-004-002124- CS-004-002125	Material Outage Management Report dated November 14, 1996.
34	Rich Hobbes	Purchasing	CS-004-002126- CS-004-002129	Receipt by receipt date report for November 14, 1996.
34	Rich Hobbes	Purchasing	CS-004-002130- CS-004-002133	Receipt by receipt date report for November 15, 1996.
34	Rich Hobbes	Purchasing	CS-004-002134- CS-004-002135	Material Outage Management Report for November 15, 1996.
34	Rich Hobbes	Purchasing	CS-004-002136- CS-004-002141	Daily Quality Control Incoming Inspection Log for November 16, 1996.
34	Rich Hobbes	Purchasing	CS-004-002142- CS-004-002143	Daily Quality Control Incoming Inspection Log for November 19, 1996.
34	Rich Hobbes	Purchasing	CS-004-002144- CS-004-002147	Receipt by receipt date report November 18, 1996.
34	Rich Hobbes	Purchasing	CS-004-002148- CS-004-002152	Daily Quality Control Incoming Inspection Log for November 19, 1996.
34	Rich Hobbes	Purchasing	CS-004-002153- CS-004-002154	Material Outage Management Report dated November 19, 1996.
34	Rich Hobbes	Purchasing	CS-004-002155- CS-004-002157	Daily Quality Control Incoming Inspection Log for November 10, 1996.
34	Rich Hobbes	Purchasing	CS-004-002158- CS-004-002161	Receipt by receipt date report for November 20, 1996.
34	Rich Hobbes	Purchasing	CS-004-002162- CS-004-002165	Receipt by receipt date report for November 19, 1996.

34	Rich Hobbes	Purchasing	CS-004-002166-CS-004-002167	Material Outage Management Report for November 20, 1996.
34	Rich Hobbes	Purchasing	CS-004-002168-CS-004-002169	Material Outage Management Report for November 21, 1996.
34	Rich Hobbes	Purchasing	CS-004-002170-CS-004-002179	Purchase Order receipts by vendor dated November 11-14, 1996.
34	Rich Hobbes	Purchasing	CS-004-002180-CS-004-002191	Purchase Order receipts by vendor dated November 11-15, 1996.
34	Rich Hobbes	Purchasing	CS-004-002192-CS-004-002198	Daily Quality Control Incoming Inspection Log for November 21, 1996.
34	Rich Hobbes	Purchasing	CS-004-002199-CS-004-002202	Receipt by receipt date report for November 21, 1996.
34	Rich Hobbes	Purchasing	CS-004-002203-CS-004-002207	Daily Quality Control Incoming Inspection Log for November 22, 1996.
34	Rich Hobbes	Purchasing	CS-004-002208-CS-004-002209	Material Outage Management Report for November 22, 1996.
34	Rich Hobbes	Purchasing	CS-004-002210-CS-004-002212	Receipt by receipt date report for November 22, 1996.
34	Rich Hobbes	Purchasing	CS-004-002213-CS-004-002217	Daily Quality Control Incoming Inspection Log for November 23, 1996.
34	Rich Hobbes	Purchasing	CS-004-002218-CS-004-002219	Material Outage Management Report for November 25, 1996.
34	Rich Hobbes	Purchasing	CS-004-002220-CS-004-002222	Receipt by receipt date report November 25, 1996.

34	Rich Hobbes	Purchasing	CS-004-002223-CS-004-002226	Daily Quality Control Incoming Inspection Log for November 26, 1996.
34	Rich Hobbes	Purchasing	CS-004-002227-CS-004-002228	Receipt by receipt date report for November 26, 1996.
34	Rich Hobbes	Purchasing	CS-004-002229-CS-004-002230	Material Outage Management Report for November 26, 1996.
34	Rich Hobbes	Purchasing	CS-004-002231-CS-004-002234	Daily Quality Control Incoming Inspection Log for November 27, 1996.
34	Rich Hobbes	Purchasing	CS-004-002235-CS-004-002239	Receipt by receipt date report for November 27, 1996.
34	Rich Hobbes	Purchasing	CS-004-002240-CS-004-002241	Daily Quality Control Incoming Inspection Log for December 2, 1996.
34	Rich Hobbes	Purchasing	CS-004-002242-CS-004-002244	Daily Quality Control Incoming Inspection Log for December 3, 1996.
34	Rich Hobbes	Purchasing	CS-004-002245-CS-004-002247	Receipt by receipt date report for December 3, 1996.
34	Rich Hobbes	Purchasing	CS-004-002248-CS-004-002249	Material Outage Management Report for December 3, 1996.
34	Rich Hobbes	Purchasing	CS-004-002250-CS-004-002252	Daily Quality Control Incoming Inspection Log for December 4, 1996.
34	Rich Hobbes	Purchasing	CS-004-002253-CS-004-002256	Daily Quality Control Incoming Inspection Log for December 5, 1996.
34	Rich Hobbes	Purchasing	CS-004-002257-CS-004-002258	Material Outage Management Report for December 5, 1996.

34	Rich Hobbes	Purchasing	CS-004-002259- CS-004-002262	Receipt by receipt date report for December 5, 1996.
34	Rich Hobbes	Purchasing	CS-004-002263- CS-004-002264	Daily Quality Control Incoming Inspection Log for December 6, 1996.
34	Rich Hobbes	Purchasing	CS-004-002266- CS-004-002269	Receipt by receipt date report for December 6, 1996.
34	Rich Hobbes	Purchasing	CS-004-002270- CS-004-002274	Daily Quality Control Incoming Inspection Log for December 7, 1996.
34	Rich Hobbes	Purchasing	CS-004-002275- CS-004-002276	Receipt by receipt date report for December 9, 1996.
34	Rich Hobbes	Purchasing	CS-004-002277- CS-004-002278	Daily Quality Control Incoming Inspection Log for December 10, 1996.
34	Rich Hobbes	Purchasing	CS-004-002279- CS-004-002282	Receipt by receipt date report for December 10, 1996.
34	Rich Hobbes	Purchasing	CS-004-002283- CS-004-002284	Daily Quality Control Incoming Inspection Log for December 11, 1996.
34	Rich Hobbes	Purchasing	CS-004-002285- CS-004-002288	Receipt by receipt date report for December 11, 1996.
34	Rich Hobbes	Purchasing	CS-004-002289- CS-004-002293	Daily Quality Control Incoming Inspection Log for December 12, 1996.
34	Rich Hobbes	Purchasing	CS-004-002294	Material Outage Management Report for December 12, 1996.
34	Rich Hobbes	Purchasing	CS-004-002295- CS-004-002300	Scheduled transfer of variances from December 12, 1996-December 18, 1996.

34	Rich Hobbes	Purchasing	CS-004-002301- CS-004-002303	Receipt by receipt date report for December 12, 1996.
34	Rich Hobbes	Purchasing	CS-004-002304- CS-004-002307	Daily Quality Control Incoming Inspection Log for December 13, 1996.
34	Rich Hobbes	Purchasing	CS-004-002308- CS-004-002311	Receipt by receipt date report for December 13, 1996.
34	Rich Hobbes	Purchasing	CS-004-002312	Daily Quality Control Incoming Inspection Log for December 14, 1996.
34	Rich Hobbes	Purchasing	CS-004-002313- CS-004-002314	Daily Quality Control Incoming Inspection Log for December 16, 1996.
34	Rich Hobbes	Purchasing	CS-004-002315- CS-004-002318	Receipt by receipt date report for December 16, 1996.
34	Rich Hobbes	Purchasing	CS-004-002319- CS-004-002320	Daily Quality Control Incoming Inspection Log for December 17, 1996.
34	Rich Hobbes	Purchasing	CS-004-002321- CS-004-002324	Receipt by receipt date report for December 17, 1996.
34	Rich Hobbes	Purchasing	CS-004-002325- CS-004-002327	Daily Quality Control Incoming Inspection Log for December 18, 1996.
34	Rich Hobbes	Purchasing	CS-004-002328- CS-004-002331	Receipt by receipt date report for December 18, 1996.
34	Rich Hobbes	Purchasing	CS-004-002332- CS-004-002334	Daily Quality Control Incoming Inspection Log for December 19, 1996.
34	Rich Hobbes	Purchasing	CS-004-002335- CS-004-002337	Receipt by receipt date report for December 19, 1996.

34	Rich Hobbes	Purchasing	CS-004-002338	Material Outage Management Report for December 19, 1996.
34	Rich Hobbes	Purchasing	CS-004-002339-CS-004-002340	Daily Quality Control Incoming Inspection Log for December 20, 1996.
34	Rich Hobbes	Purchasing	CS-004-002341-CS-004-002344	Receipt by receipt date report for December 20, 1996.
34	Rich Hobbes	Purchasing	CS-004-002345-CS-004-002347	Daily Quality Control Incoming Inspection Log for December 26, 1996.
34	Rich Hobbes	Purchasing	CS-004-002348-CS-004-002349	Daily Quality Control Incoming Inspection Log for December 27, 1996.
34	Rich Hobbes	Purchasing	CS-004-002350-CS-004-002351	Daily Quality Control Incoming Inspection Log for December 23, 1996.
34	Rich Hobbes	Purchasing	CS-004-002352-CS-004-002354	Daily Quality Control Incoming Inspection Log for December 30, 1996.
34	Rich Hobbes	Purchasing	CS-004-002355-CS-004-002358	Receipt by receipt date report for December 30, 1996.
34	Rich Hobbes	Purchasing	CS-004-002359-CS-004-002361	Receipt by receipt date report for December 27, 1996.
34	Rich Hobbes	Purchasing	CS-004-002362-CS-004-002365	Receipt by receipt date report for December 26, 1996.
34	Rich Hobbes	Purchasing	CS-004-002366-CS-004-002369	Daily Quality Control Incoming Inspection Log for December 31, 1996.
34	Rich Hobbes	Purchasing	CS-004-002370-CS-004-002371	Receipt by receipt date report for December 31, 1996.

34	Rich Hobbes	Purchasing	CS-004-002372- CS-004-002374	Daily Quality Control Incoming Inspection Log for November 1, 1996.
34	Rich Hobbes	Purchasing	CS-004-002375- CS-004-002377	Daily Quality Control Incoming Inspection Log for November 4, 1996.
34	Rich Hobbes	Purchasing	CS-004-002378- CS-004-002383	Receipt by receipt date report for November 4, 1996.
34	Rich Hobbes	Purchasing	CS-004-002384- CS-004-002387	Receipt by receipt date report for November 4, 1996.
34	Rich Hobbes	Purchasing	CS-004-002388- CS-004-002389	Daily Quality Control Incoming Inspection Log for November 5, 1996.
34	Rich Hobbes	Purchasing	CS-004-002390- CS-004-002394	Daily Quality Control Incoming Inspection Log for November 6, 1996.
34	Rich Hobbes	Purchasing	CS-004-002395- CS-004-002398	Receipt by receipt date report for November 6, 1996.
34	Rich Hobbes	Purchasing	CS-004-002399- CS-004-002400	Material Outage Management Report for November, 1996.
34	Rich Hobbes	Purchasing	CS-004-002401- CS-004-002406	Non-Conformance Report dated October 9, 1996.
34	Rich Hobbes	Purchasing	CS-004-002407- CS-004-002409	Receipt by receipt date report for November 7, 1996.
34	Rich Hobbes	Purchasing	CS-004-002410- CS-004-002411	Material Outage Management Report for November 7, 1996.
34	Rich Hobbes	Purchasing	CS-004-002412- CS-004-002416	Non-Conformance Reports dated October 31, 1996, November 7, 1996, November 8, 1996, daily Quality Control Incoming Inspection Log for November 8, 1996.

34	Rich Hobbes	Purchasing	CS-004-002417-CS-004-002418	Material Outage Management Report for November 8, 1996.
34	Rich Hobbes	Purchasing	CS-004-002419	Daily Quality Control Incoming Inspection Log for November 7, 1996.
34	Rich Hobbes	Purchasing	CS-004-002420-CS-004-002423	Receipt by receipt date report for November 8, 1996.
34	Rich Hobbes	Purchasing	CS-004-002424	Engineering change notice.
34	Rich Hobbes	Purchasing	CS-004-002425	Engineering change notice.
34	Rich Hobbes	Purchasing	CS-004-002426	Engineering change notice.
34	Rich Hobbes	Purchasing	CS-004-002427	Engineering change notice.
34	Rich Hobbes	Purchasing	CS-004-002428	Engineering change notice.
34	Rich Hobbes	Purchasing	CS-004-002429	Engineering change notice.
34	Rich Hobbes	Purchasing	CS-004-002430	Engineering change notice.
34	Rich Hobbes	Purchasing	CS-004-002431	Engineering change notice.
34	Rich Hobbes	Purchasing	CS-004-002432	Engineering change notice.
34	Rich Hobbes	Purchasing	CS-004-002433	Engineering change notice.
34	Rich Hobbes	Purchasing	CS-004-002434	Engineering change notice.
34	Rich Hobbes	Purchasing	CS-004-002435	Engineering change notice.
34	Rich Hobbes	Purchasing	CS-004-002436	Engineering change notice.
34	Rich Hobbes	Purchasing	CS-004-002437	Engineering change notice.
34	Rich Hobbes	Purchasing	CS-004-002438	Engineering Diagnostic Report.

34	Rich Hobbes	Purchasing	CS-004-002439- CS-004-002492	Engineering Diagnostic Reports.
34	Rich Hobbes	Purchasing	CS-004-002503- CS-004-002504	Omega testing summary.
34	Rich Hobbes	Purchasing	CS-004-002505- CS-004-002528	Engineering Diagnostic Reports.
34	Rich Hobbes	Purchasing	CS-004-002529- CS-004-002530	Omega testing summary.
34	Rich Hobbes	Purchasing	CS-004-002531- CS-004-002604	Engineering Diagnostic Report.
34	Rich Hobbes	Purchasing	CS-004-002605- CS-004-002606	Omega testing summary.
34	Rich Hobbes	Purchasing	CS-004-002607- CS-004-002615	Engineering Diagnostic Reports.
34	Rich Hobbes	Purchasing	CS-004-002616- CS-004-002617	Omega testing summary.
34	Rich Hobbes	Purchasing	CS-004-002618- CS-004-002621	Engineering Diagnostic Report.
34	Rich Hobbes	Purchasing	CS-004-002622- CS-004-002623	Omega testing summary.
34	Rich Hobbes	Purchasing	CS-004-002624- CS-004-002626	Engineering Diagnostic Report.
34	Rich Hobbes	Purchasing	CS-004-002627- CS-004-002628	Omega testing summary.

34	Rich Hobbes	Purchasing	CS-004-002629	Engineering Diagnostic Report.
34	Rich Hobbes	Purchasing	CS-004-002630- CS-004-002632	Omega testing summary.
34	Rich Hobbes	Purchasing	CS-004-002633	Engineering Diagnostic Report.
34	Rich Hobbes	Purchasing	CS-004-002634- CS-004-002647	Omega testing summaries.
34	Rich Hobbes	Purchasing	CS-004-002648- CS-004-002691	Engineering Diagnostic Reports.
34	Rich Hobbes	Purchasing	CS-004-002692- CS-004-002697	Omega testing summaries.
34	Rich Hobbes	Purchasing	CS-004-002698	Engineering Diagnostic Report.
34	Rich Hobbes	Purchasing	CS-004-002699- CS-004-002732	Omega testing summaries.
34	Rich Hobbes	Purchasing	CS-004-002733	Engineering Diagnostic Report.
34	Rich Hobbes	Purchasing	CS-004-002734- CS-004-002739	Omega testing summaries.
34	Rich Hobbes	Purchasing	CS-004-002740 -CS-004-002741	Engineering Diagnostic Report.
34	Rich Hobbes	Purchasing	CS-004-002742- CS-004-002755	Omega testing summaries.
34	Rich Hobbes	Purchasing	CS-004-002756	Engineering Diagnostic Report.
34	Rich Hobbes	Purchasing	CS-004-002757- CS-004-002764	Omega testing summaries.

34	Rich Hobbes	Purchasing	CS-004-002765	Engineering Diagnostic Report.
34	Rich Hobbes	Purchasing	CS-004-002766- CS-004-002782	Omega testing summaries.
34	Rich Hobbes	Purchasing	CS-004-002783- CS-004-002784	Engineering Diagnostic Report.
34	Rich Hobbes	Purchasing	CS-004-002785- CS-004-002786	Omega testing summary.
34	Rich Hobbes	Purchasing	CS-004-002787	Engineering Diagnostic Report.
34	Rich Hobbes	Purchasing	CS-004-002788- CS-004-002804	Omega testing summaries.
34	Rich Hobbes	Purchasing	CS-004-002805- CS-004-002807	Engineering Diagnostic Report.
34	Rich Hobbes	Purchasing	CS-004-002808- CS-004-002812	Omega testing summaries.
34	Rich Hobbes	Purchasing	CS-004-002813- CS-004-002817	Engineering Diagnostic Reports.
34	Rich Hobbes	Purchasing	CS-004-002818- CS-004-002826	Omega testing summaries.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
35	Rich Hobbs	Purchasing	CS-004-002827	Engineering Diagnostic Report dated April 30, 1997.
35	Rich Hobbs	Purchasing	CS-004-002828- CS-004-002853	Omega testing summaries for May, October, April, June 1997
35	Rich Hobbs	Purchasing	CS-004-002854- CS-004-002856	Engineering Diagnostic Report for May 1997.
35	Rich Hobbs	Purchasing	CS-004-002857- CS-004-002858	Omega testing summary for May 16, 1997.
35	Rich Hobbs	Purchasing	CS-004-002859	Engineering Diagnostic Report for May 7, 1997.
35	Rich Hobbs	Purchasing	CS-004-002860- CS-004-002864	Omega testing summary for May and June 1997.
35	Rich Hobbs	Purchasing	CS-004-002865	Engineering Diagnostic Report for May 16, 1997.
35	Rich Hobbs	Purchasing	CS-004-002866- CS-004-002886	Omega testing summary for May and June 1997.
35	Rich Hobbs	Purchasing	CS-004-002887	Engineering Diagnostic Report for July 1, 1997.
35	Rich Hobbs	Purchasing	CS-004-002888- CS-004-002914	Omega testing summary for May, June, July 1997.
35	Rich Hobbs	Purchasing	CS-004-002915	Engineering Diagnostic Report for August 8, 1997.
35	Rich Hobbs	Purchasing	CS-004-002916- CS-004-002927	Omega testing summary for June, July 1997.
35	Rich Hobbs	Purchasing	CS-004-002928	Engineering Diagnostic Report for August 8, 1997.
35	Rich Hobbs	Purchasing	CS-004-002929- CS-004-002973	Omega testing summary for June, July, October 1997.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
35	Rich Hobbs	Purchasing	CS-004-002974	Engineering Diagnostic Report for August 18, 1997.
35	Rich Hobbs	Purchasing	CS-004-002975- CS-004-003005	Omega testing summary for July 1997.
35	Rich Hobbs	Purchasing	CS-004-003006- CS-004-003008	Engineering Diagnostic Reports for July, September 1997.
35	Rich Hobbs	Purchasing	CS-004-003009- CS-004-003042	Omega testing summary for July, August, October 1997.
35	Rich Hobbs	Purchasing	CS-004-003043	Engineering Diagnostic Report for July 24, 1997.
35	Rich Hobbs	Purchasing	CS-004-003044- CS-004-003047	Omega testing summary for July, September 1997.
35	Rich Hobbs	Purchasing	CS-004-003048	Engineering Diagnostic Report for August 18, 1997.
35	Rich Hobbs	Purchasing	CS-004-003049- CS-004-003070	Omega testing summary for July, August, September, October 1997.
35	Rich Hobbs	Purchasing	CS-004-003071	Engineering Diagnostic Report August 8, 1997.
35	Rich Hobbs	Purchasing	CS-004-003072- CS-004-003074	Omega testing summary for August 26, 1997.
35	Rich Hobbs	Purchasing	CS-004-003075	Engineering Diagnostic Report for August 7, 1997.
35	Rich Hobbs	Purchasing	CS-004-003076- CS-004-003083	Omega testing summary for August, September 1997.
35	Rich Hobbs	Purchasing	CS-004-003084	Engineering Diagnostic Report for August 20, 1997.
35	Rich Hobbs	Purchasing	CS-004-003085- CS-004-003090	Omega testing summary for August 1997.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
35	Rich Hobbs	Purchasing	CS-004-003091	Engineering Diagnostic Report August 21, 1997.
35	Rich Hobbs	Purchasing	CS-004-003092- CS-004-003093	Omega testing summary for August 18, 1997.
35	Rich Hobbs	Purchasing	CS-004-003094	Engineering Diagnostic Report for August 20, 1997.
35	Rich Hobbs	Purchasing	CS-004-003095- CS-004-003105	Omega testing summary for August, September 1997.
35	Rich Hobbs	Purchasing	CS-004-003106	Engineering Diagnostic Report for October 21, 1997.
35	Rich Hobbs	Purchasing	CS-004-003107- CS-004-003203	Omega testing summary for August, September, October, November 1997.
35	Rich Hobbs	Purchasing	CS-004-003204	Engineering Diagnostic Report for October 16, 1997.
35	Rich Hobbs	Purchasing	CS-004-003205- CS-004-003289	Omega testing summary for August, September, October, November 1997.
35	Rich Hobbs	Purchasing	CS-004-003290	Engineering Diagnostic Report for October 14, 1997.
35	Rich Hobbs	Purchasing	CS-004-003291- CS-004-003431	Omega testing summary for September, October, November 1997.
35	Rich Hobbs	Purchasing	CS-004-003432	Engineering Diagnostic Report for November 5, 1997.
35	Rich Hobbs	Purchasing	CS-004-003433- CS-004-003440	Omega testing summary for October, November 1997.
35	Rich Hobbs	Purchasing	CS-004-003441	Engineering Diagnostic Report for November 7, 1997.
35	Rich Hobbs	Purchasing	CS-004-003442- CS-004-003457	Omega testing summary for October, November 1997.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
35	Rich Hobbs	Purchasing	CS-004-003458	Engineering Diagnostic Report for October 20, 1997.
35	Rich Hobbs	Purchasing	CS-004-003459- CS-004-003460	Omega testing summary for October 15, 1997.
35	Rich Hobbs	Purchasing	CS-004-003461	Engineering Diagnostic Report for October 20, 1997.
35	Rich Hobbs	Purchasing	CS-004-003462- CS-004-003513	Omega testing summary for October, November 1997.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
36	Rich Hobbs	Purchasing	CS-004-003514-CS-004-003522	Engineering Diagnostic Report dated February 26, 1997.
36	Rich Hobbs	Purchasing	CS-004-003523-CS-004-003540	Engineering Diagnostic Reports for October, November 1996.
36	Rich Hobbs	Purchasing	CS-004-003541-CS-004-003544	Engineering Diagnostic Report for March 24, 1997.
36	Rich Hobbs	Purchasing	CS-004-003545-CS-004-003549	Engineering Diagnostic Report for October 1996.
36	Rich Hobbs	Purchasing	CS-004-003550-CS-004-003551	Engineering Diagnostic Report for April 1997.
36	Rich Hobbs	Purchasing	CS-004-003552-CS-004-003598	Engineering Diagnostic Reports for October, November 1996.
36	Rich Hobbs	Purchasing	CS-004-003599-CS-004-003600	Engineering Diagnostic Report for February 1997.
36	Rich Hobbs	Purchasing	CS-004-003601-CS-004-003664	Engineering Diagnostic Reports for October, November 1996.
36	Rich Hobbs	Purchasing	CS-004-003665-CS-004-003667	Engineering Diagnostic Report for February 1997.
36	Rich Hobbs	Purchasing	CS-004-003668-CS-004-003770	Engineering Diagnostic Reports for October, November, December 1996.
36	Rich Hobbs	Purchasing	CS-004-003771	Engineering Diagnostic Report for April 1997.
36	Rich Hobbs	Purchasing	CS-004-003772-CS-004-003895	Engineering Diagnostic Reports for October, November, December 1996.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
36	Rich Hobbs	Purchasing	CS-004-003896-CS-004-003897	Engineering Diagnostic Report for January 1997.
36	Rich Hobbs	Purchasing	CS-004-003898-CS-004-003922	Engineering Diagnostic Report for December 1996.
36	Rich Hobbs	Purchasing	CS-004-003923	Engineering Diagnostic Report for January 1997.
36	Rich Hobbs	Purchasing	CS-004-003924-CS-004-003926	Engineering Diagnostic Report for December 1996.
36	Rich Hobbs	Purchasing	CS-004-003927-CS-004-003950	Engineering Diagnostic Report for January 1997.
36	Rich Hobbs	Purchasing	CS-004-003951-CS-004-003953	Engineering Diagnostic Report for December 1996.
36	Rich Hobbs	Purchasing	CS-004-003954-CS-004-003959	Engineering Diagnostic Report for January 1997.
36	Rich Hobbs	Purchasing	CS-004-003960-CS-004-003973	Engineering Diagnostic Report for December 1996.
36	Rich Hobbs	Purchasing	CS-004-003974-CS-004-003975	Engineering Diagnostic Report for January 1997.
36	Rich Hobbs	Purchasing	CS-004-003976-CS-004-003978	Engineering Diagnostic Report for December 1996.
36	Rich Hobbs	Purchasing	CS-004-003979-CS-004-004059	Engineering Diagnostic Report for January 1997, February 1997.
36	Rich Hobbs	Purchasing	CS-004-004060-CS-004-004096	Executive Management Reports for March, February, January 1998.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
36	Rich Hobbs	Purchasing	CS-004-004097- CS-004-004258	Executive Management Report for 1997.
36	Rich Hobbs	Purchasing	CS-004-004259- CS-004-004267	Executive Management Report for December 1996.
36	Rich Hobbs	Purchasing	CS-004-004268- CS-004-004397	Executive Management Reports for January - March 1998.
36	Rich Hobbs	Purchasing	CS-004-004398- CS-004-004863	February-December 1997 Executive Management Report.
36	Rich Hobbs	Purchasing	CS-004-004864- CS-004-004893	Project Proposal.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
37	Rich Hobbs	Purchasing	CS-004-004894	Handwritten notes.
37	Rich Hobbs	Purchasing	CS-004-004895	Handwritten notes dated February 16, 1998 regarding conference call.
37	Rich Hobbs	Purchasing	CS-004-004896	Engineering Diagnostic Report for October 4, 1993.
37	Rich Hobbs	Purchasing	CS-004-004897-CS-004-004901	Correspondence between Central Sprinkler and Crawford & Co. regarding insurance matters.
37	Rich Hobbs	Purchasing	CS-004-004902-CS-004-004903	Correspondence between Crawford & Co. and Central Sprinkler Co. regarding insurance matters.
37	Rich Hobbs	Purchasing	CS-004-004904	Correspondence from Central Sprinkler Co. to Crawford & Co. regarding Gene Autry Western Heritage Museum.
37	Rich Hobbs	Purchasing	CS-004-004905-CS-004-004906	Correspondence from Central Sprinkler Co. to Garvin Fire Protection regarding Gene Autry Western Heritage Museum.
37	Rich Hobbs	Purchasing	CS-004-004907-CS-004-004917	Correspondence between Crawford & Co. and Central Sprinkler regarding insurance matters.
37	Rich Hobbs	Purchasing	CS-004-004918-CS-004-004933	Pamphlet on engineered seals.
37	Rich Hobbs	Purchasing	CS-004-004934-CS-004-004952	Pamphlet on Parco O-ring information.
37	Rich Hobbs	Purchasing	CS-004-004953-CS-004-004960	Gallagher Fluid Seals, Inc. information pamphlet.
37	Rich Hobbs	Purchasing	CS-004-004961-CS-004-004972	Pamphlet on Freudenberg-Nok fluid power sealing products.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
37	Rich Hobbs	Purchasing	CS-004-004973- CS-004-004978	Pamphlet on Walter B. Gallagher Company.
37	Rich Hobbs	Purchasing	CS-004-004979- CS-004-004990	Parco marketing material.
37	Rich Hobbs	Purchasing	CS-004-004991- CS-004-005002	Pamphlet on Freundenberg-Nok O-rings.
37	Rich Hobbs	Purchasing	CS-004-005003- CS-004-005013	Engineering drawings.
37	Rich Hobbs	Purchasing	CS-004-005014- CS-004-005017	Article entitled *Central Flow Control - FC On/Off Automatic Sprinkler.*
37	Rich Hobbs	Purchasing	CS-004-005018- CS-004-005143	Physical inventory variance report dated October 16, 1997.
37	Rich Hobbs	Purchasing	CS-004-005144- CS-004-005188	Correspondence from Underwriters Laboratories Inc. regarding conforming follow-up testing on residential sprinklers.
37	Rich Hobbs	Purchasing	CS-004-005189- CS-004-005340	Daily Quality Control Incoming Inspection Logs, manufacturing receipts report, Material Outage Management Report, Non-Conformance Report for April 1997.
37	Rich Hobbs	Purchasing	CS-004-005341- CS-004-005472	Daily Quality Control Incoming Inspection Logs, manufacturing receipts report, Material Outage Management Report; Non-Conformance Report for May 1997.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
37	Rich Hobbs	Purchasing	CS-004-005473- CS-004-005607	Daily Quality Control Incoming Inspection Logs, manufacturing receipts report, Material Outage Management Report, Non-Conformance Report for June 1997.
37	Rich Hobbs	Purchasing	CS-004-005608- CS-004-005762	Daily Quality Control Incoming Inspection Logs, manufacturing receipts report, Material Outage Management Report, Non-Conformance Report for January 1997.
37	Rich Hobbs	Purchasing	CS-004-005763- CS-004-005891	Daily Quality Control Incoming Inspection Logs, manufacturing receipts report, Material Outage Management Report; Non-Conformance Report for February 1997.
37	Rich Hobbs	Purchasing	CS-004-005892- CS-004-006001	Daily Quality Control Incoming Inspection Logs, manufacturing receipts report, Material Outage Management Report; Non-Conformance Report for March 1997.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
38	Rich Hobbs	Purchasing	CS-004-006002- CS-004-006145	Daily Quality Control Incoming Inspection Logs, Material Outage Reports, Central Sprinkler manufacturing report by receipt date for January 1998.
38	Rich Hobbs	Purchasing	CS-004-006146- CS-004-006274	Daily Quality Control Incoming Inspection Logs, Material Outage Reports; Central Sprinkler manufacturing report by receipt date for February 1998.
38	Rich Hobbs	Purchasing	CS-004-006275- CS-004-006281	Daily Quality Control Incoming Inspection Logs, Material Outage Reports, Central Sprinkler manufacturing report by receipt date for March 1998.
38	Rich Hobbs	Purchasing	CS-004-006282- CS-004-006472	Daily Quality Control Incoming Inspection Logs, Material Outage Reports, Central Sprinkler manufacturing report by receipt date for October 1997.
38	Rich Hobbs	Purchasing	CS-004-006473- CS-004-006623	Daily Quality Control Incoming Inspection Logs, Material Outage Reports, Central Sprinkler manufacturing report by receipt date for November 1997.
38	Rich Hobbs	Purchasing	CS-004-006624- CS-004-006723	Daily Quality Control Incoming Inspection Logs, Material Outage Reports, Central Sprinkler manufacturing report by receipt date for December 1997.
38	Rich Hobbs	Purchasing	CS-004-006724- CS-004-006891	Daily Quality Control Incoming Inspection Logs, Material Outage Reports, Central Sprinkler manufacturing report by receipt date for July 1997.
38	Rich Hobbs	Purchasing	CS-004-006892- CS-004-007039	Daily Quality Control Incoming Inspection Logs, Material Outage Reports, Central Sprinkler manufacturing report by receipt date for August 1997.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
38	Rich Hobbs	Purchasing	CS-004-007040- CS-004-007166	Daily Quality Control Incoming Inspection Logs, Material Outage Reports, Central Sprinkler manufacturing report by receipt date for September 1997.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
39	Rich Hobbs	Purchasing	CS-004-007167- CS-004-007207	Projected fiscal year 1996 sales by part dated October 23, 1995.
39	Rich Hobbs	Purchasing	CS-004-007208- CS-004-007323	Projected fiscal year 1996 sales by part dated October 21, 1995.
39	Rich Hobbs	Purchasing	CS-004-007324- CS-004-007389	Part price\cost variances over time report dated December 1, 1995.
39	Rich Hobbs	Purchasing	CS-004-007390- CS-004-007478	Current period schedule attainment reports for the month of September 1996.
39	Rich Hobbs	Purchasing	CS-004-007479- CS-004-007480	Material Outage Management Report for July 1996.
39	Rich Hobbs	Purchasing	CS-004-007481- CS-004-007544	Current period schedule attainment report for September 1996.
39	Rich Hobbs	Purchasing	CS-004-007545- CS-004-007552	Flash Sales Report for August 1996.
39	Rich Hobbs	Purchasing	CS-004-007553- CS-004-007555	Material Outage Management Report for August 1996.
39	Rich Hobbs	Purchasing	CS-004-007556- CS-004-007666	Current period schedule attainment report for August 1996.
39	Rich Hobbs	Purchasing	CS-004-007667- CS-004-007688	Year to date sales history report for September 1997.
39	Rich Hobbs	Purchasing	CS-004-007689- CS-004-008288	Scrap Reports for raw material and finish goods for April 1997 through November 1997.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
39	Rich Hobbs	Purchasing	CS-004-008289- CS-004-008552	Physical inventory variance report for September 1996.
39	Rich Hobbs	Purchasing	CS-004-008553- CS-004-008559	Central Sprinkler memorandum to Academy Dyecasting.
39	Rich Hobbs	Purchasing	CS-004-008560- CS-004-008562	Minutes of the Management Review meeting of Quality Assurance System 1997.
39	Rich Hobbs	Purchasing	CS-004-008563- CS-004-008565	November 1997 memorandum concerning Loss Prevention Control Board.
39	Rich Hobbs	Purchasing	CS-004-008566- CS-004-008577	Corrective Action Request.
39	Rich Hobbs	Purchasing	CS-004-008578- CS-004-008583	Internal memorandum concerning audit schedules for July 1997, August 1996 and February 1996.
39	Rich Hobbs	Purchasing	CS-004-008584- CS-004-008595	1998 Paid Warranty Claims for February.
39	Rich Hobbs	Purchasing	CS-004-008596- CS-004-008669	1997 Paid Warranty Claims for December, November, October, September, July, June, May, April, March and January.
39	Rich Hobbs	Purchasing	CS-004-008670- CS-004-008732	1996 Paid Warranty Claims for November, October, July, June, May, April, March, February.
39	Rich Hobbs	Purchasing	CS-004-008733- CS-004-008747	1995 Paid Warranty Claims for October and September.
39	Rich Hobbs	Purchasing	CS-004-008748- CS-004-008760	Monthly Engineering Diagnostic Reports for January 1998 and December 1997.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
39	Rich Hobbs	Purchasing	CS-004-008761- CS-004-008768	Memorandum regarding Gallagher Fluid Seals.
39	Rich Hobbs	Purchasing	CS-004-008769- CS-004-008970	Engineering Change Meeting Reports.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
40	Rich Hobbs	Purchasing	CS-004-008971- CS-004-008976	Memorandum to Kevin Dolan regarding FX auxiliary spring cups.
40	Rich Hobbs	Purchasing	CS-004-008977- CS-004-008978	Correspondence from HEB Manufacturing Co., Inc. to Central Sprinkler Corp. dated September 26, 1997.
40	Rich Hobbs	Purchasing	CS-004-008979	Correspondence from Central Sprinkler to HEB Manufacturing Co. dated October 23, 1996.
40	Rich Hobbs	Purchasing	CS-004-008980- CS-004-008984	Correspondence from Central Sprinkler Co. to Great Lakes Plumbing & Heating dated April 14, 1997.
40	Rich Hobbs	Purchasing	CS-004-008985	Requisition for purchase order dated July 5, 1995.
40	Rich Hobbs	Purchasing	CS-004-008986	Diagnostic report prepared by Dr. Victor Greenhut.
40	Rich Hobbs	Purchasing	CS-004-008987	Correspondence from Central Sprinkler Co. to Victor A. Greenhut dated June 15, 1995.
40	Rich Hobbs	Purchasing	CS-004-008988- CS-004-009021	Engineering Diagnostic Reports for various months in 1994.
40	Rich Hobbs	Purchasing	CS-004-009022- CS-004-009024	Correspondence from Milford Automatics, Inc. to Richard C. Hobbs regarding marked up drawing with letter.
40	Rich Hobbs	Purchasing	CS-004-009025- CS-004-009029	Fax from Central Sprinkler Co. to Milford Automatics, Inc. dated October 21, 1996.
40	Rich Hobbs	Purchasing	CS-004-009030- CS-004-009032	Non-Conformance Reports.
40	Rich Hobbs	Purchasing	CS-004-009033- CS-004-009038	Pleading from the case of Charles Hart, et al. v. Central Sprinkler Corp.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
40	Rich Hobbs	Purchasing	CS-004-009039- CS-004-009046	Pleading from the case of Charles Hart, et al. v. Central Sprinkler
40	Rich Hobbs	Purchasing	CS-004-009047- CS-004-009053	News from CPSC newsletter.
40	Rich Hobbs	Purchasing	CS-004-009054- CS-004-009056	Correspondence from Viking Corp. dated August 19, 1997 to fire officials.
40	Rich Hobbs	Purchasing	CS-004-009057- CS-004-009078	Quality Score Card for November 1997.
40	Rich Hobbs	Purchasing	CS-004-009079- CS-004-009100	Quality Score Card for October 1997.
40	Rich Hobbs	Purchasing	CS-004-009101- CS-004-009122	Quality Score Card for September 1997.
40	Rich Hobbs	Purchasing	CS-004-009123- CS-004-009144	Quality Score Card for August 1997.
40	Rich Hobbs	Purchasing	CS-004-009145- CS-004-009169	Quality Score Card for July 1997.
40	Rich Hobbs	Purchasing	CS-004-009170- CS-004-009194	Quality Score Card for June 1997.
40	Rich Hobbs	Purchasing	CS-004-009195- CS-004-009219	Quality Score Card for May 1997.
40	Rich Hobbs	Purchasing	CS-004-009220- CS-004-009243	Quality Score Card for January 1997.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
40	Rich Hobbs	Purchasing	CS-004-009244- CS-004-009266	Quality Score Card for March 1997.
40	Rich Hobbs	Purchasing	CS-004-009267- CS-004-009288	Quality Score Card for February 1997.
40	Rich Hobbs	Purchasing	CS-004-009289- CS-004-009294	Process improvement program dated June 13, 1997.
40	Rich Hobbs	Purchasing	CS-004-009295- CS-004-009297	Meeting minutes from March 16, 1998 meeting.
40	Rich Hobbs	Purchasing	CS-004-009298- CS-004-009304	Meeting minutes from February 1998 meeting.
40	Rich Hobbs	Purchasing	CS-004-009305- CS-004-009319	Meeting minutes from February 1998 meeting.
40	Rich Hobbs	Purchasing	CS-004-009320	Income statement from December 1997.
40	Rich Hobbs	Purchasing	CS-004-009321- CS-004-009326	Meeting minutes for February 1998 meeting.
40	Rich Hobbs	Purchasing	CS-004-009327	Income statement for December 1997.
40	Rich Hobbs	Purchasing	CS-004-009328	Central Sprinkler consolidated financials.
40	Rich Hobbs	Purchasing	CS-004-009329	Central Sprinkler consolidated December 1997 income statement.
40	Rich Hobbs	Purchasing	CS-004-009330	Central Sprinkler Corp. consolidated income statements fiscal year 1998.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
40	Rich Hobbs	Purchasing	CS-004-009331	Central Sprinkler Corp. consolidated December 1997 Balance Sheet.
40	Rich Hobbs	Purchasing	CS-004-009332	Central Sprinkler Corp. consolidated December 1997 expense statement.
40	Rich Hobbs	Purchasing	CS-004-009333	Central Sprinkler Corp. consolidated December 1997 product line analysis.
40	Rich Hobbs	Purchasing	CS-004-009334	Central Manufacturing income statement December 1997.
40	Rich Hobbs	Purchasing	CS-004-009335	Central Manufacturing income statement monthly trend.
40	Rich Hobbs	Purchasing	CS-004-009336	Central Manufacturing December 1997 Report.
40	Rich Hobbs	Purchasing	CS-004-009337	Central Manufacturing December 1997 product line analysis.
40	Rich Hobbs	Purchasing	CS-004-009338	Central Manufacturing overhead-actual incurred December 1997.
40	Rich Hobbs	Purchasing	CS-004-009339	CSC sales and consolidated statement comparison domestic consolidated for December 1997.
40	Rich Hobbs	Purchasing	CS-004-009340	Central Sprinkler Consolidated income statement November 1997.
40	Rich Hobbs	Purchasing	No Bates	Central Sprinkler Consolidated legal entity financials.
40	Rich Hobbs	Purchasing	CS-004-009341	Central Sprinkler Corp. Consolidated November 1997 income statement.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
40	Rich Hobbs	Purchasing	CS-004-009342	Central Sprinkler Corp. Consolidated income statement fiscal year 1998.
40	Rich Hobbs	Purchasing	CS-004-009343-CS-004-009347	Various reports for November 1997 Central Sprinkler Corp.
40	Rich Hobbs	Purchasing	CS-004-009348	Omega return testing report.
40	Rich Hobbs	Purchasing	CS-004-009349-CS-004-009353	Central Sprinkler Corp. current period transfer variation report dated October 30, 1995.
40	Rich Hobbs	Purchasing	CS-004-009354	E-mail from Rich Hobbes to Tim McKivett regarding stock.
40	Rich Hobbs	Purchasing	CS-004-009355-CS-004-009356	Marriott retrofit status dated September 13, 1996.
40	Rich Hobbs	Purchasing	CS-004-009357-CS-004-009359	Central Sprinkler Co. Flash Sales Report dated August 12, 1995.
40	Rich Hobbs	Purchasing	CS-004-009360-CS-004-009369	Center Struts report dated July 5, 1996.
40	Rich Hobbs	Purchasing	CS-004-009370-CS-004-009374	Fax from Novasil to Mike Fries regarding report on Omega O-ring seal.
40	Rich Hobbs	Purchasing	CS-004-009375-CS-004-009376	Quotation from Beemer Precision, Inc.
40	Rich Hobbs	Purchasing	CS-004-009377-CS-004-009380	Central survey of vendor facilities.
40	Rich Hobbs	Purchasing	CS-004-009381-CS-004-009404	Quality Score Card for December 1996.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
40	Rich Hobbs	Purchasing	CS-004-009405- CS-004-009427	Quality Score Card for November 1996.
40	Rich Hobbs	Purchasing	CS-004-009428- CS-004-009450	Quality Score Card for October 1996.
40	Rich Hobbs	Purchasing	CS-004-009451- CS-004-009475	Quality Score Card for August 1996.
40	Rich Hobbs	Purchasing	CS-004-009476- CS-004-009509	Quality Score Card for March 1996.
40	Rich Hobbs	Purchasing	CS-004-009510- CS-004-009544	Quality Score Card for February 1996.
40	Rich Hobbs	Purchasing	CS-004-009545- CS-004-009575	Quality Score Card for January 1996.
40	Rich Hobbs	Purchasing	CS-004-009576- CS-004-009614	Quality Score Card for July 1996.
40	Rich Hobbs	Purchasing	CS-004-009615- CS-004-009652	Quality Score Card for April 1996.
40	Rich Hobbs	Purchasing	CS-004-009653- CS-004-009682	Quality Score Card for December 1996.
40	Rich Hobbs	Purchasing	CS-004-009683- CS-004-009688	Fax from Parco to Gallagher Fluid Seals regarding Central Sprinkler.
40	Rich Hobbs	Purchasing	CS-004-009689	Quotation from Gallagher Fluid Seals to Central Sprinkler Co. dated November 11, 1997.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
40	Rich Hobbs	Purchasing	CS-004-009690- CS-004-009697	Fax from Central CPVC Co. to Rich Hobbes.
40	Rich Hobbs	Purchasing	CS-004-009698- CS-004-009701	Daily Quality Control Incoming Inspection Log dated March 25, 1998.
40	Rich Hobbs	Purchasing	CS-004-009702- CS-004-009746	Quality Score Card for December 1997.
40	Rich Hobbs	Purchasing	CS-004-009747- CS-004-009755	Inventory value analysis reports.
40	Rich Hobbs	Purchasing	CS-004-009756- CS-004-009775	Quality Score Card for February 1998.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
41	Kathleen Smith	Purchasing	CS-005-000001- CS-005-000054	Engineering Change Notices for Omega Sprinkers.
41	Kathleen Smith	Purchasing	CS-005-000055- CS-005-000084	Project Proposal Forms for Project ##94-029, 95-039, 96-001, 96-002, 96-003, 96-002.
41	Kathleen Smith	Purchasing	CS-005-000085- CS-005-000116	Engineering Change Notices for January and February 1998.
41	Kathleen Smith	Purchasing	CS-005-000117- CS-005-000151	Computer generated printout, printed October 27, 1995, header "Class/Subclass."
41	Kathleen Smith	Purchasing	CS-005-000152- CS-005-000156	Memorandum for 1996 concerning Scrap SHA Diagnostic reports on O-rings.
41	Kathleen Smith	Purchasing	CS-005-000157- CS-005-000173	1997 Memorandum concerning Harris Bank project, lubrication fluid with O-rings, replacement parts and vendor parts.
41	Kathleen Smith	Purchasing	CS-005-000174	Memorandum dated November 12, 1996 concerning Omega changeout costs.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
42	Eric Goetter	Purchasing	CS-006-000001- CS-006-000025	Project Proposal Forms for Project Nos. 95-39, 96-001, 96-002, 96-003, 96-022.
42	Eric Goetter	Purchasing	CS-006-000026- CS-006-000041	Engineering Change Notices for Freon sprinklers and Omega sprinklers for 1998.
42	Eric Goetter	Purchasing	CS-006-000042- CS-006-000061	Engineering drawings for Omega Prohibitor; release for production and replacement part only; revised drawings.
42	Eric Goetter	Purchasing	CS-006-000062- CS-006-000130	Engineering drawings of Final Assembly and Bill of Materials, revised March 3, 1998 for Omega Sprinklers.
42	Eric Goetter	Purchasing	CS-006-000131- CS-006-000346	Fiscal year 1997 receipts and issues for manufacturing warehouse report, printed May 6, 1997.
42	Eric Goetter	Purchasing	CS-006-000347- CS-006-000371	Stocking inventory analysis report, printed March 23, 1998.
42	Eric Goetter	Purchasing	CS-006-000372- CS-006-000528	Parts lists accounting code, printed March 25, 1998, edit date of printed March 3, 1998.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
42	Eric Goetter	Purchasing	CS-006-000529- CS-006-000729	"Omega material to be filed" file, containing correspondence with Milford Automatics, Non-Conformance Reports concerning Brass calibrations, Engineering Change Notices concerning miscellaneous Omega sprinklers, Engineering Change Notices and Non-Conformance Reports issued to vendors, memorandum concerning Lee Brass Company, engineering drawings revised January 12, 1998, engineering drawings revised September 25, 1997, additional price quotes from Remaches, additional quote from Imperial Spring Company and Stamp, Inc., additional engineering drawings revised in November 1997, Project Proposal Forms.
42	Eric Goetter	Purchasing	CS-006-000730- CS-006-000768	Omega Retrofit file, containing notes of Omega project meetings in February 1998 in chronological order back to October 29, 1997, Omega meeting agenda, Omega activity report ending October 1997, week ending October 18, 1997 and October 25, 1997.
42	Eric Goetter	Purchasing	CS-006-000769- CS-006-000805	½ Omega Seal file containing correspondence with HPS, Inc. engineering drawings, quotes for Milford Automatic, purchase orders and quotes from HPS, quotes from K&K Screw Products, quotes from Teale Company, quotes from Hillsman Modular Molding, Inc.
42	Eric Goetter	Purchasing	CS-006-000806- CS-006-000833	New Prohibitor sprinkler file, containing preliminary engineering drawings, quotes from Screw Machine Specialities, Stevken Manufacturing, Teale Machine Company, FP Schmidt Manufacturing from Milford Automatics.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
42	Eric Goetter	Purchasing	CS-006-000834- CS-006-000919	File titled "198002-198014 O-rings," containing engineering drawings, Engineering Change Notices, price quotes received from Gallagher Fluid Seals, Engineering Change Notices sent to vendors, quotes from Beemer Precision, O-ring technical report received from Acushnet, Non-Conformance Report issued to Beemer, revised engineering drawings for O-rings.
42	Eric Goetter	Purchasing	CS-006-000920- CS-006-000968	Filed titled "198-004," containing Engineering Change Notices, engineering drawings, receipts by receipt date, manufacturing reports for February 1998, current period schedule attainment report for supply warehouse printed November 13, 1997.
42	Eric Goetter	Purchasing	CS-006-000969- CS-006-001018	Receipts by receipt date manufacturing report for the month of August 1997.
42	Eric Goetter	Purchasing	CS-006-001019- CS-006-001051	Receipts by receipt date manufacturing report for the month of September 1997.
42	Eric Goetter	Purchasing	CS-006-001052- CS-006-001126	Receipts by receipt date manufacturing report for the month of October 1997.
42	Eric Goetter	Purchasing	CS-006-001127- CS-006-001195	Receipts by receipt date manufacturing report for the month of November 1997.
42	Eric Goetter	Purchasing	CS-006-001196- CS-006-001244	Receipts by receipt date manufacturing report for the month of December 1997.
42	Eric Goetter	Purchasing	CS-006-001245- CS-006-001314	Receipt by receipt date manufacturing report for the month of January 1998.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
42	Eric Goetter	Purchasing	CS-006-001315- CS-006-001343	Receipt by receipt date manufacturing report for the month of February 1998.
42	Eric Goetter	Purchasing	CS-006-001344- CS-006-001392	Receipt by receipt date manufacturing report for the month of March 1998.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
43	Eric Goetter	Purchasing	CS-006-001393	Memorandum dated December 18, 1997 regarding stock supplies.
43	Eric Goetter	Purchasing	CS-006-001394- CS-006-001395	Warehouse balance file dated March 25, 1998.
43	Eric Goetter	Purchasing	CS-006-001396- CS-006-001397	Material Outage Management report dated March 17, 1998.
43	Eric Goetter	Purchasing	CS-006-001398- CS-006-001401	Currie & Warner Ltd. fax transmittal cover sheets of parts shipped with Non-Conformance Report attached.
43	Eric Goetter	Purchasing	CS-006-001402	Omega Parts Changes dated May 16, 1996.
43	Eric Goetter	Purchasing	CS-006-001403	Product information sheet from Gem Manufacturing Co.
43	Eric Goetter	Purchasing	CS-006-001405- CS-006-001408	Product information pamphlet from Steveken Manufacturing Co.
43	Eric Goetter	Purchasing	CS-006-001409- CS-006-001412	Production information from J. Son's Manufacturing.
43	Eric Goetter	Purchasing	CS-006-001413	Handwritten notes regarding H.E.B. Manufacturing Co., Guaranty Specialty Co., and Stamp, Inc.
43	Eric Goetter	Purchasing	CS-006-001414- CS-006-001418	Product information pamphlet and handwritten information regarding New England Precision, Inc.
43	Eric Goetter	Purchasing	CS-006-001419	Product information from Spring Manufacturing Institute.
43	Eric Goetter	Purchasing	CS-006-001420	Handwritten notes dated June 2, 1994 regarding A.J. Knott Tool and Manufacturing Corporation.
43	Eric Goetter	Purchasing	CS-006-001421 CS-006-001428	Product information regarding Olin Brass.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
43	Eric Goetter	Purchasing	CS-006-001429 CS-006-001448	Product information from Williams & Company, Inc.
43	Eric Goetter	Purchasing	CS-006-001449 CS-006-001464	Product information from Abbott Ball Company.
43	Eric Goetter	Purchasing	CS-006-001465 CS-006-001486	Product information from MOCAP.
43	Eric Goetter	Purchasing	CS-006-001487 CS-006-001492	Product information from ITRAN.
43	Eric Goetter	Purchasing	CS-006-001493 CS-006-001496	Product information regarding Topco, Inc.
43	Eric Goetter	Purchasing	CS-006-001497 CS-006-001504	General Information Bulletin regarding New Process Fibre Company, Inc.
43	Eric Goetter	Purchasing	CS-006-001505 CS-006-001610	Product information regarding Lee Spring Company.
43	Eric Goetter	Purchasing	CS-006-001611 CS-006-001616	Product information regarding Currie & Warner Company.
43	Eric Goetter	Purchasing	CS-006-001617 CS-006-001620	Product information regarding Fibre Materials Corp.
43	Eric Goetter	Purchasing	CS-006-001621 CS-006-001626	Product information regarding Illumina Ceramic Components.
43	Eric Goetter	Purchasing	CS-006-001627 CS-006-001649	Product information regarding Indium Corporation of America.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
43	Eric Goetter	Purchasing	CS-006-001650 CS-006-001653	Product information regarding HEB Company.
43	Eric Goetter	Purchasing	CS-006-001654 CS-006-001715	Product information regarding Wieland Company.
43	Eric Goetter	Purchasing	CS-006-001716 CS-006-001718	Product information regarding ITRAN.
43	Eric Goetter	Purchasing	CS-006-001719 CS-006-001728	Product information regarding Skach Manufacturing Company.
43	Eric Goetter	Purchasing	CS-006-001729 CS-006-001734	Product information regarding Waltec.
43	Eric Goetter	Purchasing	CS-006-001735 CS-006-001738	Product information regarding Metal Flow Corporation.
43	Eric Goetter	Purchasing	CS-006-001739 CS-006-001742	Product information regarding Plas Tech Company.
43	Eric Goetter	Purchasing	CS-006-001743 CS-006-001754	Product information regarding Tornos Bechler.
43	Eric Goetter	Purchasing	CS-006-001755 CS-006-001810	Product information regarding Indium Corporation of America.
43	Eric Goetter	Purchasing	CS-006-001811 CS-006-001876	Product information regarding Valley Forge Tape and Label Company, Inc.
43	Eric Goetter	Purchasing	CS-006-001877	Product information regarding New Process Fibre Company.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
43	Eric Goetter	Purchasing	CS-006-001878	Cover page of Valley Forge Tape and Label Company product information booklet.
43	Eric Goetter	Purchasing	CS-006-001879	Product information from Lee Spring Company regarding minimum tensile strength of spring materials.
43	Eric Goetter	Purchasing	CS-006-001880 CS-006-001884	Product information regarding Plymouth Rock Transportation Corporation.
43	Eric Goetter	Purchasing	CS-006-001885 CS-006-001903	Product information regarding New Process Fibre Company.
43	Eric Goetter	Purchasing	CS-006-001904	Product information regarding TCR Corporation.
43	Eric Goetter	Purchasing	CS-006-001905	Product information regarding Jay Sons Screw Machine Products, Inc.
43	Eric Goetter	Purchasing	CS-006-001906 CS-006-001913	O-ring information from Parco Company.
43	Eric Goetter	Purchasing	CS-006-001914 CS-006-001926	Product information from American Swiss Products Company, Inc.
43	Eric Goetter	Purchasing	CS-006-001927 CS-006-001938	Product information from A.J. Knott Tool and Manufacturing Corporation.
43	Eric Goetter	Purchasing	CS-006-001939 CS-006-001943	Product information from WALTEC.
43	Eric Goetter	Purchasing	CS-006-001944 CS-006-001965	Product information regarding Cambridge-Lee Industries.
43	Eric Goetter	Purchasing	CS-006-001966 CS-006-001974	Product information from Wynn's-Precision, Inc.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
43	Eric Goetter	Purchasing	CS-006-001975 CS-006-001990	Product information regarding Autoswage.
43	Eric Goetter	Purchasing	CS-006-001991 CS-006-001994	Product information regarding New Process Fibre Company.
43	Eric Goetter	Purchasing	CS-006-001995 CS-006-002001	Product information regarding Milford Company.
43	Eric Goetter	Purchasing	CS-006-002002 CS-006-002009	Product information regarding Autoswage.
43	Eric Goetter	Purchasing	CS-006-002010 CS-006-002038	Polymer Molding Closure Products Catalog.
43	Eric Goetter	Purchasing	CS-006-002039 CS-006-002070	Polymer Molding Closure Products Catalog.
43	Eric Goetter	Purchasing	CS-006-002071 CS-006-002084	McDermott Associates catalog.
43	Eric Goetter	Purchasing	CS-006-002085 CS-006-002103	MOCAP catalog.
43	Eric Goetter	Purchasing	CS-006-002104 CS-006-002109	Gem Manufacturing Products catalog.
43	Eric Goetter	Purchasing	CS-006-002110 CS-006-002117	Pen Fasteners catalog.
43	Eric Goetter	Purchasing	CS-006-002118 CS-006-002124	Pamphlet from Pated Spring Company.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
43	Eric Goetter	Purchasing	CS-006-002125 CS-006-002129	Parco o-ring standard size chart.
43	Eric Goetter	Purchasing	CS-006-002130 CS-006-002144	New Process Fibre information.
43	Eric Goetter	Purchasing	CS-006-002145 CS-006-002148	New Process Fibre Company General Information Bulletin.
43	Eric Goetter	Purchasing	CS-006-002149 CS-006-002164	New Process Fibre brochures titled "The Shape of Things."
43	Eric Goetter	Purchasing	CS-006-002165 CS-006-002170	Brochure from New England Precision, Inc.
43	Eric Goetter	Purchasing	CS-006-002171 CS-006-002173	Information from Seal Dynamics Company.
43	Eric Goetter	Purchasing	CS-006-002174 CS-006-002177	Information from Coldsorm, Inc.
43	Eric Goetter	Purchasing	CS-006-002178 CS-006-002179	Product information from Polymer Molding Incorporated.
43	Eric Goetter	Purchasing	CS-006-002180 CS-006-002188	Cross-reference chart for tapered plugs and caps.
43	Eric Goetter	Purchasing	CS-006-002189 CS-006-002205	Information from Polymer Molding Incorporated.
43	Eric Goetter	Purchasing	CS-006-002206 CS-006-002211	Information from Gem Manufacturing.
43	Eric Goetter	Purchasing	CS-006-002212	Non-Conformance Report on Omega guide pin.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
43	Eric Goetter	Purchasing	CS-006-002213	Central Sprinkler Open Orders as of February 13, 1998.
43	Eric Goetter	Purchasing	CS-006-002214 CS-006-002215	Minutes from the Omega Product meeting dated December 17, 1997.
43	Eric Goetter	Purchasing	CS-006-002216 CS-006-002217	Material Outage Management Reports dated March 5, 1998.
43	Eric Goetter	Purchasing	CS-006-002218 CS-006-002235	Product information from GBC Materials Corporation.
43	Eric Goetter	Purchasing	CS-006-002236 CS-006-002256	Product information from Invetech American Bearing and Power Transmission Products.
43	Eric Goetter	Purchasing	CS-006-002257	Cover of a PMI Closure Products catalog.
43	Eric Goetter	Purchasing	CS-006-002258 CS-006-002346	Lee Stock Springs 1998 catalog.
43	Eric Goetter	Purchasing	CS-006-002347 CS-006-002351	Purchase order information from Milford Automatics Inc.
43	Eric Goetter	Purchasing	CS-006-002352 CS-006-002387	Product information from Beemer Engineering Company.
43	Eric Goetter	Purchasing	CS-006-002388 CS-006-002421	Product catalog from Acushnet Company.
43	Eric Goetter	Purchasing	CS-006-002422 CS-006-002443	F&F Distributors, Inc. non-standard o-ring sizes catalog.
43	Eric Goetter	Purchasing	CS-006-002444 CS-006-002475	Parco O-ring design handbook.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
43	Eric Goetter	Purchasing	CS-006-002476 CS-006-002493	Lee Springs Company catalog.
43	Eric Goetter	Purchasing	CS-006-002494 CS-006-002499	Information from Gallagher Fluid Seals, Inc.
43	Eric Goetter	Purchasing	CS-006-002500 CS-006-002502	Norton Performance Plastics information.
43	Eric Goetter	Purchasing	CS-006-002503 CS-006-002508	American Variseal Selection Guide.
43	Eric Goetter	Purchasing	CS-006-002509 CS-006-002520	Creavey Seal Company product information.
43	Eric Goetter	Purchasing	CS-006-002521 CS-006-002524	Product information on Zymaxx from DuPont.
43	Eric Goetter	Purchasing	CS-006-002525 CS-006-002536	Busak and Shamban Luytex Wear Ring products catalog.
43	Eric Goetter	Purchasing	CS-006-002537 CS-006-002542	Busak and Shamban Wedgpak products catalog.
43	Eric Goetter	Purchasing	CS-006-002543 CS-006-002546	Busak and Shamban Aerospace Products Range catalog.
43	Eric Goetter	Purchasing	CS-006-002547 CS-006-002558	Busak and Shamban Turcite Slycring product catalog.
43	Eric Goetter	Purchasing	CS-006-002559 CS-006-001577	Busak and Shamban Turcon U-cup catalog.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
43	Eric Goetter	Purchasing	CS-006-002578 CS-006-002589	Busak and Shamban Turcon CFT seals catalog.
43	Eric Goetter	Purchasing	CS-006-002590 CS-006-002601	Busak and Shamban Excluder No. 2 catalog.
43	Eric Goetter	Purchasing	CS-006-002602 CS-006-002608	Information on non-asbestos filters.
43	Eric Goetter	Purchasing	CS-006-002609 CS-006-002616	Product information from Polycarbon on the Calgrath Flexible Graphite.
43	Eric Goetter	Purchasing	CS-006-002617 CS-006-002618	Product information from Palmetto.
43	Eric Goetter	Purchasing	CS-006-002619 CS-006-002634	Information from Gallagher Fluid Seals.
43	Eric Goetter	Purchasing	CS-006-002635 CS-006-002692	Product information from Minnesota Rubber.
43	Eric Goetter	Purchasing	CS-006-002693 CS-006-002695	Product information from Wynn's Precision, Inc. on the Dyna-seal Bolt and Fastener Seals.
43	Eric Goetter	Purchasing	CS-006-002696 CS-006-002708	Product information on o-rings from Parco.
43	Eric Goetter	Purchasing	CS-006-002709 CS-006-002724	Product information from Kalrez.
43	Eric Goetter	Purchasing	CS-006-002725 CS-006-002733	Product information from Zalak High Performance Seals.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
43	Eric Goetter	Purchasing	CS-006-002734 CS-006-002745	Schedule Transfer Variance for March, 1998.
43	Eric Goetter	Purchasing	CS-006-002746 CS-006-002747	Report on number of parts produced.
43	Eric Goetter	Purchasing	CS-006-002748 CS-006-002763	Price quotes from various manufacturers.
43	Eric Goetter	Purchasing	CS-006-002764 CS-006-002846	Central Sprinkler Corporation Warehouse Balance File dated March 6, 1998.
43	Eric Goetter	Purchasing	CS-006-002847 CS-006-002863	Quality Manual for Central Sprinkler.
43	Eric Goetter	Purchasing	CS-006-002864	Supervisors and responsibility list.
43	Eric Goetter	Purchasing	CS-006-002865 CS-006-002874	Approved Vendor list.
43	Eric Goetter	Purchasing	CS-006-002875 CS-006-002877	Engineering Change Notices.
43	Eric Goetter	Purchasing	CS-006-002878 CS-006-003022	Master Part List dated May 6, 1997.
43	Eric Goetter	Purchasing	CS-006-003023 CS-006-003027	Part number and description list.
43	Eric Goetter	Purchasing	CS-006-003028 CS-006-003070	Handwritten vendor list.
43	Eric Goetter	Purchasing	CS-006-003071 CS-006-003077	Handwritten parts list.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
43	Eric Goetter	Purchasing	CS-006-003078 CS-006-003218	Handwritten inventory list.
43	Eric Goetter	Purchasing	CS-006-003219 CS-006-003223	Wrench and Headguard "Cheat Sheet."
43	Eric Goetter	Purchasing	CS-006-003224	Handwritten notes on Williams & Company, Inc. stationery.
43	Eric Goetter	Purchasing	CS-006-003225 CS-006-003227	Engineering drawings.
43	Eric Goetter	Purchasing	CS-006-003228	Pamphlet on Olin Brass.
43	Eric Goetter	Purchasing	CS-006-003229 CS-006-003246	Letter and attached information regarding Olin Brass.
43	Eric Goetter	Purchasing	CS-006-003247 CS-006-003249	Omega Activity Report.
43	Eric Goetter	Purchasing	CS-006-003250 CS-006-003286	Current Period Schedule Attainment Report dated March 19, 1998.
43	Eric Goetter	Purchasing	CS-006-003287 CS-006-003288	Memorandum regarding scrap material.
43	Eric Goetter	Purchasing	CS-006-003289	Bruce Sedall Potential Scrap List.
43	Eric Goetter	Purchasing	CS-006-003290 CS-006-003405	Current period schedule attainment report for the months March and February of 1998.
43	Eric Goetter	Purchasing	CS-006-003406 CS-006-003597	Current period schedule attainment report for February and January of 1998.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
43	Eric Goetter	Purchasing	CS-006-003598 CS-006-003602	Gallagher Fluid Seals customer order report.
43	Eric Goetter	Purchasing	CS-006-003603 CS-006-003649	Raw Material Parts List.
43	Eric Goetter	Purchasing	CS-006-003650	Handwritten notes on Williams & Company, Inc. stationery.
43	Eric Goetter	Purchasing	CS-006-003651	Weekly log of Omega Heads identified by test kits, listed by model number.
43	Eric Goetter	Purchasing	CS-006-003652 CS-006-003655	Fax from ITRAN Rubber Corporation to Central Sprinkler regarding samples.
43	Eric Goetter	Purchasing	CS-006-003656 CS-006-003663	Fax from Currie and Warner Limited to Central Sprinkler regarding deliveries on orders.
43	Eric Goetter	Purchasing	CS-006-003664	Omega Project Meeting minutes dated March 11, 1998.
43	Eric Goetter	Purchasing	CS-006-003665	Gallagher Fluid Seals packing list.
43	Eric Goetter	Purchasing	CS-006-003666	Requisition for purchase order from Milford Automatic dated February 17, 1998.
43	Eric Goetter	Purchasing	CS-006-003667 CS-006-003668	Purchase Orders.
43	Eric Goetter	Purchasing	CS-006-003669	Vendor Qualification Criteria worksheet.
43	Eric Goetter	Purchasing	CS-006-003670	Quotation from Milford Automatics, Inc.
43	Eric Goetter	Purchasing	CS-006-003671	Quotation from AME Corporation.
43	Eric Goetter	Purchasing	CS-006-003672	Milford Automatics, Inc. Quotation.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
43	Eric Goetter	Purchasing	CS-006-003673 CS-006-003674	Fax from Central to ITRAN Rubber Company dated March 9, 1998.
43	Eric Goetter	Purchasing	CS-006-003675 CS-006-003683	Fax from Currie and Warner Limited to Central Sprinkler regarding new orders placed.
43	Eric Goetter	Purchasing	CS-006-003684 CS-006-003685	Fax from Central Sprinkler Company to Currie and Warner Limited dated November 25, 1997.
43	Eric Goetter	Purchasing	CS-006-003686 CS-006-003687	Fax from Central to AME Corporation dated December 18, 1997.
43	Eric Goetter	Purchasing	CS-006-003688 CS-006-003689	Handwritten notes.
43	Eric Goetter	Purchasing	CS-006-003690	Handwritten notes on Cobra Industries, Ltd. stationery.
43	Eric Goetter	Purchasing	CS-006-003691	Handwritten notes.
43	Eric Goetter	Purchasing	CS-006-003692	Fax from Currie and Warner Limited to Central dated March 29, 1998.
43	Eric Goetter	Purchasing	CS-006-003693	Non-Conformance Report.
43	Eric Goetter	Purchasing	CS-006-003694	Purchase Order.
43	Eric Goetter	Purchasing	CS-006-003695	Handwritten notes on Williams and Company, Inc. stationery.
43	Eric Goetter	Purchasing	CS-006-003696	Fax from Michael Larock to Rick Goetter dated March 9, 1998.
43	Eric Goetter	Purchasing	CS-006-003697	Handwritten notes regarding forecast for Omega.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
43	Eric Goetter	Purchasing	CS-006-003698 CS-006-003700	Handwritten notes on Williams and Company, Inc. stationery.
43	Eric Goetter	Purchasing	CS-006-003701	Central Sprinkler active parts information from Milford Automatics, Inc. dated February 23, 1998.
43	Eric Goetter	Purchasing	CS-006-003702 CS-006-003706	Handwritten notes on Williams and Company, Inc. stationery.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
44	Vincent Hlavinki	Purchasing	CS-007-000001-CS-007-000243	Physical Inventory Variance for the month of September 1997.
44	Vincent Hlavinki	Purchasing	CS-007-000244-CS-007-000550	Fiscal Year 1996 receipts and issues for manufacturing warehouse report dated December 31, 1996.
44	Vincent Hlavinki	Purchasing	CS-007-000551-CS-007-000858	Fiscal Year 1996 receipts and issues for manufacturing warehouse report dated October 31, 1996.
44	Vincent Hlavinki	Purchasing	CS-007-000859-CS-007-001150	Fiscal Year 1996 receipts and issues for manufacturing warehouse report dated September 24, 1996.
44	Vincent Hlavinki	Purchasing	CS-007-001151-CS-007-001419	Fiscal Year 1995 receipts and issues for manufacturing warehouse report dated October 26, 1995.
44	Vincent Hlavinki	Purchasing	CS-007-001420-CS-007-001734	Fiscal Year 1997 receipts and issues for manufacturing warehouse report dated February 4, 1997.
44	Vincent Hlavinki	Purchasing	CS-007-001735-CS-007-001748	Vendor payments report for period January 1994 through December 1994 report issued November 15, 1994.
44	Vincent Hlavinki	Purchasing	CS-007-001749-CS-007-001972	Fiscal year 1994 receipts and issues for manufacturing warehouse report dated December 13, 1994.
44	Vincent Hlavinki	Purchasing	CS-007-001973-CS-007-002188	Fiscal year 1994 receipts and issues for manufacturing warehouse report dated October 24, 1994.
44	Vincent Hlavinki	Purchasing	CS-007-002189-CS-007-002226	Fiscal year quantity shipped report dated January 25, 1995.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
45	Vincent Hlavinki	Purchasing	CS-007-002227-CS-007-002316	Parts Assemblies Reports for the months of August 1997, September 1997, July 1997, June 1997, May 1997, April 1997, March 1997.
45	Vincent Hlavinki	Purchasing	CS-007-002317-CS-007-002677	Parts Assemblies Reports for May 1997, January through March of 1998, January through December of 1997, and November through December of 1996.
45	Vincent Hlavinki	Purchasing	CS-007-002678-CS-007-002686	Stock level update and report dated September 1996.
45	Vincent Hlavinki	Purchasing	CS-007-002687-CS-007-002864	Parts Assemblies Reports for January 1996 through May 1996, July 1996 through August 1996, and October 1996 through November 1996.
45	Vincent Hlavinki	Purchasing	CS-007-002865-CS-007-002892	Parts Assemblies Reports for December and November 1995.
45	Vincent Hlavinki	Purchasing	CS-007-002893-CS-007-002906	Parts Assemblies Reports for February and January 1996.
45	Vincent Hlavinki	Purchasing	CS-007-002907-CS-007-002910	Parts Assemblies Report for April 1995.
45	Vincent Hlavinki	Purchasing	CS-007-002911-CS-007-002915	Part Assemblies Report for March 1996.
45	Vincent Hlavinki	Purchasing	CS-007-002916-CS-007-002920	Parts Assemblies Report for May 1995.
45	Vincent Hlavinki	Purchasing	CS-007-002921-CS-007-002932	Part Assemblies Reports for May and April 1996.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
45	Vincent Hlavinki	Purchasing	CS-007-002933-CS-007-002983	Part Assemblies Reports for May 1995 through December 1995.
45	Vincent Hlavinki	Purchasing	CS-007-002984-CS-007-003093	Fiscal year 1997 receipts and issues for manufacturing warehouse report dated March 5, 1997.
45	Vincent Hlavinki	Purchasing	CS-007-003094-CS-007-003403	Fiscal year 1997 receipts and issues for manufacturing warehouse report dated March 5, 1997.
45	Vincent Hlavinki	Purchasing	CS-007-003404-CS-007-003543	Raw Materials Scrap Report for the month of October 1996.
45	Vincent Hlavinki	Purchasing	CS-007-003544-CS-007-003677	Component parts requirements for forecasted items for the months of January, February and March of 1998.
45	Vincent Hlavinki	Purchasing	CS-007-003678-CS-007-004013	Component parts requirements for forecasted items report for the months of August 1997 through December 1997.
45	Vincent Hlavinki	Purchasing	CS-007-004014-CS-007-004058	BBOH value of purchased raw material and sub-assemblies report dated March 5, 1998.
45	Vincent Hlavinki	Purchasing	CS-007-004059-CS-007-004186	Purchase raw material wear use detail report for March 5, 1998.
45	Vincent Hlavinki	Purchasing	CS-007-004187-CS-007-004231	BBOH value of purchase raw material and sub-assemblies report dated February 6, 1998.
45	Vincent Hlavinki	Purchasing	CS-007-004232-CS-007-004357	Purchase raw material wear use detail report for February 6, 1998.
45	Vincent Hlavinki	Purchasing	CS-007-004358-CS-007-004530	BBOH value of purchase raw material and sub-assemblies report and purchase raw material wear use detail report for the month of January 1998.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
45	Vincent Hlavinki	Purchasing	CS-007-004531-CS-007-004712	BBOH value of purchase raw material and sub-assemblies report and purchase raw material wear use detail report for the month of December 1997.
45	Vincent Hlavinki	Purchasing	CS-007-004713-CS-007-004899	BBOH value of purchase raw material and sub-assemblies report and purchase raw material wear use detail report for November 1997.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
46	Vincent Hlavinki	Purchasing	CS-007-004900-CS-007-005084	Raw materials Scrap reports for November 1996.
46	Vincent Hlavinki	Purchasing	CS-007-005085-CS-007-005090	Price quotes received from New England Precision, Inc., A.J. Knott, PA-TED.
46	Vincent Hlavinki	Purchasing	CS-007-005091-CS-007-005497	File containing Engineering Change Notices, First Article Inspection Reports, engineering drawings, Non-Conformance Reports.
46	Vincent Hlavinki	Purchasing	CS-007-005498-CS-007-005529	"159071" file containing requisition for purchase order, sample inspection reports, Engineering Change Notices, engineering drawings, and price quotes from Dickson Cast Products.
46	Vincent Hlavinki	Purchasing	CS-007-005530-CS-007-005771	"15943200" file containing Engineering Change Notices, engineering drawings, Non-Conformance Reports, price quotes from ILCD Corp., BMC Corp., and Carteret Corp., Weekly Scrap Reports from September 1997 to February 1998, vendor scrap detail report for September and August.
46	Vincent Hlavinki	Purchasing	CS-007-005772-CS-007-006005	"197033\034" file containing memorandum concerning replacement parts, Engineering Change Notices, engineering drawings, First Article Inspection Reports, sample inspection reports, parts assembly reports, physical inventory reports, and price quotes from Fusion Coating, HEB Manufacturing Co., HEB, and Valley Forge Tape and Label.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
46	Vincent Hlavinki	Purchasing	CS-007-006006-CS-007-006025	Carteret file containing price quote from Carteret, product information from Carteret Dye Casting, cost reductions by product report, cost reductions by vendor report.
46	Vincent Hlavinki	Purchasing	CS-007-006026-CS-007-006202	Omega Retrofit file containing memorandum concerning Omega Sprinklers, Tech Notes article on Omega, Omega Activity Reports for December 1997 through March 1998, weekly logs of Omega heads, Project Proposals, Omega project meetings and activity reports for December 1997 and November 1997, engineering drawings, Omega test results summary reports, Omega meeting agenda and Omega Project Meeting Minutes for October 1997.
46	Vincent Hlavinki	Purchasing	CS-007-006203-CS-007-006295	Monthly Inventory Analysis file containing inventory value analysis reports for every month of 1995, 1996, 1997, and through February 1998.
46	Vincent Hlavinki	Purchasing	CS-007-006296-CS-007-006303	Month-to-Date Sales Quantity file containing net sales quantity by product class summary report dated December 4, 1994.
46	Vincent Hlavinki	Purchasing	CS-007-006304-CS-007-006474	Quality file containing vendor monthly Incoming Inspection Logs for 1997, 1996, Central Vendor Quality audit logs, monthly vendor lists, report regarding manufacturing warehouse.

Boxes 47 - 132 will be included in remaining production.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
133	James Link	Accounting	CS-024-000001-CS-024-000101	"Quarterly and Year-End Audit and A/R" file, containing the 1997 Annual Report, handwritten notes, reports on analysis of units sold, Audit Fee summary report, budget information, and information from Ernst & Young.
133	James Link	Accounting	CS-024-000102-CS-024-000326	"SEC" file, containing the SEC Form 10-K, comparison of five-year cumulative total return report, information on the shareholders meeting held March 7, 1997, the SEC Form 10-Q, and correspondence with the SEC regarding filing.
133	James Link	Accounting	CS-024-000327-CS-024-000421	"Other Quarters" file, containing miscellaneous articles copied from magazines and handwritten notes and memoranda regarding cost center, invoices/credit memos, Omega costs, and check requests.
133	James Link	Accounting	CS-024-000422-CS-024-000494	"Savings" file, containing handwritten notes, information about meetings, termination letter and release, personnel statistics.
133	James Link	Accounting	CS-024-000495-CS-024-000581	"Inventory 7/97 Forward" file, containing map, memorandum on raw parts inventory values, memorandum regarding cycle count programs, handwritten notes, information regarding process improvement program, report on manufacturing gain/loss summaries, memorandum regarding physical inventory meetings, report regarding physical inventory variances, information regarding physical inventory organization meeting, memorandum regarding physical inventory instructions, memorandum regarding open purchase orders and customer orders, and information on the bar code inventory count procedures.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
133	James Link	Accounting	CS-024-000582-CS-024-000804	"Budget 1988" file, containing reports on budgets and advances, memoranda regarding budgets, sales and profit plan overview reports, balance sheet information, profit plan reports, fixed asset addition reports, information systems budget, consolidated statement of income, handwritten notes, budget and strategic plan reports, expense statement for Lansdale warehouse profit plan report, expense statements for different departments.
133	James Link	Accounting	CS-024-000805-CS-024-000868	"Central Notes" file, containing report on monthly mix analysis, long-range strategic plans 1988-1990, handwritten notes, reports on product unit analysis.
133	James Link	Accounting	CS-024-000869-CS-024-000938	"Manufacturing Departments/Allocations/ Costing" file, containing handwritten notes, memoranda regarding distribution of costs, reports on overhead allocation, and work center listings.
133	James Link	Accounting	CS-024-000939-CS-024-001064	"Product Pricing/Costing/Inventory" file, containing handwritten notes, reports on variances, inventory accounting user manual from Arthur Andersen, and part description reports, daily profit margin reports/ sales reports, and handwritten notes.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
133	James Link	Accounting	CS-024-001065-CS-024-001198	"Omega" file, containing memoranda regarding Omega reserve analysis, handwritten notes, reports regarding program reserves, reports regarding projected merit costs and billing, reports regarding change-out costs audits, information regarding Omega head identification sheet, return heads analysis report, test record reports, sprinkler heads report, memorandum regarding Hawaii Sheraton change-out, information regarding premier audit, agreement between Central Sprinkler and Marriott, Consumer Product Safety Act July of 1995 and Central Intelligence newsletter.
133	James Link	Accounting	CS-024-001199-CS-024-001342	"Central Sprinkler" file, containing minutes of Operations Meetings, memoranda on quotes, memoranda on forecasts, minutes of Deluge valve meetings.
133	James Link	Accounting	CS-024-001343-CS-024-001421	"Consolidated Financial Monthly Statements Fiscal Year November 1997 through October 1998" file, containing financial data for January 1998, November 1998, and December 1998.
133	James Link	Accounting	CS-024-001422-CS-024-001489	"Monthly Management Reports November 1997 through April 1998" file, containing reports on inventory by location, employee advances, accounts receivable analysis, accounts payable analysis/sales by selling warehouse reports and by salespersons reports/ sales by shipping warehouse reports, sales analysis by class/subclass reports.
133	James Link	Accounting	CS-024-001490-CS-024-001766	"Consolidated Monthly Statements Fiscal Year November 1996 through October 1997" file, containing financial data reports.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
133	James Link	Accounting	CS-024-001767- CS-024-002018	"Consolidated Financial Monthly Statements 1996" file, containing monthly financial reports for 1996.
133	James Link	Accounting	CS-024-002019- CS-024-002153	"Monthly Financial Statements November 1995 through October 1996" file, containing monthly financial reports.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
134	James Link	Accounting	CS-024-002154-CS-024-002490	"Monthly Financial Statements November 1994 to October 1995" file, containing memorandum to the Board of Directors on financial data for each month attaching a balance sheet.
134	James Link	Accounting	CS-024-002491-CS-024-002863	"Monthly Management Reports, November 1996 through April 1997" file, containing cost of sales and inventory analysis report, accounts payable report, accounts receivable report, inventory analysis report, employee advances report, accounts payable analysis, inventory by location report/sales report, sales analysis by class/subclass description reports.
134	James Link	Accounting	CS-024-002864-CS-024-003221	"Monthly Management Reports, May 1997 through October 1997" file, containing cost of sales and inventory analysis report, accounts payable report, accounts receivable report, inventory analysis report, employee advances report, accounts payable analysis, inventory by location report/sales report, sales analysis by class/subclass description reports.
134	James Link	Accounting	CS-024-003222-CS-024-003514	"Management Reports, August, September, October 1996" file containing cost of sales and inventory analysis report, accounts payable report, accounts receivable report, inventory analysis report, employee advances report, accounts payable analysis, inventory by location report/sales report, sales analysis by class/subclass description reports.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
134	James Link	Accounting	CS-024-003515-CS-024-004105	"Monthly Management Reports, October 1995 through March 1996" file containing cost of sales and inventory analysis report, accounts payable report, accounts receivable report, inventory analysis report, employee advances report, accounts payable analysis, inventory by location report/sales report, sales analysis by class/subclass description reports.
134	James Link	Accounting	CS-024-004106-CS-024-004483	"Monthly Management Reports, April 1996 through July 1996" file containing cost of sales and inventory analysis report, accounts payable report, accounts receivable report, inventory analysis report, employee advances report, accounts payable analysis, inventory by location report/sales report, sales analysis by class/subclass description reports.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
135	James Link	Accounting	CS-024-004484- CS-024-004938	Monthly Management Reports prepared by James D. Link for January-December 1994, 1995.
135	James Link	Accounting	CS-024-004939- CS-024-005373	Monthly Management Reports prepared by James D. Link for October, November 1994.
135	James Link	Accounting	CS-024-005374- CS-024-006074	Monthly Management Reports prepared by James D. Link for February, March, April, May, June, July, August, September, 1995.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
136	James Link	Accounting	CS-024-006075-CS-024-006163	Sales analysis by class\subclass and part period ending February printed March 6, 1998.
136	James Link	Accounting	CS-024-006164-CS-024-006185	Sales analysis by class\subclass description period ending February printed March 5, 1998.
136	James Link	Accounting	CS-024-006186-CS-024-006359	Shipment unit values report as of February dated March 9, 1998.
136	James Link	Accounting	CS-024-006360-CS-024-006392	Shipment unit values as of February for sprinklers and CPVC reports dated March 9, 1998.
136	James Link	Accounting	CS-024-006394-CS-024-006419	Sales analysis by class\subclass description period ending February dated March 5, 1998 and March 9, 1998.
136	James Link	Accounting	CS-024-006420-CS-024-006421	Sales analysis by class\subclass description 007 date March 9, 1998.
136	James Link	Accounting	CS-024-006422-CS-024-006427	Flash Sales Report dated March 6, 1998.
136	James Link	Accounting	CS-024-006428-CS-024-006729	Shipment unit values as of February for other and for sprinklers dated February 9, 1998.
136	James Link	Accounting	CS-024-006730-CS-024-006735	Flash Sales Report March 11, 1998.
136	James Link	Accounting	CS-024-006736-CS-024-006738	Daily profit margin report dated March 5, 1998.
136	James Link	Accounting	CS-024-006739-CS-024-006763	Sales analysis by class\subclass period ending February dated March 5, 1998.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
136	James Link	Accounting	CS-024-006764- CS-024-006766	Flash Sales Report March 5, 1998.
136	James Link	Accounting	CS-024-006767- CS-024-006776	Flash Sales Report dated March 5, 1998.
136	James Link	Accounting	CS-024-006777- CS-024-006779	Flash Sales by shipping warehouse report dated March 5, 1998.
136	James Link	Accounting	CS-024-006780- CS-024-006786	Flash Spending Report summary dated March 4, 1998.
136	James Link	Accounting	CS-024-006787	Income Statement month ending January 1998.
136	James Link	Accounting	CS-024-006788- CS-024-006793	Flash Sales Report dated February 8, 1998.
136	James Link	Accounting	CS-024-006794- CS-024-006812	Sales analysis by class\subclass description period ending January dated February 8, 1998.
136	James Link	Accounting	CS-024-006813- CS-024-006814	Flash sales by selling warehouse report dated February 8, 1998.
136	James Link	Accounting	CS-024-006815- CS-024-006823	Flash Sales Report dated February 8, 1998.
136	James Link	Accounting	CS-024-006824- CS-024-006825	Flash Sales Report dated February 8, 1998.
136	James Link	Accounting	CS-024-006826	Sales analysis by class\subclass description period ending January dated February 8, 1998.
136	James Link	Accounting	CS-024-006827	Flash Sales Report dated February 8, 1998.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
136	James Link	Accounting	CS-024-006828-CS-024-006832	Sales analysis by class\subclass description period ending January dated February 8, 1998.
136	James Link	Accounting	CS-024-006833-CS-024-006864	Shipment unit values for CPVC resale and other dated February 8, 1998.
136	James Link	Accounting	CS-024-006865-CS-024-006866	Central Sprinkler Daily Profit margin report dated February 6, 1998.
136	James Link	Accounting	CS-024-006867-CS-024-006955	Sales analysis by class\subclass and part period ending January dated February 8, 1998.
136	James Link	Accounting	CS-024-006956-CS-024-007044	Material\labor\overhead costs sales analysis by class\ subclass and part period ending January dated February 8, 1998.
136	James Link	Accounting	CS-024-007045-CS-024-007128	Sales analysis by class\subclass and part period ending January dated February 6, 1998.
136	James Link	Accounting	CS-024-007129-CS-024-007212	Material\labor\overhead costs sales analysis by class\ subclass and part period ending January dated February 6, 1998.
136	James Link	Accounting	CS-024-007213-CS-024-007218	Flash Sales Report dated March 6, 1998.
136	James Link	Accounting	CS-024-007219-CS-024-007434	Shipment unit values as of December report dated January 9, 1998.
136	James Link	Accounting	CS-024-007435-CS-024-007456	Shipment unit values as of December dated January 9, 1998.
136	James Link	Accounting	CS-024-007457-CS-024-007465	Shipment unit values as of December dated January 9, 1998.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
136	James Link	Accounting	CS-024-007466-CS-024-007491	Sales analysis by class\subclass reports period ending December reports dated January 9, 1998.
136	James Link	Accounting	CS-024-007492-CS-024-007501	Flash Sales Report January 9, 1998.
136	James Link	Accounting	CS-024-007502	Flash Sales by shipping warehouse report dated January 9, 1998.
136	James Link	Accounting	CS-024-007503	Flash Sales by selling warehouse report dated January 9, 1998.
136	James Link	Accounting	CS-024-007504-CS-024-007509	Flash Spending report for January 1998.
136	James Link	Accounting	CS-024-007510-CS-024-007511	Daily profit margin report dated January 9, 1998.
136	James Link	Accounting	CS-024-007512-CS-024-007532	Flash Sales Report dated January 9, 1998.
136	James Link	Accounting	CS-024-007533-CS-024-007535	Sales analysis by class\subclass period ending November dated December 11, 1997.
136	James Link	Accounting	CS-024-007536-CS-024-007543	Flash Sales Report dated December 1997.
136	James Link	Accounting	CS-024-007544	Flash Sales by shipping warehouse report dated December 1997.
136	James Link	Accounting	CS-024-007545	Flash Sales by selling warehouse report dated December 1997.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
136	James Link	Accounting	CS-024-007546-CS-024-007553	Flash Spending report as of November 30, 1997 summary of reports.
136	James Link	Accounting	CS-024-007554-CS-024-007557	Daily invoice register report dated December 1997.
136	James Link	Accounting	CS-024-007558-CS-024-007568	Flash Sales Reports dated December 1997.
136	James Link	Accounting	CS-024-007569-CS-024-007589	Sales analysis by class\subclass description period ending November dated December 11, 1997.
136	James Link	Accounting	CS-024-007590-CS-024-007620	Shipment unit values as of November for Central CPVC and resale dated December 11, 1997.
136	James Link	Accounting	CS-024-007621-CS-024-007626	Flash Sales Report dated March 1998.
136	James Link	Accounting	CS-024-007627-CS-024-007864	Shipment unit values report dated December 11, 1997.
136	James Link	Accounting	CS-024-007865-CS-024-007868	Daily profit margin report dated December 17, 1997.
136	James Link	Accounting	CS-024-007869-CS-024-007872	Flash Sales Report dated November 9, 1997.
136	James Link	Accounting	CS-024-007873-CS-024-007934	Sales analysis by class\subclass description period ending October dated November 9, 1997.
136	James Link	Accounting	CS-024-007935-CS-024-007937	Daily profit margin report dated November 9, 1997.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
136	James Link	Accounting	CS-024-007938- CS-024-007946	Flash Sales Report, Flash Sales by shipping warehouse, Flash Sales by salesmen dated November 9, 1997.
136	James Link	Accounting	CS-024-007947- CS-024-007957	Sales analysis by class\subclass description period ending October dated November 9, 1997.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
136	James Link	Accounting	CS-024-007958	Flash Sales by Selling Warehouse Report dated November 9, 1997.
136	James Link	Accounting	CS-024-007959- CS-024-007968	Flash Sales Report dated November 9, 1997.
136	James Link	Accounting	CS-024-007969- CS-024-007976	Flash Spending Summary Report as of October 31, 1997 for CPVC, Central Casting, and Central Sprinkler.
136	James Link	Accounting	CS-024-007977- CS-024-008007	Shipment Unit Values as of October for CPVC and Resale dated November 9, 1997.
136	James Link	Accounting	CS-024-008008	Daily Profit Margin Report dated November 9, 1997.
136	James Link	Accounting	CS-024-008009- CS-024-008245	Shipment Unit Values as of October, dated November 9, 1997.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
137	James Link	Accounting	CS-024-008246- CS-024-008743	October 1997 the file including Central Sprinkler Corp. Consolidated Balance Sheet, Central Sprinkler Co. Inventory Comparison October 31, 19 v. October 31, 1996, Central Sprinkler Corporation Inventory By Location for fiscal year ending October 13, 1997, Central Sprinkler Corp. Consolidated, Central Sprinkler Co. units sold fiscal year 1997, 4th quarter 1997 review, Central Sprinkler Corporation operating expense reports, Central Sprinkler Corporation Cash Flow worksheet, Central Sprinkler Co. Comparative Analysis of major accruals and reserves, Fiscal Year 1997 Consolidated 10K by quarter, Consolidated Statement of Income for year-to-date, Cash and Cash Equivalents for year ended October 31, 1997, Consolidated Balance Sheet for October 10, 1997, debt schedule, Average Shares Outstanding October 31, 1997, Consolidated Statement of Cash Flows, handwritten notes regarding income taxes, Reserve Balances for the year ended October 31, 1997, Finance Department expense summary December 16, 1997, October 1997 journal entries regarding eliminations, Consolidated Statement for current month, memorandum from Central regarding October Financial Statement timetable, memorandum from Central regarding schedule for October 1997 closing, October, 1997 inventory report for Spray Safe Automatic Sprinklers, Central CPVC project accounting for fiscal year 1997, rental/lease disclosure dated October 31, 1997, debt disclosure dated October 31, 1997, EPS disclosure dated October 31, 1997, Accounts Payable Analysis for year ending October 31, 1997; Inventory

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
				Analysis dated October 1997, ESOP expense analysis for school year October 31, 1997, Investment Sales Analysis 1997, Inventory Reconciliation to Detail October 31, 1997, insurance reserve/products liability claims detail and expenses as of October 31, 1997, Elimination Analysis October 1997, Warehouse Excess Inventory by major category October 1997, fiscal year 1997 collection analysis, November 1, 1997 letter to customer fiscal year 1997 Daily Sales, handwritten notes regarding discount reserve, rebate and pricing reserves, November 10, 1997 Executive Management Reports, sales price comparison, Domestic Consolidated Quarterly Tax data period ending October 31, 1997, Spray Safe Automatic Sprinkler Balance Sheet October 1997, Operations Closing October 31, 1997, Freight Analysis 1997, Conley Warehouse Income Statements October 1997, memorandum to James Link regarding annual filing, Credits for a Month dated October 5, 1997, September 1997, November 5, 1997, August, 1997, November 10, 1997, handwritten note entitled Foreign & Export sales dated December 1, 1997, October 1997 machine met pounds produced, Weekly Scrap Report dated November 5, 1997, Domestic Consolidated Quarterly Tax data period ending October 24, 1997, Physical Inventory Variance September 1997, weekly scrap report October 24, 1997, e-mail message from James Link, fax transmission from Spray Safe Automatic Sprinklers, Ltd., daily disbursements, Export Corp. income statement, handwritten memorandum regarding analysis on Omega reserve documents, handwritten notes

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
				regarding 10-K - Research & Development, Sales Manufacturing and Non-Manufacturing Consolidated Fiscal Year Ending October 31, 1997, 10K marketing personnel, schedule request list dated October 31, 1997, Overhead Capitalization Fiscal Year Ending October 31, 1997, schedule request list dated October 31, 1997, Overhead Capitalization Fiscal Year October 31, 1997, Form 6765 Credit for increasing research activities, memorandum regarding 1997 Paid Warranty Claims, memorandum regarding credit memo report for October 1997, credits for months October 1997.
137	James Link	Accounting	CS-024-008744-CS-024-009001	1997 Accounts Receivable file, including Notice of Annual Meeting of shareholders March 9, 1998, financial highlight documents, 1997 Form 10k documents, documents regarding audit of financial statement, documents regarding Central Sprinkler Co., correspondence between Central Sprinkler and Arthur Andersen, correspondence between Arthur Andersen and Corr, Stevens & Fenningham, facsimile Arthur Andersen & Central Sprinkler Company, Spray Safe Automatic Sprinklers, Ltd. Consolidated Management Accounts October 1997, correspondence between Reed Smith Shaw & McClay and Arthur Andersen regarding correspondence between Corr, Stevens & Fenningham and Arthur Andersen re: Central Sprinkler.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
137	James Link	Accounting	CS-024-009002-CS-024-009208	October 1997 Year Ended file, including correspondence between ML&B and Arthur Andersen regarding Central Sprinkler Co., report of Arthur Andersen, LLP, Press Release, Annual Operating Results Press Release, 10k filing documents, options expense reports for Fiscal Year ending October 31, FASB Disclosure Summary Report, Grant Summary Report, Grant Recap Report, Exercise Recap Report.
137	James Link	Accounting	CS-024-009209-CS-024-009274	Budget 1997 file, including 1997 profit plan Consolidated Statements of Income, 1997 capital budget; 7/19/96 projections; budget comments, Consolidating Statement of Income Budget 1996/1997, memorandum regarding Fiscal Year 1997 budget, handwritten notes regarding budget for 1996/1997, memorandum from CSC regarding remaining capital expenditures, handwritten note regarding budget 1997; Central Sprinkler Export Corp., 1997 budget and long range plan, 1997 budget and strategic plan departmental resource requirements, workday calendar budget 1996-1997, memorandum regarding 1997 budget and long range strategic plan.
137	James Link	Accounting	CS-024-009275-CS-024-009296	1997 Capital Budget file, including 1997 capital budget docs, 1997 proposed budget capital expenditure manufacturing.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
137	James Link	Accounting	CS-024-009297- CS-024-010655	September 1997 file, including Consolidated September 1997 Balance Sheet, Lansdale statistics gross margin percent information, sales & Consolidated Statement comparison domestic Consolidated month September 1997, variance favorable/unfavorable, overhead allocation worksheet September 1997, Central Castings Co. Deposit on Fixed Assets September 1997, Reserve Balances for year ended October 31, 1997, Consolidated Statement of income for September 30, 1997, Accounts Receivable Analysis for year ending October 31, 1997, Cash Flow Worksheet, Average Shares Outstanding September 30, 1997, Inventory Reconciliation to detail September 30, 1997, Central Castings Corp. monthly Profit/Loss Analysis Fiscal Year 1997, Sales Consolidated Fiscal Year October 31, 1997, Central Casting Corp. Labor Summary Hours and Earnings September 1997, CPVC sales to Central analysis September 1997, Elimination Analysis September 1997, Overhead Variance September 1997, Overhead Rate Analysis, Royalty Controlled Flow, ESOP expense analysis Fiscal Year October 31, 1997, memorandum regarding credit memo report for September, October 5, 1997 credits for month September 1997, October 5, 1997 credits for the month of September 1997, Spray Safe Automatic Sprinkler Balance Sheet September 1997, Finance Department expense summaries September 1997, Warehouse Excess Inventory by major categories, regarding September Financial Statement timetable, schedule for September 1997 closing, Spray Safe Automatic Sprinkler, Ltd. Consolidated Management

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
				Accounts for September 1997, memorandum regarding 1997 paid warranty claims for the year ending October 31, 1997, Fiscal Year 1997 collection analysis, Spray Safe Automatic Sprinklers Consolidated Management accounts for August 1997, memorandum regarding credit memo report for August 1997, Consolidated July 1997 Balance Sheet, Cash Flow worksheet, Accounts Receivable information, selective operating expense comparison, Consolidated Statement of Cash Flows unaudited, Quarterly Review July 31, 1997, Commission Payable Summary for July, 1997, Spray Safe Automatic Sprinkler Balance Sheet July 19, 1998, August 1997, credits for the month July 97, third quarter 1997 shareholder report, third quarter 1997 report, third quarter 1997 result, Form 10Q, test release dated September 4, 1997 regarding reports third quarter results, Joint meeting of Board of Directors, meeting, agenda & minutes, correspondence between Central Sprinkler and Securities Exchange Commission regarding form 10Q.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
138	James Link	Accounting	CS-024-010656 CS-024-010939	May 1997 file containing May 1997 Consolidated Balance Sheets, Sales and Consolidated Statement Comparison Reports, Expense Summary Report, Consolidated Statement of Income Report, Consolidated Sales Report, Consolidated Balance Sheets Report, Cash Flow Worksheet Report, Reserve Balances Reports, Average Shares Outstanding, Monthly Profit and Loss Analysis for Fiscal 1997, Scrap Report for the 4th and 5th Week of May, Overhead Analysis, Sales Price Comparison, Executive Management Reports, ESOP Expense Analysis, Collection Analysis for Fiscal 1997, Warehouse Balance Reports, Daily Molding Pounds Produced, Overhead Allocation Worksheet, Negative Balance on Hand Report, Inventory Reconciliation, Warehouse Excess Inventory, Inventory Analysis, Accounts Receivable Analysis, Credit Memo Report, Inventory Analysis, Accounts Payable Analysis, Physical Inventory Variance, Key Lansdale Statistics, Spray Safe Automatic Sprinklers Management Accounts May 1997, 1997 Paid Warranty Claims.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
138	James Link	Accounting	CS-024-010940 CS-024-011286	April 1997 file containing April 1997 Balance Sheets, Central Sprinkler Corp. Second Quarter 1997 Results, Reserve Balances, Quarterly Review, Shares Outstanding, Inventory by Location, Cash Flow Worksheet, Consolidated Statement of Income, Variance\Unfavorable Report Inventory Analysis, Consolidated Warehouse Excess Inventory Analysis, Overhead Allocation Worksheet, Cost of Sales and Inventory Analysis, Profit and Loss Report, Daily Molding Pounds Produced, Warehouse Balance File, Balance Sheet, Accounts Receivable Analysis, Accounts Payable Analysis, Consolidated Statements of Cash Flows, various handwritten notes and journals, Royalties Report, Negative Balance on Hands, ESOP Expense Analysis, Scrap Reports, Executive Management Reports, Financial Statement Timetable Report, Omega Program Reports, Credit Memo Report, Spray Safe Automatic Sprinklers Consolidated Management Accounts Report, 1997 Paid Warranty Claims Report.
138	James Link	Accounting	CS-024-011287 CS-024-011531	April 97 Quarter file, containing SEC Form S-8, Board of Directors Meeting Minutes for June 9, 1997, Second Quarter 1997 Results, Second Quarter 1997 Shareholder Report, Central Sprinkler Corporation Form 10-Q, newspaper articles concerning Central Sprinkler, Central Sprinkler Schedules for April 1997 Quarter, various versions of Quarterly Report.
138	James Link	Accounting	CS-024-011532 CS-024-011677	April 1997 Quarter file containing SEC Form S-8, SEC Form 10-Q, notes to Consolidated Financial Statements, draft 10-Q, draft Consolidated Balance Sheet.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
138	James Link	Accounting	CS-024-011678 CS-024-011969	March 1997 file containing March 1997 Balance Sheet, Reserve Balances Report, Inventory Reconciliation to Detail Report, Consolidated Statements of Income Report, Consolidated Balance Sheets Report, Daily Molding Pounds Produced Report, ESOP Price Change Report, Inventory Reconciliation to Detail Reports, Warehouse Balance File Report, Overhead Rate Analysis Report, Weekly Scrap Report, Executive Management Reports, Balance Sheet for March of 1997, Average Shares Outstanding Reports, Reserve Balances Report, Financial Statement Timetable Memo, Credit Memo Report, Negative Balance on Hands Report, Consolidated Warehouse Excess Inventory Analysis, Warehouse Inventory for Major Category Report, Income Statement Report, Expense Summary Reports, Schedule from March 1997 Closing Memo, Accounts Payable Analysis, Inventory Analysis, Cost of Sales and Inventory Analysis, handwritten notes on indirect labor variances, Spray Safe Automatic Sprinklers Consolidated Management Accounts for March 1997, and 1997 Paid Warranty Claims.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
138	James Link	Accounting	CS-024-011970 CS-024-012119	First Quarter 1997 file containing SEC Form 10-Q January 31, 1997, Letter to Shareholders, First Quarter 1997 Results, Quarterly Schedule, several internal memoranda concerning the filing of 10-Q, Agenda for Joint Meeting of Board of Directors on March 7, 1997, Consolidated Balance Sheets with handwritten notes, First Quarter Reports, Script for Annual Meeting March 7, 1997, Summary of Votes Cast, Draft Financial Statements for Central Sprinkler and Subsidiaries.
138	James Link	Accounting	CS-024-012120 CS-024-012600	February 1997 file containing Balance Sheet for 1997, Cash Flow Worksheet, Consolidated Balance Sheets, Consolidated Statements of Income, Profit and Loss Report, Reserve Analysis, Daily Molding Pounds Produced Report, Average Shares Outstanding Report, Overhead Rate Analysis Report, Spray Safe Automatic Sprinkler Balance Sheet, Stock Price 1997 Report, Inventory Reconciliation to Detail Report, Consolidated Warehouse Excess Inventory Analysis, Warehouse Excess by Major Category, Negative Balance on Hands Report, Executive Management Reports, Weekly Scrap Report, Draft Financial Results, Credit Memo Report for February 1997, Schedule for February 1997 Closing, February Financial Statement Timetable, 1997 Inventory Analysis, Accounts Receivable Report, Accounts Payable Analysis Report, Expense Summary Report, Income Statement for February 1997, Collection Analysis, Central Spray Safe Management Accounts, 1997 Paid Warranty Claims, First Quarter Reports of 1997, Letters to Shareholders, EDGAR Filings.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
138	James Link	Accounting	CS-024-012601 CS-024-012834	January 1997 file containing January 1997 Balance Sheet, First Quarter 1997 versus First Quarter 1996 Analysis of Units Sold Report, Quarterly Review Report, Press Release, Consolidated Statement of Income Report, Cash Flow Worksheet, Reserve Balances, Consolidated Balance Sheets, Profit and Loss Report, Overhead Rate Analysis Report, Weekly Scrap Report, Executive Management Reports, Average Shares Outstanding Report, Stock Price, ESOP Expense Analysis, Daily Molding Pounds Produced Report, Warehouse Balance File, Negative Balance on Hand, Spray Safe Balance Sheet, Consolidated Warehouse Excess Inventory Analysis, Accounts Receivable Analysis, Income Statement for January 1997, Schedule for January 1997 Closing Memo, January Financial Statement Timetable Memo, Spray Safe Consolidated Management Accounts January 1997, 1997 Inventory Analysis, Warehouse Excess Inventory by Major Category, Insurance Reserve handwritten data, Expense Summary, 1997 Paid Warranty Claims.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
138	James Link	Accounting	CS-024-012835 CS-024-013115	December 1996 file containing December 1996 Balance Sheet, Reserve Balances Report, Consolidated Statement of Income Report, Profit and Loss Reports, Consolidated Statement of Income Report, various Sales Reports, Inventory Reconciliation to Detail Report, Balance Sheet Report, Executive Management Reports, Weekly Scrap Reports, Consolidated Balance Sheets Report, Daily Molding Pounds Produced Report, Financial Results for December 1996 Draft Report, Accounts Receivable Analysis Report, Accounts Payable Analysis Report, Negative Balance on Hands Report, Consolidated Warehouse Excess Inventory Report, December Financial Statement Timetable Report, Income Statement Report, Warehouse Excess Inventory by Major Category Report, Income Statement for December 1996 Report, Credit Memo Report for December 1996, Expense Summary, 1997 Inventory Analysis, Weekly Scrap Report, Spray Safe Consolidated Management Accounts, 1996 Paid Warranty Claims.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
138	James Link	Accounting	CS-024-013116 CS-024-013381	November 1996 file containing November 1996 Balance Sheet, Inventory Reconciliation to Detail, Reserve Balance Report, Daily Molding Pounds Produced, Profit and Loss Report, Warehouse Expense Summary, Financial Results, Warehouse Excess Inventory by Major Category, Consolidated Statement of Income, Overhead Rate Analysis, Warehouse Balance File, Average Shares Outstanding, Collection Analysis, Weekly Scrap Report, Balance Sheet for November 1996, Negative Balance on Hands, Executive Management Reports, Accounts Receivable Analysis, Income Statement, Notes to Consolidated Management Accounts, Credit Memo Report for November 1996, Spray Safe Consolidated Management Accounts November 1996, 1996 Paid Warranty Claims.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
139	James Link	Accounting	CS-024-013382- CS-024-013467	"Audit Reports" file, containing memoranda regarding the issuance of company cars, business records, Omega transactions, field audit reports, audit reports, memoranda regarding inventory, memoranda regarding inventory cycle count.
139	James Link	Accounting	CS-024-013468- CS-024-013546	"First Quarter 1998" file, containing SEC Form 10Q, press release, and drafts of 10Q.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
139	James Link	Accounting	CS-024-013537- CS-024-013802	"January 1998" file containing Balance Sheet, Inventory by Location, Inventory Reconciliation to date, letter to CoreStates Bank regarding borrowing base, Accounting Statements, Cash Flow Worksheets, sales and Consolidated Statement Comparison Domestic Consolidated, consolidated warehouse excess inventory analysis by major category, production variances, Profit and Losses Detail, inventory turn analysis of finished goods by major category report, operating expenses, quarterly review, sales and cost of sales, a first quarter 1998 review, a press release on first quarter 1998 sales and earnings, reserve balances report, handwritten notes, warehouse expense analysis, average shares outstanding reports, insurance reserves, investment reports, scrap analysis reports, Royalty Control Flow reports, elimination analysis, scrap reporting, Executive Management Reports, copies of e-mails, Hunter Molding efficiency analysis, collections analysis, Paid Warranty Claims reports, handwritten notes, profit and loss statements, Central Castings Corp. financial reports, January financial timetables, cumulative-to-date increase in sales price report, production variances, overhead rate analysis, elimination analysis, income statements, casting sales to Central analysis reports, Spray Safe Automatic Sprinklers notes to Consolidated Management accounts, daily sales goals, finance department expense summaries.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
139	James Link	Accounting	CS-024-013803- CS-024-013991	"December 1997" file containing Balance Sheet, Inventory by Location, Inventory Reconciliation to date, letter to CoreStates Bank regarding borrowing base, Accounting Statements, Cash Flow Worksheets, sales and Consolidated Statement Comparison Domestic Consolidated, consolidated warehouse excess inventory analysis by major category, production variances, Profit and Losses Detail, inventory turn analysis of finished goods by major category report, operating expenses, quarterly review, sales and cost of sales, a first quarter 1998 review, a press release on first quarter 1998 sales and earnings, reserve balances report, handwritten notes, warehouse expense analysis, average shares outstanding reports, insurance reserves, investment reports, scrap analysis reports, Royalty Control Flow reports, elimination analysis, scrap reporting, Executive Management Reports, copies of e-mails, Hunter Molding efficiency analysis, collections analysis, Paid Warranty Claims reports, handwritten notes, profit and loss statements, Central Castings Corp. financial reports, January financial timetables, cumulative-to-date increase in sales price report, production variances, overhead rate analysis, elimination analysis, income statements, casting sales to Central analysis reports, Spray Safe Automatic Sprinklers notes to Consolidated Management accounts, daily sales goals, finance department expense summaries.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
139	James Link	Accounting	CS-024-013992- CS-024-014820	File folder entitled "November 1997" containing Balance Sheet, Inventory by Location, Inventory Reconciliation to date, letter to CoreStates Bank regarding borrowing base, Accounting Statements, Cash Flow Worksheets, sales and Consolidated Statement Comparison Domestic Consolidated, consolidated warehouse excess inventory analysis by major category, production variances, Profit and Losses Detail, inventory turn analysis of finished goods by major category report, operating expenses, quarterly review, sales and cost of sales, a first quarter 1998 review, a press release on first quarter 1998 sales and earnings, reserve balances report, handwritten notes, warehouse expense analysis, average shares outstanding reports, insurance reserves, investment reports, scrap analysis reports, Royalty Control Flow reports, elimination analysis, scrap reporting, Executive Management Reports, copies of e-mails, Hunter Molding efficiency analysis, collections analysis, Paid Warranty Claims reports, handwritten notes, profit and loss statements, Central Castings Corp. financial reports, January financial timetables, cumulative-to-date increase in sales price report, production variances, overhead rate analysis, elimination analysis, income statements, casting sales to Central analysis reports, Spray Safe Automatic Sprinklers notes to Consolidated Management accounts, daily sales goals, finance department expense summaries, analysis of tooling, dyes, and patterns in progress, ESOP expense analysis report, negative balance on hand report, depreciation schedule, credit memo report, Form 10-K, and draft Forms 10-K.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
139	James Link	Accounting	CS-024-014821- CS-024-015140	"Inventory 1995 Through 6/97" file, containing memoranda and reports on inventory and inventory cycles.
139	James Link	Accounting	CS-024-015141- CS-024-015364	"Inventory Reduction" file, containing memoranda, reports, and handwritten notes about inventory reduction.
139	James Link	Accounting	CS-024-015365- CS-024-015742	"Labor Reporting E&O 1995, 1996, and 1997" file, containing reports on Central Sprinkler Company personnel and payroll statistics, payroll summary reports, inventory and inventory analysis.
139	James Link	Accounting	CS-024-015743- CS-024-016122	"E&O 1994" file, containing inventory analysis/E&O Review Reserve Summary Reports, usage reports, inventory obsolete review reports.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
140	James Link	Accounting	CS-024-016123 CS-024-016736	Personnel Statistics, Fiscal Year 1997 file containing Employee Status Reports by month for the year of 1977 and for September 1996, Union Employee Status Reports for the months of May through October of 1997, February through April of 1997, September of 1996 and December of 1996.
140	James Link	Accounting	CS-024-016737 CS-024-017042	Personnel Statistics, Fiscal Year 1998 file containing Branch Headcount Plan 1998, Employee Status Reports for the months of November of 1997 through March 1998, Union Employee Status Reports for the months of November 1997 through March 1998.
140	James Link	Accounting	CS-024-017043 CS-024-017209	Personnel Names and Count by Department file, containing Employee Status Reports by month for November, December and September of 1996, Union Employee Status Reports for October and November of 1996, and Salaried Employee Status Report for July 1996.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
140	James Link	Accounting	CS-024-017210 CS-024-017935	File containing Employee Status Reports for the months of February, May, October and November of 1996, Union Employee Status Reports for the months of February, March and July of 1996, Salaried Employee Status Reports for the month of March 1996, Fiscal Year 1998 Budget Update, General Ledger Account Analysis, Expense Summaries, 1998 Budget and Strategic Plans, Income Statement Assumptions, Budgets for Fiscal Year 1997 and 1996, Union Pay Rates, Salary Pay Rates, Capital Budget for 1998, Management Manufacturing Expense Summary, R&D Budgets, Engineering Budgets, Budget and Long-Range Plans, Department Resource Requirements, Customer Service Budget, Expense Statement Personnel Department, Warehouse Administration Expense, Expense Statements.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
140	James Link	Accounting	CS-024-017936 CS-024-018485	Staff Meeting file containing handwritten notes of staff meeting in January of 1998, Income Statement for Fiscal Year 1997, Expense Statements, Profit and Loss Statements, Balance Sheet, internal memorandum concerning Fiscal Year 1998 Budgets, Draft Fiscal Year 1998 Budget, Departmental Resource Requirements, Profit Plans, Department Expense Reports for Budget 1998, New Departments and Changes Reports, Organization Chart for Central Sprinkler 1998, Income Statement Final Revisions, 1998 Capital Budget, Projected Consolidated Balance Sheets, Personnel Requirements, 1998 Budget and Strategic Plan, Fiscal Year 1998 Budget Adverse Scenario, Balance Sheet, Profit Plan 1996 to October 1997 with revisions for November 1997 to October 1998, 1998 Budget and Long-range Plan, Capital Equipment Proposed Spreadsheet Income Statement.
140	James Link	Accounting	CS-024-018486 CS-024-018509	Budgets 1998 file containing 1998 Profit Plan Departmental Operating Expenses, Direct Labor Spreadsheet, 1998 Budget and Strategic Plan Input Forms and Instructions, Fiscal Year 1998 Budget Spreadsheet, Departmental Resource Requirements, 1998 Capital Budget, and memorandum concerning 1998 budget and long-range strategic plan.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
140	James Link	Accounting	CS-024-018510 CS-024-018743	File containing Manufacturing Budget Recap Draft Summary Report, Vacation Holiday Evaluation Budget, Fixed Asset Additions Report, Income Statement, Domestic Consolidated Budget, 1998 Capital Budget, Payroll Register, 1998 Budgets and Long-range Strategic Plan memos, 1998 Profit Plan Consolidated Statements of Income, handwritten notes concerning 1998 changes, ESOP price change, Depreciation Schedule Asset Report, Incentive Compensation Plan, 1998 Profit Plan Departmental Operating Expense Report, 1998 Budget and Strategic Plan Departmental Resource Requirements for Research and Development.

Boxes 141 - 219 will be included in remaining production.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
220	Carmine Schiavone	Customer Service	CS-039-000001-CS-039-000136	Florida State Fire Marshall report regarding Mel's Marina, correspondence from White & Williams law firm, correspondence from Corr, Stevens, Fenningham law firm; report regarding Fire Control Hydraulic Design Information, Incident Report from the Gulf Breeze Volunteer Fire Department, Omega inspection protocol, engineering drawings regarding layout of the Mel's Marina, articles regarding the fire at Mel's Marina.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
221	Carmine Schiavone	Customer Service	CS-040-000001-CS-040-000008	Correspondence with U.S. Fire Control Corporation.
221	Carmine Schiavone	Customer Service	CS-040-000009-CS-040-000030	Correspondence regarding the Exclusive Patent Licensing Agreement and Amendments.
221	Carmine Schiavone	Customer Service	CS-040-000031-CS-040-000034	File folders.
221	Carmine Schiavone	Customer Service	CS-040-000035-CS-040-000048	Correspondence with U.S. Fire Control Corporation for 1993.
221	Carmine Schiavone	Customer Service	CS-040-000049-CS-040-000063	Correspondence with U.S. Fire Control for 1982.
221	Carmine Schiavone	Customer Service	CS-040-000064-CS-040-000095	Correspondence with U.S. Fire Control for 1981.
221	Carmine Schiavone	Customer Service	CS-040-000096-CS-040-000100	Correspondence with U.S. Fire Control for 1978.
221	Carmine Schiavone	Customer Service	CS-040-000101-CS-040-000138	Correspondence with U.S. Fire Control for 1977.
221	Carmine Schiavone	Customer Service	CS-040-000139-CS-040-000142	Letter from General Industries, Inc., describing products.
221	Carmine Schiavone	Customer Service	CS-040-000143-CS-040-000145	Article from Popular Science on Home Fire Sprinklers.
221	Carmine Schiavone	Customer Service	CS-040-000146-CS-040-000173	Sprinkler patent.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
221	Carmine Schiavone	Customer Service	CS-040-000174-CS-040-000190	Factory Mutuel progress report examination of fully automatic on/off pendant standard sprinkler.
221	Carmine Schiavone	Customer Service	CS-040-000191-S-040-000272	Sprinkler patents.
221	Carmine Schiavone	Customer Service	CS-040-000273-CS-040-000292	Exclusive Patent Licensing Agreement dated November, 1977.
221	Carmine Schiavone	Customer Service	CS-040-000293	Technical drawing.
221	Carmine Schiavone	Customer Service	CS-040-000294-CS-040-000328	Executed copies of Exclusive Patent Licensing Agreement and amendments.
221	Carmine Schiavone	Customer Service	CS-040-000329-CS-040-000364	U.S. Patents on fire sprinklers.
221	Carmine Schiavone	Customer Service	CS-040-000365	Correspondence between Central Sprinkler and U.S. Fire Control Corporation.
221	Carmine Schiavone	Customer Service	CS-040-000366-CS-040-000381	Correspondence between Central Sprinkler and U.S. Fire Control regarding letter agreement.
221	Carmine Schiavone	Customer Service	CS-040-000382-CS-040-000447	Patents and correspondence regarding patents.
221	Carmine Schiavone	Customer Service	CS-040-000448-CS-040-000496	Sales analysis reports.
221	Carmine Schiavone	Customer Service	CS-040-000497-CS-040-000623	Royalty reports and correspondence regarding royalties.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
221	Carmine Schiavone	Customer Service	CS-040-000624-CS-040-000766	Information on sales and royalty payments for 1980 through 1981.
221	Carmine Schiavone	Customer Service	CS-040-000767-CS-040-000783	Correspondence regarding payment of royalties between U.S. Fire Control and Central Sprinkler Corp.
221	Carmine Schiavone	Customer Service	CS-040-000784-CS-040-000802	SEC Form 10-Q for quarter ending July 1997.
221	Carmine Schiavone	Customer Service	CS-040-000803-CS-040-000836	SEC Form 10-Q for quarter ending April 1997.
221	Carmine Schiavone	Customer Service	CS-040-000837-CS-040-000901	SEC Forms 10-Q for fiscal year 1996.
221	Carmine Schiavone	Customer Service	CS-040-000902-CS-040-000957	SEC Form 10-K for fiscal year ending October 1996.
221	Carmine Schiavone	Customer Service	CS-040-000958-CS-040-000980	Correspondence regarding royalty audit in March 1997.
221	Carmine Schiavone	Customer Service	CS-040-000981-CS-040-000982	Handwritten information on royalties for U.S. Fire Control Corp. for 1980 through 1981.
221	Carmine Schiavone	Customer Service	CS-040-000983-CS-040-000986	Memorandum and attached information on Omega charge-out costs.
221	Carmine Schiavone	Customer Service	CS-040-000987-CS-040-001015	"General Ledger Distribution Reports for October 1997."
221	Carmine Schiavone	Customer Service	CS-040-001016-CS-040-001094	Reports regarding "Invoices October 1997."

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
221	Carmine Schiavone	Customer Service	CS-040-001095-CS-040-001096	Handwritten information on "Omega Analysis September 1997."
221	Carmine Schiavone	Customer Service	CS-040-001097-CS-040-001111	Year to date Omega sales history for fiscal year 1996.
221	Carmine Schiavone	Customer Service	CS-040-001112-CS-040-001129	Report of General Ledger Distribution September 1997.
221	Carmine Schiavone	Customer Service	CS-040-001130-CS-040-001171	Report "Invoices Fiscal Year 1997."
221	Carmine Schiavone	Customer Service	CS-040-001172-CS-040-001173	Handwritten "Omega Analysis August 1997."
221	Carmine Schiavone	Customer Service	CS-040-001174-CS-040-001188	General Ledger Distribution details August 1997.
221	Carmine Schiavone	Customer Service	CS-040-001189-CS-040-001222	Report "Invoices Fiscal Year 1997."
221	Carmine Schiavone	Customer Service	CS-040-001223-CS-040-001224	Handwritten report "Omega Analysis July 1997."
221	Carmine Schiavone	Customer Service	CS-040-001225-CS-040-001243	Report "Invoices July 1997."
221	Carmine Schiavone	Customer Service	CS-040-001244-CS-040-001255	"General Distribution Ledger July 1997."
221	Carmine Schiavone	Customer Service	CS-040-001256-CS-040-001257	Handwritten "Omega Analysis June 1997."

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
221	Carmine Schiavone	Customer Service	CS-040-001258-CS-040-001268	General Ledger Distribution June 1997.
221	Carmine Schiavone	Customer Service	CS-040-001269-CS-040-001290	Report "Invoices June 1997."
221	Carmine Schiavone	Customer Service	CS-040-001291-CS-040-001292	Handwritten "Omega Analysis May 1997."
221	Carmine Schiavone	Customer Service	CS-040-001293-CS-040-001308	Report "Invoices May 1997."
221	Carmine Schiavone	Customer Service	CS-040-001309-CS-040-001322	Report "General Ledger Distribution Details May 1997."
221	Carmine Schiavone	Customer Service	CS-040-001323-CS-040-001324	Handwritten "Omega Analysis April 1997."
221	Carmine Schiavone	Customer Service	CS-040-001325-CS-040-001343	Report "Invoices April 1997."
221	Carmine Schiavone	Customer Service	CS-040-001344-CS-040-001356	Report "General Ledger Distribution Details April 1997."
221	Carmine Schiavone	Customer Service	CS-040-001357-CS-040-001358	Handwritten "Omega Adjustments for Royalties for April 1997."
221	Carmine Schiavone	Customer Service	CS-040-001359-CS-040-001372	Report "Invoices March 1997."
221	Carmine Schiavone	Customer Service	CS-040-001373-CS-040-001383	Report "General Ledger Distribution Details March 1997."

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
221	Carmine Schiavone	Customer Service	CS-040-001384-CS-040-001385	Handwritten "Omega Analysis February 1997."
221	Carmine Schiavone	Customer Service	CS-040-001386-CS-040-001404	Report "Invoices February 1997."
221	Carmine Schiavone	Customer Service	CS-040-001405-CS-040-001409	"General Ledger Distribution Report February 1997."
221	Carmine Schiavone	Customer Service	CS-040-001410-CS-040-001411	Handwritten "Omega Analysis January 1997."
221	Carmine Schiavone	Customer Service	CS-040-001412-CS-040-001431	Report "Invoices January 1997."
221	Carmine Schiavone	Customer Service	CS-040-001432-CS-040-001450	"Accounts Receivable Report for Marriott International."
221	Carmine Schiavone	Customer Service	CS-040-001451-CS-040-001453	"General Ledger Distribution Detail Report January 1997."
221	Carmine Schiavone	Customer Service	CS-040-001454	Handwritten "Omega Analysis December 1996."
221	Carmine Schiavone	Customer Service	CS-040-001455-CS-040-001471	"Invoices Report December 1996."
221	Carmine Schiavone	Customer Service	CS-040-001472-CS-040-001473	Handwritten "Omega Analysis November 1996."
221	Carmine Schiavone	Customer Service	CS-040-001474-CS-040-001482	"General Ledger Distribution Detail Report November 1996."

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
221	Carmine Schiavone	Customer Service	CS-040-001483-CS-040-001516	"Invoices Report November 1996."
221	Carmine Schiavone	Customer Service	CS-040-001517-CS-040-001519	Handwritten "October 1996 Report on Replacement Heads."
221	Carmine Schiavone	Customer Service	CS-040-001520-CS-040-001539	"General Ledger Distribution Detail Report October 1996."
221	Carmine Schiavone	Customer Service	CS-040-001540-CS-040-001549	"Invoices Report September 1996."
221	Carmine Schiavone	Customer Service	CS-040-001550-CS-040-001558	"General Ledger Distribution Detail Report September 1996."
221	Carmine Schiavone	Customer Service	CS-040-001559-CS-040-001561	"General Ledger Distribution Detail Report August 1996."
221	Carmine Schiavone	Customer Service	CS-040-001562	Handwritten "Omega Analysis November 1977."
221	Carmine Schiavone	Customer Service	CS-040-001563-CS-040-001665	"Invoices Report November 1997."
221	Carmine Schiavone	Customer Service	CS-040-001666-CS-040-001697	"General Ledger Distribution Report November 1997."
221	Carmine Schiavone	Customer Service	CS-040-001698	Handwritten "Omega Analysis December 1997."
221	Carmine Schiavone	Customer Service	CS-040-001699-CS-040-001812	"Invoices Report December 1997."

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
221	Carmine Schiavone	Customer Service	CS-040-001813-CS-040-001822	"Invoices Report December 1997."
221	Carmine Schiavone	Customer Service	CS-040-001823-CS-040-001902	"CSC-US Fire Containing Filed Analysis by Class/Subclass Description Report and SEC Form 10-Q for January 1997."

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
222	Carmine Schiavone	Customer Service	CS-040-001903-CS-040-002111	"Licensing Agreement Between CSC and U.S. Fire Control Corporation -- Letters" file, including correspondence, Complaint for infringement of patent, Application for U.S. Patent, presolicitation notice for construction contract for U.S. Navy, royalty reports, Settlement Agreement and exchange of Releases, License agreement, handwritten royalty detail work sheets, trademark license agreement, and assignment.
222	Carmine Schiavone	Customer Service	CS-040-002112-CS-040-002162	"From U.S. Fire Control" file, containing information on General Industries, Inc. article on home fire sprinklers, letter patent, progress report, examination of fully automatic (on/off) pendant standard sprinkler by General Industries, and results of full-scale fire tests conducted by Factory Mutual Resource Corporation.
222	Carmine Schiavone	Customer Service	CS-040-002163-CS-040-002354	"Licensing Agreement Between CSC and U.S. Fire Control Corporation -- Executed Documents and Patents" file, containing patents and exclusive patent licensing agreement and amendment to licensing agreement.
222	Carmine Schiavone	Customer Service	CS-040-002355-CS-040-002811	"U.S. Fire Control Royalty Audits 3/98" file containing Omega Head Sales Reports, year-to-date sales history on Omegas reports, correspondence, forms of SEC Form 10-Q, SEC Form 10-K, copies of royalty checks, patent agreement between Central and U.S. Fire Control, exclusive patent licensing agreement, amendment to exclusive patent licensing agreement, invoices, and handwritten summaries of Omega sales.

BOX #	SOURCE	DEPARTMENT	BATES RANGE	DESCRIPTION
222	Carmine Schiavone	Customer Service	CS-040-002812-CS-040-002888	"U.S. Fire Royalty Audit 3/97" file, including sales reconciliation report, correspondence, handwritten notes, sales analysis by class/subclass description reports, and royalty control flow reports.

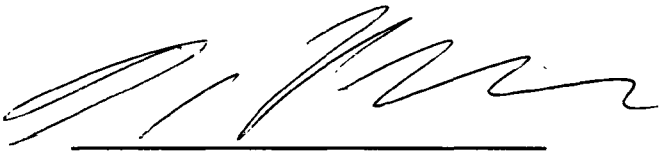
CERTIFICATE OF SERVICE

I, Thomas P. Hogan, Jr., hereby certify that on this date a true and correct copy of the foregoing Respondents' Opposition to Complaint Counsel's Motion to Compel was served via regular mail upon the following:

Deborah S. Orlove
Complaint Counsel
U.S. Consumer Product Safety Commission
4430 East West Highway
Bethesda, MD 20814

The Honorable William B. Moran
Offices of the Administrative Law Judges
Environmental Protection Agency
401 M Street, S.W.
Mail Code 1900 L
Washington, DC 20460

Dated: July 1, 1998



Thomas P. Hogan, Jr.

RECEIVED 6/02/98

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp.	:	
	:	**CPSC Docket No. 98-2**
and	:	
	:	
Central Sprinkler Co.,	:	
	:	
Respondents.	:	
	:	

PROPOSED PROTECTIVE ORDER AND OPPOSITION OF RESPONDENTS TO COMPLAINT COUNSEL'S SUBMISSION OF DOCUMENTS IN CAMERA

Complaint Counsel has filed two motions within the past several days submitting documents for an in camera review by the Court.[1/] In Complaint Counsel's In Camera Submissions, Complaint Counsel has submitted to the Court for consideration purportedly confidential and trade secret material previously supplied to Complaint Counsel by third parties. Complaint Counsel admits that this material is responsive to Respondents' discovery requests.

It is utterly inappropriate for Complaint Counsel to engage in this course of conduct. Complaint Counsel is simply attempting to submit its "evidence" to the Court piece-meal, without permitting Respondents an opportunity to oppose, comment on, or even review the material. In its most recent submission, Complaint Counsel has not even revealed to

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1/ Complaint Counsel's In Camera Submission of Documents in Response to Discovery and Request for Disclosure Determination, filed May 15, 1998; and Complaint Counsel's Notice of In Camera Submission of Documents in Response to Discovery, filed May 18, 1998 (collectively, "Complaint Counsel's In Camera Submissions"). Complaint Counsel's in camera submission of an anonymous letter is addressed by Respondents separately from this memorandum. See Respondents' Opposition To Complaint Counsel's Motion For Protective Order Regarding Anonymous Letter.

Respondents the nature or source of the documents submitted to the Court. In essence, Complaint Counsel is attempting to conduct an ex parte trial of this matter. Such conduct is antithetical to the nature of due process and creates a strong appearance of impropriety.

As an initial matter, the material submitted for in camera review by Complaint Counsel is subject to discovery. Title 15 U.S.C. § 2055(a)(8) provides that material obtained by the CPSC from third parties is discoverable. Specifically, the statute provides: "The provisions of paragraphs (2) through (6) [regarding material obtained from third parties] shall not prohibit the disclosure of information . . . when relevant in any administrative proceedings under this Act or in judicial proceedings to which the Commission is a party." 15 U.S.C. § 2055(a)(8) (emphasis added). Because the instant case in an "administrative proceeding under this Act," the documents provided by the third parties are discoverable.

In addition, Complaint Counsel has submitted no evidence that the third parties have refused to permit discovery of the documents provided. Complaint Counsel has not provided any affidavits, sworn statements, or verifications from the third parties in question stating that they would not permit discovery. Instead, the third parties merely requested "prior notification of any intended release . . . so that [the third party] may prepare a response. . . ." See Exhibits "A" and "B" to Complaint Counsel's In Camera Submission of Documents In Response to Discovery and Request for Disclosure Determination. Thus, the appropriate and normal course of action should have been for Complaint Counsel to notify the affected third parties and, if requested by the third parties, seek a negotiated confidentiality agreement with Respondents. The appropriate course of action for Complaint Counsel clearly was not to submit the documents to the Court for an in camera, ex parte review.

Moreover, Complaint Counsel's stated concern about confidentiality and trade secrets is a thinly veiled excuse to present the documents in camera. Over two weeks ago, on May 1, 1998, in response to Complaint Counsel's stated request for a confidentiality agreement in its discovery responses, Respondents provided a draft Confidentiality Agreement to Complaint Counsel. See Letter of May 1, 1998 with attached Confidentiality Agreement, attached hereto as Exhibit "A". This Confidentiality Agreement provided confidential documents produced to the CPSC by third parties with a large degree of protection from public disclosure, while permitting discovery in this case to proceed.

Complaint Counsel did not comment on or respond to this proposed Confidentiality Agreement. Respondents sent follow-up letters on May 7 and 13, requesting comments or agreement from Complaint Counsel regarding this Confidentiality Agreement. See Letters of May 7 and 13, 1998, attached hereto as Exhibits "B" and "C". Complaint Counsel still provided no response. Instead, with no prior notice, Complaint Counsel unilaterally began to submit documents for in camera review by the Court.

Respondents now submit the draft Confidentiality Agreement for Court approval as a Protective Order Regarding Confidentiality, attached hereto as Exhibit "D". The Court has the authority to enter the Protective Order Regarding Confidentiality pursuant to 16 C.F.R. § 1025.31(d). The Protective Order Regarding Confidentiality will protect the interests of both parties and non-parties regarding trade secrets or other confidential research, development, or commercial information. It also will obviate the need for the Court to review all potentially confidential documents on an in camera basis prior to production, and will permit discovery to proceed in this case.

Based on all of the foregoing, Respondents respectfully request that the Court: (1) deny Complaint Counsel's request to withhold from discovery the documents submitted in camera ; and (2) enter the attached Protective Order Regarding Confidentiality.

Respectfully submitted,

Dated: May 19, 1998

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Attorneys for Respondents
CENTRAL SPRINKLER CORP. and
CENTRAL SPRINKLER COMPANY

EXHIBIT A

2000 One Logan Square
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215-963-5000
Fax: 215-963-5299

Morgan, Lewis
& Bockius LLP
COUNSELORS AT LAW
125 years
1873 1998

Thomas P. Hogan, Jr.
215-963-5253

May 1, 1998

VIA TELECOPIER

Deborah S. Orlove
Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4430 East West Highway
Bethesda, MD 20814

Re: In the Matter of Central Sprinkler Corp., et al. (CPSC Docket No. 98-2)

Dear Ms. Orlove:

On Wednesday, April 29, 1998, we received Complaint Counsel's written discovery responses. However, to date, we still have not received any documents. Please immediately address this matter. In addition, in the future, please arrange for prompt and reliable service of any documents and/or pleadings.

Regarding your discovery responses, a quick reading reveals that these responses are highly deficient. In essence, the Staff has failed to provide any evidence or requested information supporting the Complaint in this matter. We will provide a detailed analysis of the deficiencies in the Staff's discovery responses once we receive the documents you are producing, and hope that you will make a good faith attempt to provide meaningful supplemental responses. In the absence of such supplemental responses, we will be forced to file a motion to compel.

There are several preliminary matters regarding the Staff's discovery responses which must be addressed immediately. First, regarding all claims of documents or information allegedly protected by the attorney-client privilege or work product doctrine, please immediately produce a privilege log as required by the discovery requests and applicable practice and procedure. Given the expedited nature of these proceedings, we will expect to receive such a log no later than May 8, 1998.

Second, the Staff has delayed providing certain documents pending the entry of a Confidentiality Agreement. Unfortunately, you did not choose to raise this issue with us prior to raising such an objection, nor have you suggested any agreement. To remedy this problem, attached is a draft Confidentially Agreement. Please provide me with any comments by the end of the day on May 5, 1998. In the absence of any comments, given the expedited nature of these proceedings, we will submit the Confidentiality Agreement for Court approval.

Third, your discovery responses reveal that the CPSC has been in contact with not only former Central employees, but also current Central employees. Such ex parte contacts are a clear breach of ethical obligations and are contrary to the Staff's prior written representations that no such contacts had occurred. Please immediately produce all evidence related to such contacts, which clearly cannot be considered privileged in any manner. Under no circumstances should the Staff engage in ex parte contacts with the Court regarding these contacts, which appears to be the course of action you suggest in your discovery responses. In this regard, please immediately confirm that you will not make any ex parte submissions to Judge Moran without substantial prior notice that would give us an opportunity to object to any such one-sided factual submissions to the Court.

Regards,

Thomas P. Hogan, Jr.

TPH/lgh

Enclosure

DRAFT

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446	:	**CPSC Docket No. 98-2**
	:	
and	:	
	:	
Central Sprinkler Co., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446,	:	
	:	
Respondents.	:	
	:	

CONFIDENTIALITY AGREEMENT

Respondents Central Sprinkler Corporation and Central Sprinkler Company (collectively, "Central") and Petitioner the Consumer Product Safety Commission (the "CPSC"), through undersigned counsel, hereby agree:

1. Petitioner and Respondents shall have the right to limit access to any document or other item relevant to this litigation, including without limitation answers to interrogatories and any portion of deposition testimony or other testimony by a witness, to the undersigned outside counsel for the parties.

2. Such documents or other tangible items must be designated by conspicuously stamping the words "OUTSIDE COUNSEL ONLY" on each page of the designated material or by notifying the other party in writing of the material to be considered so designated. With regard to testimony, a party may limit access to such testimony to the undersigned outside counsel by notifying the other party of the portion of testimony to be designated on the record at the deposition or in writing no later than two days after the transcript is received.

3. Information designated for "OUTSIDE COUNSEL ONLY" shall not be disclosed or disseminated to anyone, except:

a. the undersigned outside counsel for any party, and the employees of such counsel to whom it is necessary that the information be disclosed for purposes of this litigation only; or

b. any expert engaged by a party for the purposes of assisting in the preparation of this litigation, provided, however, that no such information shall be disseminated to any expert who is employed by a direct business competitor of Central or its affiliates; or

c. any person, entity, or firm with the prior written consent of all parties.

4. Petitioner and Respondents shall have the right to designate as CONFIDENTIAL any document or other item relevant to this litigation, including without limitation answers to interrogatories and any portion of deposition testimony or other testimony by a witness.

5. Such documents or other tangible items must be designated by conspicuously stamping the words "CONFIDENTIAL" on each page of the designated material or by notifying the other party in writing of the material to be considered so designated. With regard to testimony, a party may designate portions of the record CONFIDENTIAL by notifying the other party on the record at the deposition or in writing no later than two days after the transcript is received.

6. Information designated "CONFIDENTIAL" shall not be disclosed or disseminated to anyone, except:

a. a party, counsel for any party, and the employees of such counsel to whom it is necessary that the information be disclosed for purposes of this litigation only; or

b. any expert engaged by a party for the purpose of assisting in the preparation of this litigation, provided, however, that no CONFIDENTIAL information shall be disseminated to any expert who is employed by a direct business competitor of Central or its affiliates; or

c. any person who was involved in the preparation of the document or information; or

d. any other person, entity, or firm with the prior written consent of all parties.

7. Any party that provides documents or other discovery obtained from the other party in the course of this litigation to any person (other than the Court, court personnel, and court reporters) will first obtain from such person, prior to any such dissemination, a written statement in the form attached as Exhibit "A" hereto, that such person agrees to be bound by this Confidentiality Agreement. The undersigned counsel shall maintain a list of all such persons along with the written agreement of each person. Upon request of any party at any time, counsel in possession of the written agreements shall immediately either: (a) provide copies of the written agreements to the requesting party; or (b) submit the written agreements to the Court to determine whether any aspect of the written agreements are protected from discovery by any privilege.

8. When any document or information designated "CONFIDENTIAL" or "OUTSIDE COUNSEL ONLY," or other pleadings or papers disclosing or referring to such information are used in connection with any motion, hearing, filing or other submission to the Court, they shall be filed in an envelope under seal pursuant to the rules of this Court and shall be marked as follows:

> CONFIDENTIAL/RESTRICTED:
> The contents of this envelope are not to be revealed to anyone except the Court, or with the prior consent of all the parties herein, or pursuant to any other Order of this Court. If the contents are thus revealed, they shall thereafter be resealed.

9. a. Nothing in this Agreement shall preclude any party from challenging a designation of "CONFIDENTIAL" OR "OUTSIDE COUNSEL ONLY" by another party. If any party elects to challenge a designation of any document, deposition testimony, or

information pursuant to this order, that party must provide at least five days advance notice to afford the designating party an opportunity to remove voluntarily such designation.

b. If, after the five-day period has expired, the designating party has not agreed to remove the designation and the parties are otherwise unable to resolve the challenge to the designation, the challenging and designating parties shall contact the Court for a determination of whether the challenged designation is appropriate. The challenging party shall provide the Court with one copy of each document, response, or portion of transcript challenged. The challenging party has the burden of proving the inapplicability and/or incorrectness of any designation.

c. If the challenge is not resolved by agreement, or by voluntary removal, and if the Court is not contacted, then the designation shall remain in effect and shall continue to apply to such document or information.

10. All documents and other discovery produced or obtained in the course of this litigation, whether designated "CONFIDENTIAL" or "OUTSIDE COUNSEL ONLY" or not, shall be used for the sole and limited purpose of preparation for and trial of this action and shall not be used for any other purpose. "For purposes of preparation and trial of this action," as used in this Order, means that individuals obtaining access to discovery: (i) can read and review such discovery to become knowledgeable about this litigation; and (ii) can comment on such discovery to counsel for the parties if they so choose. All other uses, including but not limited to (1) making such discovery available to any person who has not signed Exhibit "A" hereto and (2) causing such discovery to be published in any trade journal, newspaper, or other written

publication other than filings with this Court connected with this litigation, shall fall outside the definition of "For purposes of preparation for and trial of this action." Nothing in this Confidentiality Agreement shall preclude persons wishing to use discovery from this litigation for purposes other than "For purposes of preparation for and trial of this action" from moving this Court, upon reasonable notice to the parties, for appropriate relief.

11. Within thirty days of the close of this litigation for any reason, each party shall retrieve all copies of materials designated "CONFIDENTIAL" or "OUTSIDE COUNSEL ONLY" from his or its own files, and from experts or other persons to whom he or it has provided such materials consistent with this Confidentiality Agreement, and shall do one of the following: (1) return to the designating party all such materials, including all copies thereof, produced by such designating party during this action; or (2) certify in writing to the designating party that all materials designated "CONFIDENTIAL" or "OUTSIDE COUNSEL ONLY" produced by such other party during this action have been destroyed. All material protected by this Confidentiality Agreement which has been placed in any computer databank, hard drive, or disk shall be completely erased, and any documents listing or summarizing information protected by this Confidentiality Agreement shall be destroyed within the same period.

12. Nothing herein contained shall be construed to preclude or limit any party from opposing any discovery on any grounds that would otherwise be available. This Agreement shall not, in and of itself, prejudice any contention of any party upon any motion, nor shall this Agreement constitute a waiver of any right to seek relief from the Court from any and all of the provisions hereof or other modifications of the terms hereof. This Agreement shall not limit any party's

right to seek judicial review or to seek further and additional protection against or limitation upon production or dissemination of information and documents or their contents.

13. Nothing herein shall be construed to preclude or limit the presence of any individual at any hearings in or the trial of this action.

DRAFT

Dated: _____

_____

J. Gordon Cooney, Jr.
Thomas P. Hogan, Jr.
Emily J. Lawrence
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2000 One Logan Square
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(215) 963-5000

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(215) 639-4070

Attorneys for Respondents
CENTRAL SPRINKLER CORP. and
CENTRAL SPRINKLER COMPANY

DRAFT

Dated: _____

_____

Deborah S. Orlove
Eric H. Singer
Howard N. Tarnoff

Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4430 East West Highway
Bethesda, MD 20814
(301) 504-0626

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446	:	**CPSC Docket No. 98-2**
	:	
and	:	
	:	
Central Sprinkler Co., a Corporation,	:	
451 North Cannon Avenue	:	
Lansdale, PA 19446,	:	
	:	
Respondents.	:	
	:	

EXHIBIT "A" TO CONFIDENTIALITY AGREEMENT

I hereby certify that I have read the CONFIDENTIALITY AGREEMENT entered into by the parties in the above-captioned litigation. I hereby agree to be bound by the terms of the CONFIDENTIALITY AGREEMENT and to submit personally to the jurisdiction of the Administrative Law Judge assigned to this action for purposes of enforcing my agreement to be bound by the terms of the CONFIDENTIALITY AGREEMENT.

I hereby agree that I will use any documents or other discovery produced or provided by a party in the above-captioned litigation for the sole and limited purposes of preparation for and trial of the above-captioned litigation.

DRAFT

Date: _____ Signature: _____

EXHIBIT B

2000 One Logan Square
Philadelphia, PA 19103-6993
215-963-5000
Fax: 215-963-5299

Morgan, Lewis
& Bockius LLP
COUNSELORS AT LAW
125 years
1873 1998

Thomas P. Hogan, Jr.
215-963-5253

May 7, 1998

VIA TELECOPIER & REGULAR MAIL

Deborah S. Orlove
Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4430 East West Highway
Bethesda, MD 20814

Re: In the Matter of Central Sprinkler Corp., et al. (CPSC Docket No. 98-2)

Dear Ms. Orlove:

This letter responds to your letter of May 6, 1998.

First, regarding the scope of discovery provided by the Staff, your letter fails to address the multiple deficiencies with the Staff's discovery responses raised in my letter of May 4. For example, you still refuse or fail to identify persons with knowledge regarding the key allegations in the Complaint. By failing to provide such information, you completely block Central's ability to take depositions of your witnesses and effectively shut down discovery. Moreover, you fail to address the large number of interrogatories and document requests for which the Staff has provided no response whatsoever. These are only two examples of your letter's failure to address the many deficiencies described in my letter of May 4. It would thus appear that the Staff is refusing to engage in any good faith attempt to resolve this discovery dispute. Therefore, in the absence of full and complete supplemental responses from the Staff as discussed in my letter of May 4, we will be forced to file a motion to compel.

Second, in your letter, you represented that the Staff will provide us with a privilege log. You have not indicated when you will provide it, however. Given the pervasive nature of your privilege objections, the timing requirements established for motions to compel by the CPSC rules of practice, and the fact that such a log already is tardy, we will expect to receive the Staff's privilege log no later than May 8, 1998, as we requested in my letter of May 4.

Your letter also represents that you will begin to provide the Staff's initial test results, but again you do not provide a set date for production. As indicated to you in my letter of May 4, we will expect to receive a full supplemental production by no later than May 8, 1998.

In addition, your letter reiterates a refusal to produce purportedly confidential documents from third parties absent a confidentiality agreement. In my letter to you of May 1, we provided you with a draft Confidentiality Agreement. Despite your stated willingness to produce the referenced documents pursuant to such an agreement, your letter does not comment on or otherwise address the proposed Confidentiality Agreement. In the absence of your comments, we will submit the Confidentiality Agreement for Court approval contemporaneously with any necessary motion to compel. Moreover, please be advised that if you refuse to produce any document for any reason, Central will oppose the admission of that document or class of documents into evidence at the trial of this matter.

Finally, we hereby reiterate our request that the Staff not attempt to engage in any ex parte contacts with the Court.

To date, the Staff has not provided any meaningful discovery to Respondents. Of the 2000 pages of documents produced, approximately 1500 consist of test results provided to you by Central, and many of the remaining 500 consist of publicly available documents. Your discovery provides no meaningful information to Central regarding the bases of your claims and substantially impairs Central's ability to prepare for trial. The Staff cannot and should not be permitted to file a public Complaint, but then refuse to provide the evidence purportedly supporting such claims. We hope that the Staff will choose to take a more reasonable and forthcoming approach going forward in this litigation.

Regards,

Thomas P. Hogan, Jr.

TPH/lgh

EXHIBIT C

2000 One Logan Square
Philadelphia, PA 19103-6993
215-963-5000
Fax: 215-963-5299

Morgan, Lewis
& Bockius LLP
COUNSELORS AT LAW

125 years

Thomas P. Hogan, Jr.
215-963-5253

May 13, 1998

VIA TELECOPIER & REGULAR MAIL

Deborah S. Orlove
Complaint Counsel
United States Consumer Product Safety Commission
Office of Compliance
4430 East West Highway
Bethesda, MD 20814

Re: In the Matter of Central Sprinkler Corp., et al. (CPSC Docket No. 98-2)

Dear Ms. Orlove:

This letter is written in response to your letter of May 8, 1998.

We have received Complaint Counsel's supplemental production of documents. This production remains deficient, as it provides little more than the naked conclusions of Complaint Counsel regarding test results. Absent the underlying data and methodology, these results provide Central with little relevant information and no opportunity to examining the validity of the results.[1/]

Nevertheless, please clarify whether it is Complaint Counsel's position that you have produced all relevant and responsive documents, including all documents currently in your possession which you intend to introduce at trial. If so, Central will begin to prepare for the trial of this matter based on the documents already produced. For example, based on the test results produced in your supplemental production, this will mean, inter alia, that Complaint Counsel has no information that indicates any failures regarding Omegas using silicone o-rings, and no

---

1/ Contrary to the assertions in your letter, your discovery responses to date have not provided the underlying data supporting these test results, unless such results are compiled almost entirely from Respondents' own test results already produced to Complaint Counsel. In fact, your prior discovery responses and correspondence indicate that you have not produced the underlying data and methodology based on a claim to work product protection.

information that indicates failures in any post-1990 Omegas used in copper or plastic systems. If Complaint Counsel has not produced all relevant documents, please confirm this fact in writing by May 14, so that we can begin to prepare a motion to compel.

Regarding Complaint Counsel's identification of potential witnesses, your letter points to the fact that you have identified "numerous persons with . . . knowledge" in response to six of Respondents' interrogatories. It appears, however, that this represents a selective and incomplete disclosure of "persons with knowledge." Moreover, Complaint Counsel has not provided sufficient documents that would allow Respondents to identify other potential witnesses. If it is Complaint Counsel's position that the persons identified by Complaint Counsel in discovery responses to date represent the universe of potential fact witnesses for Complaint Counsel, please confirm this fact. On the other hand, if Complaint Counsel is aware of other "persons with knowledge" that Complaint Counsel has not disclosed, please confirm this fact in writing by May 14.

In addition, to date, Complaint Counsel continues to ignore several other pressing issues. Complaint Counsel has not addressed the multiple deficiencies in your discovery responses as described in my letters of May 4 and May 7. Moreover, Complaint Counsel has failed to produce a privilege log despite repeated requests from Respondents. Finally, despite several reminders, Complaint Counsel has neither commented on nor responded to the draft Confidentiality Agreement that Respondents sent to you two weeks ago.

Regards,

Thomas P. Hogan, Jr.

TPH/lgh

EXHIBIT D

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp.	:	
	:	**CPSC Docket No. 98-2**
	:	
and	:	
	:	
Central Sprinkler Co.,	:	
	:	
Respondents.	:	
	:	

PROTECTIVE ORDER REGARDING CONFIDENTIALITY

AND NOW, pursuant to 16 C.F.R. § 1025.31(d), for good cause shown, the Court hereby ORDERS that the following terms and conditions shall apply as a protective order in the above-referenced matter.

1. Petitioner and Respondents shall have the right to limit access to any document or other item relevant to this litigation, including without limitation answers to interrogatories and any portion of deposition testimony or other testimony by a witness, to the undersigned outside counsel for the parties.

2. Such documents or other tangible items must be designated by conspicuously stamping the words "OUTSIDE COUNSEL ONLY" on each page of the designated material or by notifying the other party in writing of the material to be considered so designated. With regard to testimony, a party may limit access to such testimony to the undersigned outside counsel by notifying the other party of the portion of testimony to be designated on the record at the deposition or in writing no later than two days after the transcript is received.

3. Information designated for "OUTSIDE COUNSEL ONLY" shall not be disclosed or disseminated to anyone, except:

a. the undersigned outside counsel for any party, and the employees of such counsel to whom it is necessary that the information be disclosed for purposes of this litigation only; or

b. any expert engaged by a party for the purposes of assisting in the preparation of this litigation, provided, however, that no such information shall be disseminated to any expert who is employed by a direct business competitor of Respondents or its affiliates; or

c. any person, entity, or firm with the prior written consent of all parties.

4. Petitioner and Respondents shall have the right to designate as CONFIDENTIAL any document or other item relevant to this litigation, including without limitation answers to interrogatories and any portion of deposition testimony or other testimony by a witness.

5. Such documents or other tangible items must be designated by conspicuously stamping the words "CONFIDENTIAL" on each page of the designated material or by notifying the other party in writing of the material to be considered so designated. With regard to testimony, a party may designate portions of the record CONFIDENTIAL by notifying the other party on the record at the deposition or in writing no later than two days after the transcript is received.

6. Information designated "CONFIDENTIAL" shall not be disclosed or disseminated to anyone, except:

a. a party, counsel for any party, and the employees of such counsel to whom it is necessary that the information be disclosed for purposes of this litigation only; or

b. any expert engaged by a party for the purpose of assisting in the preparation of this litigation, provided, however, that no CONFIDENTIAL information shall be disseminated to any expert who is employed by a direct business competitor of Respondents or its affiliates; or

c. any person who was involved in the preparation of the document or information; or

d. any other person, entity, or firm with the prior written consent of all parties.

7. Any party that provides documents or other discovery obtained from the other party in the course of this litigation to any person (other than the Court, court personnel, and court reporters) will first obtain from such person, prior to any such dissemination, a written statement in the form attached as Exhibit "A" hereto, that such person agrees to be bound by this Confidentiality Agreement. Petitioners and Respondents shall maintain a list of all persons to whom they have provided such documents along with the written agreement of each person. Upon request of any party at any time, counsel in possession of the written agreements shall immediately either: (a) provide copies of the written agreements to the requesting party; or (b) submit the written agreements to the Court to determine whether any aspect of the written agreements are protected from discovery by any privilege.

8. When any document or information designated "CONFIDENTIAL" or "OUTSIDE COUNSEL ONLY," or other pleadings or papers disclosing or referring to such information are used in connection with any motion, hearing, filing or other submission to the Court, they shall be filed in an envelope under seal pursuant to the rules of this Court and shall be marked as follows:

> CONFIDENTIAL/RESTRICTED:
> The contents of this envelope are not to be revealed to anyone except the Court, or with the prior consent of all the parties herein, or pursuant to any other Order of this Court. If the contents are thus revealed, they shall thereafter be resealed.

9. a. Nothing in this Agreement shall preclude any party from challenging a designation of "CONFIDENTIAL" OR "OUTSIDE COUNSEL ONLY" by another party.

If any party elects to challenge a designation of any document, deposition testimony, or information pursuant to this order, that party must provide at least five days advance notice to afford the designating party an opportunity to remove voluntarily such designation.

b. If, after the five-day period has expired, the designating party has not agreed to remove the designation and the parties are otherwise unable to resolve the challenge to the designation, the challenging and designating parties shall contact the Court for a determination of whether the challenged designation is appropriate. The challenging party shall provide the Court with one copy of each document, response, or portion of transcript challenged. The challenging party has the burden of proving the inapplicability and/or incorrectness of any designation.

c. If the challenge is not resolved by agreement, or by voluntary removal, and if the Court is not contacted, then the designation shall remain in effect and shall continue to apply to such document or information.

10. All documents and other discovery produced or obtained in the course of this litigation, whether designated "CONFIDENTIAL" or "OUTSIDE COUNSEL ONLY" or not, shall be used for the sole and limited purpose of preparation for and trial of this action and shall not be used for any other purpose. "For purposes of preparation and trial of this action," as used in this Order, means that individuals obtaining access to discovery: (i) can read and review such discovery to become knowledgeable about this litigation; and (ii) can comment on such discovery to counsel for the parties if they so choose. All other uses, including but not limited to (1) making such discovery available to any person who has not signed Exhibit "A" hereto and (2)

causing such discovery to be published in any trade journal, newspaper, or other written publication other than filings with this Court connected with this litigation, shall fall outside the definition of "For purposes of preparation for and trial of this action." Nothing in this Protective Order shall preclude persons wishing to use discovery from this litigation for purposes other than "For purposes of preparation for and trial of this action" from moving this Court, upon reasonable notice to the parties and, if applicable, the non-party who originally provided the documents, for appropriate relief.

11. Within thirty days of the close of this litigation for any reason, each party shall retrieve all copies of materials designated "CONFIDENTIAL" or "OUTSIDE COUNSEL ONLY" from his or its own files, and from experts or other persons to whom he or it has provided such materials consistent with this Protective Order, and shall do one of the following: (1) return to the designating party all such materials, including all copies thereof, produced by such designating party during this action; or (2) certify in writing to the designating party that all materials designated "CONFIDENTIAL" or "OUTSIDE COUNSEL ONLY" produced by such other party during this action have been destroyed. All material protected by this Protective Order which has been placed in any computer databank, hard drive, or disk shall be completely erased, and any documents listing or summarizing information protected by this Protective Order shall be destroyed within the same period.

12. Nothing herein contained shall be construed to preclude or limit any party from opposing any discovery on any grounds that would otherwise be available. This Protective Order shall not, in and of itself, prejudice any contention of any party upon any motion, nor shall this Protective Order constitute a waiver of any right to seek relief from the Court from any and all of the

provisions hereof or other modifications of the terms hereof. This Protective Order shall not limit any party's right to seek judicial review or to seek further and additional protection against or limitation upon production or dissemination of information and documents or their contents.

13. Nothing herein shall be construed to preclude or limit the presence of any individual at any hearings in or the trial of this action.

BY THE COURT:

Dated: _____, 1998

_____
The Hon. William B. Moran
Administrative Law Judge

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	:	
	:	
Central Sprinkler Corp.	:	
	:	**CPSC Docket No. 98-2**
and	:	
	:	
Central Sprinkler Co.,	:	
	:	
Respondents.	:	
	:	

EXHIBIT "A" TO PROTECTIVE ORDER

I hereby certify that I have read the PROTECTIVE ORDER entered in the above-captioned litigation. I hereby agree to be bound by the terms of the PROTECTIVE ORDER and to submit personally to the jurisdiction of the Administrative Law Judge assigned to this action for purposes of enforcing my agreement to be bound by the terms of the PROTECTIVE ORDER.

I hereby agree that I will use any documents or other discovery produced or provided by a party in the above-captioned litigation for the sole and limited purposes of preparation for and trial of the above-captioned litigation.

Date: _____ Signature: _____

CERTIFICATE OF SERVICE

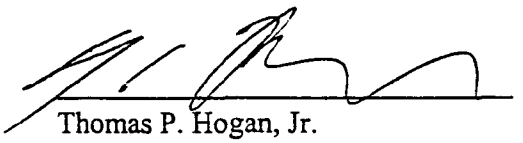
I, Thomas P. Hogan, Jr., hereby certify that on this date a true and correct copy of the foregoing Proposed Protective Order and Opposition of Respondents to Complaint Counsel's Submission of Documents In Camera was served via telecopier and regular mail upon the following:

Eric L. Stone
Director
Division of Administrative Litigation
U.S. Consumer Product Safety Commission
4430 East West Highway
Bethesda, MD 20814

Alan H. Schoem
Assistant Executive Director
Office of Compliance
U.S. Consumer Product Safety Commission
4430 East West Highway
Bethesda, MD 20814

The Honorable William B. Moran
Offices of the Administrative Law Judges
Environmental Protection Agency
401 M Street, S.W.
Mail Code 1900 L
Washington, DC 20460

Dated: May 19, 1998



Thomas P. Hogan, Jr.

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
CADET MANUFACTURING COMPANY,	)	CPSC Docket No. 99-1
Respondent	)	

CONSENT AGREEMENT

This Consent Agreement is made by and between the staff of the Consumer Product Safety Commission, and Respondent, Cadet Manufacturing Company, a domestic corporation, to settle the above-captioned administrative action. The parties agree as follows:

Parties

1. The "staff" is the staff of the Consumer Product Safety Commission ("CPSC" or "the Commission"), an independent regulatory agency of the United States of America, established by Congress pursuant to Section 4 of the Consumer Product Safety Act ("CPSA"), 15 U.S.C. § 2053, as amended.

2. Respondent Cadet Manufacturing Company ("Cadet") is a corporation organized and existing under the laws of the State of Washington, with its principal place of business located at 2500 West Fourth Plain Boulevard, Vancouver, Washington 98660. Cadet manufactures and distributes in-wall electric heaters among other heating products.

Subject Matter

3. Since approximately 1978, Cadet has manufactured and sold and/or distributed in commerce in-wall electric heaters for use in homes and residences under the brand names "Cadet" and "Encore." These include all models and variants within each model of the series FW (including models FW-051, FW-101, FW-122, FW-202, and FW-751), manufactured between 1978 and 1987; series FX (including models FX-051, FX-052, FX-071, FX-072, FX-101, FX-102, FX-122, FX-151, FX-152, FX-202, and FX-242), manufactured between 1985 and 1994; series LX (including models LX-242, LX-302, LX-402, and LX-482), manufactured between 1985 and 1994; series TK (including models TK-051, TK-071, TK-072, TK-101, TK-102, TK-151, and TK-152), manufactured between 1984 and 1998; series ZA (including models ZA-051, ZA-052, ZA-071, ZA-072, ZA-101, ZA-102, ZA-122, ZA-151, ZA-152, ZA-202, and ZA-242), manufactured between 1985 and 1999; series Z (including models Z-072, Z-101, Z-102, Z-151, Z-152, Z-202,and Z-208), manufactured between 1993 and 1999; and all series and models of the same or functionally identical heaters manufactured and distributed by Cadet under the Encore brand name, including series RX (including models RX-072, RX-101, RX-102, RX-151, RX-152, RX-202, and RX-242), manufactured between 1985 and 1994; series RLX (including models RLX-302, RLX-402, and RLX-482) manufactured between 1985 and 1994; series RK (including models RK-101 and RK-102), manufactured between 1984 and 1998; series RA (including models RA-101, RA-102, RA-151, RA-152, and RA-202), manufactured between 1985 and 1994; and series ZC (including models ZC-072, ZC-101, ZC-102, ZC-151, ZC-152, ZC-202, and ZC-208), manufactured between 1993 and 1999. For each of these heaters, the variants signified by the suffix T (with thermostat), W (white color), and TW (with thermostat and white color) found after the model number are

included. These heaters shall hereinafter be collectively referred to as "the Heaters." Cadet manufactured approximately 1,950,000 of the Heaters for sale to consumers principally in the States of California, Idaho, Montana, Oregon, and Washington.

4. On January 14, 1999, the staff filed an Administrative Complaint ("Complaint") against Cadet, seeking a determination that certain of the Heaters present a substantial product hazard within the meaning of Section 15(a)(2) of the CPSA, 15 U.S.C. § 2064(a)(2), and public notice and a recall of certain of the Heaters pursuant to Sections 15(c) and (d) of the CPSA, 15 U.S.C. §§ 2064(c) and (d). The Complaint alleges that certain of the Heaters are defective and present a substantial product hazard within the meaning of Section 15(a)(2) of the CPSA, 15 U.S.C. § 2064(a)(2), because their design and/or manufacture causes them to overheat, fail, and catch fire; and/or allow lint, dirt, or debris to build up within the heaters and catch fire. The Complaint also alleges that the design of certain of the Heaters can cause the Heaters to spew flames and/or burning or molten particles, or eject sparks into the living space of a home or residence, or energize the Heaters creating a risk of electric shock.

5. To date, the staff has received information alleging at least 264 instances of electrical fire or malfunction involving the Heaters: 115 units of series FX; 32 units of series FW; 5 units of series LX; 74 units of series ZA; 3 units of series TK; and 35 units of series Z; including 134 heaters that allegedly smoked, sparked, caught fire, emitted flame, and/or ejected burning particles as the result of the alleged defects identified and described in Paragraphs 8 through 10 of the Complaint. These incidents have allegedly caused or contributed to three deaths and two serious thermal burn injuries, and the staff also contends that the Heaters may cause serious electric shock injury and death.

6. Cadet denies each and all of the staff's allegations in the Complaint that Cadet's heaters are defective. Cadet contends that its heaters (other than Cadet's models Z152 and Z202) are safe when properly installed, maintained, and used. Cadet further denies generally and specifically any allegation that Cadet's heaters present a substantial risk of injury to the public, or present a substantial product hazard.

Agreement of the Parties

7. It is the express purpose of the parties entering this Consent Agreement to protect the public safety by carrying out the recall and replacement of the Heaters.

8. The parties intend for this Consent Agreement and the attached Order (hereinafter "Order" or "the Order"), which is hereby incorporated by reference, to resolve all of the staff's allegations and requests for relief relating to the Heaters.

9. The Heaters are "consumer products" within the meaning of Section 3(a)(1) of the CPSA, 15 U.S.C. § 2052(a)(1).

10. Cadet is a "manufacturer" of "consumer product[s]," which are "distributed in commerce," as those terms are defined in Sections 3(a)(1), (4), and (11) of the CPSA, 15 U.S.C. §§ 2052(a)(1), (4), and (11).

11. The CPSC has jurisdiction over Cadet and the Heaters under Sections 3(a)(1), (4), and (11) and Section 15 of the CPSA, 15 U.S.C. §§ 2052(a)(1), (4), and (11), and § 2064.

12. For purposes of this settlement only, Cadet agrees not to contest the allegations in the Complaint that the Heaters contain a "defect which creates a substantial product hazard," as those terms are defined in Section 15(a) of the CPSA, 15 U.S.C. § 2064(a).

13. This Consent Agreement and Order shall take effect upon its final acceptance by the CPSC and final approval by the United States Bankruptcy Court for the Western District of Washington at Tacoma (hereinafter, "the Bankruptcy Court"). The date of final approval by the Bankruptcy Court shall hereinafter be referred to as "the Effective Date."

14. Upon acceptance by the CPSC of this Consent Agreement, and entry of the incorporated Order, and final approval by the Bankruptcy Court, Cadet knowingly, voluntarily, and completely waives and relinquishes any past, present, and/or future right or rights in this matter: (a) to an administrative or judicial hearing and to all further procedural steps, including findings of fact, conclusions of law, and/or further determination of whether the Heaters contain a defect which creates a substantial product hazard within the meaning of Section 15 of the CPSA; (b) to seek judicial review or otherwise challenge or contest the validity of this Consent Agreement and Order as issued and entered; (c) to seek judicial review of this or any past orders, findings, and/or determinations of the CPSC or the Presiding Officer in this matter, except as set forth in Paragraphs 23 and 25 of this Consent Agreement; and (d) to file any claim or to seek any remedy under the Equal Access to Justice Act.

15. Cadet agrees to fulfill all requirements of the incorporated Order.

16. The incorporated Order is issued under Sections 15(c) and (d) of the CPSA, 15 U.S.C. §§ 2064(c) and (d), and a violation of this Consent Agreement and the incorporated Order is a prohibited act within the meaning of Section 19(a)(5) of the CPSA, 15 U.S.C. § 2068(a)(5), and may subject Cadet to civil and/or criminal penalties under Sections 20 and 21 of the CPSA, 15 U.S.C. §§ 2069 and 2070.

17. Cadet acknowledges that any interested person may bring an action pursuant to Section 24 of the CPSA, 15 U.S.C. § 2073, in any United States District Court in which Cadet is found or transacts business to enforce the Order and to obtain appropriate injunctive relief.

18. The CPSC, the staff, and/or Cadet may disclose terms of this Consent Agreement and Order to the public.

19. This Consent Agreement and incorporated Order shall be binding upon the parties hereto and their successors, assigns, and any operating bankruptcy trustees or receivers. If, prior to the termination of this Consent Agreement and Order, Cadet merges with any other business entity or sells, assigns, or otherwise transfers substantially all of its assets, Cadet shall provide reasonable prior notice to the surviving corporation or the purchaser, assignee, or transferee of substantially all of Cadet's assets, of this Consent Agreement and Order, and of its binding effect upon said surviving corporation, purchaser, assignee, or transferee. The existence of this Consent Agreement and Order and its binding effect shall be noted in any agreement between Cadet and such surviving corporation, purchaser, assignee, or transferee. It shall be a condition of any such merger, sale, assignment, or transfer that the surviving corporation or the purchaser, assignee, or transferee shall execute a document agreeing to be bound by the provisions of this Consent Agreement and Order and shall submit to the jurisdiction of the CPSC for purposes of enforcement of this Consent Agreement and Order. In the event of any merger or sale, assignment, or transfer of substantially all of Cadet's assets, Cadet shall provide written notice to the staff no later than sixty (60) days prior to any such merger or asset sale, assignment, or transfer, except in the case of extenuating circumstances, in which

case Cadet shall notify the staff as soon as reasonably possible.

20. This Consent Agreement and Order have been negotiated by the parties. Cadet is not relying on the advice of the staff, nor anyone associated with the staff, as to legal, tax, or other consequences of any kind arising out of this Consent Agreement and Order, and Cadet specifically assumes the risk of all legal, tax, and other consequences.

21. For all purposes, this Consent Agreement and Order shall constitute an enforceable judgment obtained in an action or proceeding by a governmental unit to enforce its police and regulatory power. Cadet acknowledges and agrees that this Consent Agreement and Order are pursuant to the CPSC's police and regulatory power to remedy the alleged risk created by the Heaters, and that, once Cadet, with the proper authorization from the Bankruptcy Court, signs the Consent Agreement and incorporated Order, the Consent Agreement and the incorporated Order are not subject to an automatic stay in any bankruptcy proceeding involving Cadet.

22. The CPSC, at its sole discretion and upon reasonable notice to Cadet, may void, suspend, or rescind all, or any part, of this Consent Agreement and Order if Cadet has made material misrepresentations regarding, but not limited to, its financial condition as of the date of this Consent Agreement and Order; the projected manufacturing costs, service and handling costs, freight costs, notification costs, and factory set-up costs for replacement heaters; and/or the estimated number of the Heaters remaining to be remediated, and the staff has relied upon those misrepresentations in entering into this Consent Agreement.

23. If, after the Effective Date hereof, any provision of this Consent Agreement and Order is held to be illegal, invalid, or unenforceable under present or future laws

effective during the term of this Consent Agreement and Order, such provision shall be fully severable. The rest of the Consent Agreement and Order shall remain in full effect, unless the CPSC determines that severing the provision materially impacts the remediation program set forth in this Consent Agreement and Order. The CPSC determination shall constitute the final agency decision and shall be subject to judicial review, such review to be based upon the record of any such CPSC proceeding and according to law.

24. Cadet acknowledges that this Consent Agreement and Order have been negotiated between unrelated, sophisticated, and knowledgeable parties acting in their own self-interest and represented by counsel, and the provisions of this Consent Agreement and Order shall not be interpreted or construed against any person or entity because that person or entity or any of its attorneys or representatives drafted or participated in drafting this Consent Agreement and Order.

25. The provisions of this Consent Agreement and Order shall be interpreted in a reasonable manner to effect its purpose to remedy the alleged hazard that the Heaters pose. In the event of a dispute between the parties arising under this Consent Agreement and Order, the parties agree to submit the issue for determination by the CPSC. The CPSC determination shall constitute the final agency decision and shall be subject to judicial review, such review to be based upon the record of any such CPSC proceeding and according to law.

26. The existence of a dispute between the staff and Cadet over any provision of this Consent Agreement and Order shall not excuse, toll, or suspend any obligation or deadline imposed upon Cadet under this Consent Agreement and Order.

27. This Consent Agreement and Order shall not be waived, changed, amended,

modified, or otherwise altered, except in writing executed by the parties and approved by the CPSC.

28. This Consent Agreement and Order contain the entire agreement, understanding, representation, and interpretation of the parties herein, and nothing else may be used to vary or contradict its terms.

29. Cadet and the staff consent to the entry of the Order attached hereto.

Dated: 6/18/99

Howard N. Tarnoff, Trial Attorney
Margaret H. Plank, Trial Attorney

Eric L. Stone, Director, Legal Division
Alan H. Schoem, Assistant Executive Director, Office Of Compliance
U.S. Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814
Telephone: 301-504-0626

Complaint Counsel

Dated: 6/17/99

Leon Simson, Esq.
Brad T. Summers, Esq.
David W. Criswell, Esq.
Ball Janik LLP
One Main Place
101 SW Main Street, Suite 1100
Portland, OR 97204
Telephone: 503-228-2525

Counsel for Respondent
Cadet Manufacturing Company

Richard E. Anderson
Chairman and CEO
Cadet Manufacturing Company

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of	)	
CADET MANUFACTURING COMPANY,	)	CPSC Docket No. 99-1
Respondent	)	

ORDER

UPON CONSIDERATION of the Administrative Complaint ("Complaint") filed against Respondent Cadet Manufacturing Company ("Cadet") on January 14, 1999, and the Consent Agreement between the parties; and

The Consumer Product Safety Commission ("CPSC" or "the Commission") having jurisdiction over the subject matter and Cadet;

IT IS HEREBY ORDERED THAT:

1. The Consent Agreement between Cadet and the staff of the CPSC (hereinafter, "the staff") is accepted, and Cadet shall comply with all obligations of the Consent Agreement and this Order, upon final approval by the United States Bankruptcy Court for the Western District of Washington at Tacoma ("the Bankruptcy Court"). The date of final approval by the Bankruptcy Court shall hereinafter be referred to as "the Effective Date."

2. All allegations of the Complaint are resolved by this Consent Agreement and Order. Based on the Consent Agreement, including Cadet's agreement not to contest the allegations of the Complaint for settlement purposes, the CPSC finds that

the Consent Agreement and this Order are necessary to protect the public from the alleged hazard presented by Cadet's series FW, FX, LX, TK, ZA, and Z in-wall electric heaters, and the functionally identical heaters manufactured and distributed by Cadet under the Encore brand name, including series RX, RLX, RK, RA, and ZC. These heaters shall hereinafter be collectively referred to as "the Heaters."

3. Cadet shall immediately cease and desist manufacturing for sale, offering for sale, distributing in commerce, and/or importing into the customs territory of the United States any of the Heaters, whether by itself or through its subsidiaries, affiliates, Cadet-owned distribution centers, or any other persons or entities over whom Cadet has control.

4. To remedy the substantial product hazard allegedly created by the Heaters, Cadet shall perform the following remedial actions:

a. Cadet shall provide replacement heaters, at the prices set forth in Appendix A of this Order, to persons who purchased the Heaters, current Heater owners, and parties with the legal capacity to act on behalf of Heater owners who make a written request for removal and replacement of the Heaters and who provide to Cadet reasonable proof of ownership of the Heaters (a receipt, serial number, date code, or other evidence of ownership, but not the receipt alone) within twenty-four (24) months after the Effective Date of this Order. These persons shall hereinafter be collectively referred to as "Heater Claimants." The series and models of the replacement heaters and the prices for the replacement heaters are set forth in Appendix A of this Order.

b. Cadet shall provide to Heater Claimants, at Cadet's cost plus ten percent (10%), any fittings, fixtures, and/or appurtenances (hereinafter, collectively

"replacement parts") necessary for proper replacement of the Heaters with replacement heaters.

c. Except as otherwise agreed by Cadet, the purchase price for replacement heaters and replacement parts shall be paid to Cadet by Heater Claimants concurrently with shipment by Cadet.

d. Cadet shall manufacture the replacement heaters in a manner that is consistent with the following provisions:

1) the replacement heaters shall utilize over temperature limit control switches that are equivalent or better than the specifications of Therm-O-Disc, Inc.'s 60T over temperature limit control switches;

2) the replacement heaters shall contain an audible alarm or manual reset switch that will be triggered when the over temperature limit control switch is tripped;

3) to the extent feasible, the replacement heaters shall utilize a one-piece blower wheel;

4) the replacement heaters shall be assembled utilizing the minimum practicable amount of in-house crimping;

5) the replacement heaters shall contain labeling that will warn users of the hazards and risks associated with airflow that is impeded or reduced by lint, dirt, or debris, and/or objects that are placed too close to the heaters (this labeling shall be in substantially the same form as set forth in Appendix B of this Order); and

6) the replacement heaters shall contain installation instructions that: (a) alert owners and installers that the replacement heaters must not be installed in

insulated walls; and (b) inform owners how to clean and maintain the replacement heaters.

e. Cadet shall undertake the following quality assurance program for the manufacture of its replacement heaters, which shall include statistically valid sampling of all incoming components and finished heaters:

1) Cadet shall train all appropriate manufacturing personnel in component handling and shall require all appropriate manufacturing personnel to undertake a periodic review of handling methods;

2) Cadet shall implement a quality control inspection process of all incoming components, including the over temperature limit control switches, elements, blower wheels, and wire assemblies;

3) Cadet shall create written wire assembly/terminal crimping instructions and unit assembly instructions, and copies of the instructions shall be provided to all appropriate manufacturing personnel;

4) Cadet shall confirm that the crimping process of terminal wire combinations conforms to the manufacturing specifications;

5) Cadet shall undertake increased inspections of the crimping equipment and associated tooling; and

6) Cadet shall implement a statistically valid inspection and sampling program for all of its finished replacement heaters.

f. Cadet shall provide the capacity, in accordance with the production schedule attached hereto as Appendix C, to produce at least 225,000 fan heaters per twelve (12) month period to meet the demand for replacement heaters, until such time as the recall program is completed.

g. If Cadet receives requests for replacement heaters at a rate that exceeds its monthly capacity to manufacture the replacement heaters, as specified by the production schedule attached hereto as Appendix C, Cadet shall devise a plan for prioritizing replacement heater distribution. Cadet's plan for replacement heater distribution shall be submitted to the staff for approval prior to implementation. In the event the staff disagrees with Cadet's plan for replacement heater distribution, Cadet shall implement a feasible plan as amended or devised by the staff.

5. Cadet shall enter into an Escrow Agreement which provides for the creation and administration of an Escrow Account. The Escrow Agreement shall be in a form and content acceptable to the staff and shall be approved by the staff prior to execution. The Escrow Agreement shall be consistent with the terms of this Consent Agreement and Order and shall contain such terms as are customary and are acceptable to the staff, including the following provisions:

a. The Escrow Account shall be established pursuant to this Consent Agreement and Order. The Escrow Account shall not be part of Cadet's bankruptcy estate. Cadet and/or Cadet's estate shall have no interest, whether legal, equitable, or otherwise, in the funds in the Escrow Account.

b. The Escrow Account shall remain in effect until the earlier of seventy-three (73) months from the Effective Date of this Order, or until all claims arising from the removal and replacement of the Heaters have been paid in full and all expenses of the Escrow Account have been paid in full. Upon termination of the Escrow Account, all remaining funds in the Escrow Account that were originally deposited by Cadet shall be distributed to CPSC-approved designees.

c. The staff shall appoint the Disbursing Agent for the Escrow Account, who shall have appropriate experience as a claims administrator. The staff shall identify the Disbursing Agent as soon as possible after entry of this Order, and in no event later than the effective date of the plan of reorganization in Cadet's bankruptcy case.

d. Commencing on the Effective Date of this Order, Cadet shall deposit into the Escrow Account fifty percent (50%) of all proceeds, including punitive and treble damages, recovered by Cadet or its successors or assigns (hereinafter, "the Proceeds"), after deduction of actual costs and attorney's fees, from claims and lawsuits against its insurers or other third parties relating to alleged defects in the Heaters, but not including claims to recover accounts receivable generated upon sale of the Heaters, (hereinafter, "the Claims"), regardless of whether such Proceeds are paid directly to Cadet, its attorneys, agents, and/or representatives. However, Cadet shall deposit into the Escrow Account sixty percent (60%) of the Proceeds, after deduction of actual costs and attorney's fees, from claims and lawsuits against the manufacturer(s) of the heating elements used in the series Z heaters, regardless of whether such Proceeds are paid directly to Cadet, its attorneys, agents, and/or representatives. These deposits shall hereinafter be referred to as the "Claim Recovery Deposits." Cadet shall continue to make such deposits until the earlier of seventy-two (72) months after the Effective Date of this Order, or until all replacement heaters have been shipped and paid in full and all expenses of the Escrow Account have been paid in full.

e. The staff or Cadet may cause additional amounts to be deposited into the Escrow Account by third parties who contributed to the manufacture, sale, distribution, installation, exportation, and importation of the Heaters.

f. The Disbursing Agent shall pay to Cadet from the Escrow Account Eleven Dollars ($11.00) per replacement heater shipped by Cadet. These payments from the Escrow Account shall be made to Cadet weekly or monthly (at Cadet's option), based upon the number of replacement heaters shipped by Cadet during the preceding week or month. Cadet shall furnish, in a timely manner, to the Disbursing Agent all information necessary for the Disbursing Agent to properly administer and disburse the funds in the Escrow Account, including, but not limited to, a list of the names and addresses of the Heater Claimants, the number of replacement heaters covered by each request, and verification of the quantities of replacement heaters that are shipped pursuant to those requests. Cadet may receive advances from the Escrow Account solely for the purpose of financing Cadet's commencement of the Heater replacement program, upon receiving written approval from the staff.

6. Cadet shall provide replacement heaters, at the prices set forth in Appendix A of this Order, to any Heater Claimant who makes a written request for removal and replacement of Heaters and who provides to Cadet reasonable proof of ownership of the Heaters (a receipt, serial number, date code, or other evidence of ownership, but not the receipt alone) on or before the date that is twenty-four (24) months after the Effective Date of this Order.

7. Those Heater Claimants who, on or after October 23, 1997, but prior to the Effective Date of this Order, (a) already removed and replaced or contracted to remove and replace their Heaters; and (b) provide the Disbursing Agent, within twenty-four (24) months of the Effective Date of this Order, with verification of removal and replacement of the Heaters (e.g., work order, bill, receipt, or other documentation from the person or

company replacing the Heaters), shall be entitled to receive a payment of Twenty-Five Dollars ($25.00) per replaced Heater from the Disbursing Agent.

8. Cadet shall provide notice to the public, its customers, and Heater Claimants of the alleged risks and hazards posed by the Heaters and the remedy to which Heater Claimants are entitled under this Order. All notices shall be in a form and content acceptable to the staff and shall be approved by the staff prior to dissemination. Cadet must conduct the following notice program:

a. By the Effective Date of this Order, Cadet shall have an adequately staffed, operational toll-free recall information telephone line (hereinafter, "Recall Hotline"). The Recall Hotline shall provide a general overview of the alleged risks and hazards associated with the Heaters and shall provide the details of Cadet's Heater replacement program. Cadet shall make available trained customer service representatives to help callers participate in the recall, to provide assistance for callers with questions and problems regarding the recall, and to enable Heater Claimants to check the status of their claims. The Recall Hotline shall operate from 7:00 A.M. until 7:00 P.M. Pacific Standard Time, Monday through Friday, for the first six weeks after it becomes operational. Staffing and hours of operation may be reassessed by Cadet in consultation with the CPSC staff after week six.

b. By the Effective Date of this Order, Cadet shall have an operational website (hereinafter, "the Recall Website") which notifies the public of the alleged risks and hazards associated with the Heaters and provides the details of Cadet's Heater replacement program. The Recall Website shall contain a summary of the recall, the requirements for participation, a question and answer document incorporating a list of

commonly asked questions about the recall, a list of the series and models of the replacement heaters and the prices for the replacement heaters (as set forth in Appendix A of this Order), a hyper-link to the CPSC press release announcing the recall, and such other information as the staff and Cadet find necessary to inform the public adequately about the recall.

c. Cadet shall obtain the names and addresses of purchasers and owners of the Heaters and occupants of residences and homes that contain the Heaters from all available sources, including consumer complaints, warranty records, registration cards, dealer and distributor lists, and previous recall records. Within ten (10) days after the Effective Date of this Order, and for as long as new additions to this list become available, Cadet shall mail the staff-approved notice to these people and entities.

d. Within ten (10) days after the Effective Date of this Order, Cadet shall mail the staff-approved notice to its old and current distributors, dealers, and wholesale customers.

e. Within ten (10) days after the Effective Date of this Order, Cadet shall mail the staff-approved notice to *ASHRAE Journal, Buildings Magazine, Building Operating Management, Commercial Property News, Consulting Specifying Engineer, Electrical Contractor Magazine, Engineered Systems, Facilities Design and Management, Journal of Property Management, National Real Estate Investor, NFPA Journal, Reeves Journal, The ASHI Reporter,* and *The Air Conditioning Heating and Refrigeration News*.

f. Within ten (10) days after the Effective Date of this Order, Cadet shall mail the staff-approved notice to the state fire marshals in all fifty States of the United States of America and all local fire marshals or Authorities Having Jurisdiction ("AHJ's") in

the States of Idaho, Montana, Oregon, and Washington.

g. Within ten (10) days after the Effective Date of this Order, and again between one hundred and eighty (180) and one hundred and eighty-five (185) days thereafter, Cadet shall mail the staff-approved notice to all electric utility companies in the States of California, Idaho, Montana, Oregon, and Washington.

h. Within ten (10) days after the Effective Date of this Order, Cadet shall mail the staff-approved notice to selected homeowner and property insurance companies (e.g., Allstate, Prudential, State Farm, Travelers).

i. Within ten (10) days after the Effective Date of this Order, Cadet shall mail the staff-approved notice to the American Homeowners Association (AHA), the American Society of Heating Refrigeration Air Conditioning Engineers (ASHRAE), the American Society of Home Inspectors, Inc. (ASHI), the American Subcontractors Association, the Building Officials and Code Administrators (BOCA), the Building Owners and Managers Association (BOMA), Consumer Federation of America, Consumers Union, Independent Electrical Contractors Inc. (IEC), the International Association of Electrical Inspectors (IAEI), the International Conference of Building Officials (ICBO), the National Association of Homebuilders (NAHB), the National Association of Realtors, the National Electrical Contractors Association (NECA), and the National Fire Protection Association (NFPA).

j. Within ten (10) days after the Effective Date of this Order, and again between one hundred and eighty (180) and one hundred and eighty-five (185) days thereafter, Cadet shall purchase space for publication of three column x 7.5" advertisements of the staff-approved notice in newspapers ~~(as listed in Appendix F of this~~

~~Order)~~ in the States of California, Idaho, Montana, Oregon, and Washington.

9. Within five (5) days after the Effective Date of this Order, Cadet shall request that Underwriters Laboratories, Inc., 333 Pfingsten Road, Northbrook, IL, withdraw its listing of approval for the Heaters. Cadet shall also purge from its Underwriters Laboratories' listings all in-wall electric heater designs that are not currently in use.

10. Cadet shall not, without first both notifying and consulting with the staff ninety (90) calendar days in advance, manufacture for sale, offer for sale, distribute in commerce, and/or import into the customs territory of the United States, whether by itself or through its subsidiaries, affiliates, Cadet-owned distribution centers, or any other persons or entities over whom Cadet has control, any in-wall electric heaters containing either of the following components: (a) an over-temperature limit control switch encased within a nominal one-half (1/2) inch or smaller diameter phenolic (plastic) housing; or (b) a zig-zag fine wire heater element.

11. Cadet shall devise procedures to encourage the destruction of the Heaters. Cadet shall destroy all finished goods inventory of the Heaters and returned Heaters, from whatever source, and will not use any component parts of any returned or finished goods for the manufacture or sale of any other product. Cadet shall provide to the staff a quarterly accounting, in a format acceptable to the staff, of all returned and destroyed Heaters after the Effective Date of this Order, until the earlier of thirty-six (36) months from the Effective Date of this Order or when the staff agrees with Cadet that further reports are unnecessary.

12. Cadet shall generate and maintain in a database information that includes and is retrievable by: (a) Heater Claimant name, address, and telephone number; (b) date

of receipt of each order for replacement heaters; (c) quantity, series, and model of each Heater being replaced; (d) quantity, series, and model of each replacement heater; (e) inclusive production dates of each replacement heater; (f) date of shipment of each replacement heater; (g) date of the completed fulfillment of each order for replacement; (h) if applicable, reason(s) why a replacement heater order is delayed or could not be fulfilled; and (i) such other data as is reasonably necessary for the staff to monitor the effectiveness of the Heater replacement program. This information shall be immediately available to the staff and the Disbursing Agent, upon request.

13. Beginning with the Effective Date of this Order, and by 5:00 P.M. Eastern Standard Time on the tenth (10^{th}) business day of every month thereafter for the first six (6) months and quarterly thereafter, Cadet shall provide to the staff a cumulative status report in a format acceptable to the staff. The status reports shall be made until the earlier of seventy-three (73) months from the Effective Date of this Order, or when the staff agrees with Cadet that further reports are unnecessary. This status report shall include:

a. a cumulative report of pending and completed replacement heater orders that contains the data specified in Paragraph 12 above, sorted by date, and accompanied by a copy of the complete computer database file(s) on electronic media that contains the data specified in Paragraph 12 above;

b. a complete and accurate statement of the reason(s) for any failure by Cadet to produce replacement heaters in at least ninety percent (90%) of the quantities that are specified in the production schedule attached hereto as Appendix C, or to ship replacement heaters during the month following the month in which they were produced; and

c. the status of the Claims described in Paragraph 5.d. of this Order.

14. Cadet shall immediately notify the staff in writing if:

a. Underwriters Laboratories, Inc. (UL) withdraws or discontinues its approval or listing, no longer approves or lists, modifies its approval or listing, or issues a Variation Notice for any of the replacement heaters at any time, for any reason whatsoever; ~~and~~or

b. Cadet obtains information with respect to the replacement heaters that is reportable under Section 15(b) of the CPSA, 15 U.S.C. § 2064(b).

15. Cadet shall provide to the staff a copy of all filings it makes with the Bankruptcy Court within three (3) business days of making such filings. Cadet shall provide to the staff any and all of its quarterly or annual financial statements (audited and unaudited) within five (5) business days of completion or receipt from the auditor. Cadet shall notify the staff in writing of any planned changes in corporate officers and directors at least thirty (30) days before such changes occur, except in the case of extenuating circumstances, in which case Cadet shall notify the staff as soon as reasonably possible. Cadet shall also notify the staff in writing of any merger or sale, assignment, or transfer of substantially all of Cadet's assets at least sixty (60) days prior to such event, except in the case of extenuating circumstances, in which case Cadet shall notify the staff as soon as reasonably possible.

16. Cadet shall allow the CPSC and/or the staff to inspect any and all records regarding the replacement heaters, remediation program, any class action lawsuits regarding the Heaters, any bankruptcy proceedings involving Cadet, and any claims or lawsuits against Cadet's insurers or other third parties relating to the Heaters, and to

inspect all manufacturing, design, receiving, and/or inventory facilities regarding the replacement heaters at any time during normal business hours, upon reasonable notice.

17. In addition to any penalty it may incur pursuant to Paragraph 16 of the Consent Agreement, if Cadet fails to make timely contributions to the Escrow Account as required by Paragraph 5 of this Order, Cadet shall be liable for additional contributions to the Escrow Account. Such additional contributions shall include the following:

a. Interest at the percentage rate established by the Department of the Treasury pursuant to 31 U.S.C. § 3717, for any period after the due date; and

b. A five percent (5%) per month penalty charge if the deposit is not made within thirty (30) days after the due date.

18. Cadet and the staff shall evaluate the effectiveness of the Heater replacement program, as prescribed by this Consent Agreement and Order, on an on-going basis. Cadet shall undertake such additional notice or corrective actions as the staff and Cadet determine are necessary to make the Heater replacement program as effective as possible.

19. This Order, and all of the obligations it imposes upon Cadet, shall terminate in its entirety when Cadet has completely fulfilled all obligations under the Consent Agreement and Order and upon the final distribution of all funds to be placed in the Escrow Account pursuant to Paragraphs 5-7 of this Order, whichever is later.

BY ORDER OF THE CONSUMER PRODUCT SAFETY COMMISSION

Sadye Dunn

Sadye Dunn, Secretary
Consumer Product Safety Commission

Dated: July 30, 1999

to Hellman 6-21-73

UNITED STATES OF AMERICA
BEFORE CONSUMER PRODUCT SAFETY COMMISSION

COMMISSIONERS: Richard O. Simpson, Chairman
Barbara Hackman Franklin
Lawrence M. Kushner
Constance B. Newman

In the Matter of J. J. NEWBERRRY CO., a corporation	DOCKET NO. 8849 FINAL ORDER

The appeals from the initial decision of the Administrative Law Judge having been withdrawn, and the Commission having determined that the case should not be placed on its own docket for review and that the initial decision should be adopted and issued as the decision of the Commission:

IT IS ORDERED that the initial decision of the Administrative Law Judge shall on the 21st day of June, 1973, become the decision of the Commission.

By the Commission.

Samuel M. Hart
Secretary

ISSUED: June 21, 1973

RECEIVED
JAN 23 1973
SECRETARY

UNITED STATES OF AMERICA
BEFORE FEDERAL TRADE COMMISSION

In the Matter of

J. J. NEWBERRY CO.,
a corporation

DOCKET NO. 8849

INITIAL DECISION

Donald R. Moore, Administrative Law Judge

James Manos
New York, New York
Counsel Supporting the Complaint. 1/

Weil, Gotshal & Manges, New York, New York,
by Irving Scher and Herbert M. Hellman,
Counsel for Respondent.

PRELIMINARY STATEMENT

The complaint in this proceeding, charging violation of the Flammable Fabrics Act, as amended (15 U.S.C. §1191 et seq.), and of the Federal Trade Commission Act (15 U.S.C. 45), in connection with the sale of fabrics, was issued by the Federal Trade Commission on June 30, 1971, and was thereafter duly served on respondent. Respondent filed answer on August 17, 1971, and denied generally any violation of law.

1/ Robert G. Smith and Charles F. Canavan served as counsel supporting the complaint during most of the trial stage of this proceeding but by reason of transfer and retirement, respectively, withdrew from the case before its completion.

After a series of prehearing conferences and various prehearing procedures, hearings were held in January, April, and September 1972. (The intervals between hearings were accounted for by various procedural matters, including interlocutory appeals to the Commission.) The record was closed for the reception of evidence on October 20, 1972.

At the hearings, testimony and other evidence were offered in support of and in opposition to the allegations of the complaint. The parties were represented by counsel and were afforded full opportunity to be heard, to examine and to cross-examine witnesses, and to introduce evidence bearing on the issues. The testimony and evidence presented, comprising nearly 1400 pages of transcript and more than 30 exhibits, have been duly recorded and filed.

After the presentation of evidence, counsel for both parties filed proposed findings of fact and conclusions of law and a proposed form of order, together with briefs in support thereof, and also filed reply briefs. In this initial decision, those proposed findings not adopted, either in the form proposed or in substance, are rejected as lacking support in the record or as involving immaterial matters.

As required by Section 3.51(b)(1) of the Commission's Rules of Practice, the findings of fact include references to the principal supporting items of evidence in the record. Such references are intended to serve as convenient guides to the testimony and to the exhibits supporting the findings of fact, but they do not necessarily represent complete summaries of the evidence considered in arriving at such findings. Where references are made to proposed findings submitted by the parties, such references are intended to include their citations to the record unless otherwise indicated.

References to the record are made in parentheses, and certain abbreviations are used as follows:

CPF - "Proposed Findings, Conclusions of Law, Arguments in Support thereof, and Order of Counsel Supporting the Complaint."

CPF-A - Arguments in Support of Complaint Counsel's Findings and Conclusions (contained in CPF).

CRB - Reply Brief of Complaint Counsel ("Complaint Counsel's Exceptions and Argument in Support Thereof to the Respondent's Proposed Findings and Brief").

CX - Commission Exhibit.

RB - Respondent's Brief ("Brief in Support of Respondent's Proposed Findings of Fact, Conclusions of Law, and Order").

RPF - Respondent's "Proposed Findings of Fact, Conclusions of Law, and Order."

RRB - Respondent's Reply Brief ("Reply to Complaint Counsel's Proposed Findings, Conclusions of Law, Arguments in Support Thereof, and Order").

RX - Respondent's Exhibit.

Tr. - Transcript.

References to the proposed findings of counsel are to paragraph numbers and page numbers, preceded by one of the abbreviations listed above. References to the briefs and arguments of counsel are to page numbers, preceded by one of the abbreviations listed above. References to testimony sometimes cite the name of the witness and the transcript page number without the abbreviation "Tr." -- for example, Sierichs 371.

Having heard and observed the witnesses and having carefully reviewed the entire record in this proceeding, together with the proposed findings and briefs filed by the parties, the administrative law judge makes findings of fact, enters his resulting conclusions, and issues an order as follows:

FINDINGS OF FACT

Respondent J. J. Newberry Co. ("Newberry" or "respondent") is a corporation organized, existing, and doing business under and by virtue of the laws of the State of Delaware, with its office and principal place of business located at 245 Fifth Avenue, New York, New York.

Respondent has more than 500 retail stores located throughout the United States engaged in the sale of various consumer goods, including various textile fiber products.

Respondent is now and for many years has been engaged in the sale and offering for sale, in commerce, and in the importation into the United States, and has introduced, delivered for introduction, transported and caused to be transported in commerce, and has sold or delivered after sale or shipment in commerce, fabrics, as the terms "commerce" and "fabric" are

defined [redacted] the Flammable Fabrics Act, as amended. Respondent's gross purchase volume of all fabrics for the year 1969 was $32 million. For the year 1971, the total was $40 million. Curtain and drapery fabric constituted approximately two percent of Newberry's total purchases of fabric for each of the two years 1969 and 1971.

(Record references: Complaint and Answer, ¶1, 2; CX 1, ¶1-3; CX 14 A; Porter 686-878)

This case is the outgrowth of a routine inspection of a Newberry store in Culver City, California. The inspection was made on May 8, 1969 by Miss Helen Sierichs, an investigator assigned to the Los Angeles regional office of the Federal Trade Commission. (CX 1, ¶10; Tr. 316, 327)

The fabric that is the subject of this proceeding (CX 8) came to her attention when she saw a customer draping a sample of the fabric on a small child. It was a sheer, rose-pink fabric with a white design. She purchased approximately a half yard of the fabric and submitted it to Washington headquarters of the Commission for testing as to flammability. (Sierichs 327, 349)

This sample failed the minimum flammability requirements of Commercial Standard 191-53, which standard is applicable only "for the testing of articles of wearing apparel and for fabrics intended for use or which may reasonably be expected to be used in wearing apparel." (CX 1, ¶11; CX 4)

The subject fabric (CX 8) was a sheer fabric with a fiber content of approximately 80% acetate and 20% nylon. It was designated by the manufacturer as Style No. 78150 and was also known as "Spangle." (CX 1, ¶4; Chace 834, 840)

Newberry had purchased 23,390 yards of the subject fabric from Memblatt & Haas Textile Co., 11 West 25th Street, New York, New York, for $11,111. Memblatt & Haas had purchased the subject fabric from the manufacturer, Berkshire-Hathaway, Inc., 97 Cove Street, New Bedford, Massachusetts. (CX 1, ¶5; CX 2; RX 11, Maxson 925-26; Memblatt 869-70; Heely 1082, 1087; Chace 834-35) The fabric was distributed to 82 Newberry stores (CX 1, ¶7; CX 14; Maxson 932).

On May 19, 1969, which was prior to any notice received by Newberry's headquarters office from its Culver City store, an investigator from the Commission's New York regional office visited Newberry's office and advised Newberry officials that the Commission was investigating the marketability of the subject fabric under the Act (CX 1, ¶12; Nash 1229; Sherman 741-45).

Newberry immediately tested the subject fabric in its laboratory for compliance with Commercial Standard 191-53, and the fabric was found to fail that standard for the testing of articles of wearing apparel and for fabrics intended for use or which may reasonably be expected to be used in wearing apparel. On May 20 or 21, 1969, a copy of the test report prepared by Newberry's laboratory (CX 5) was voluntarily supplied to the Commission investigator (CX 1, ¶13; Nash 1230-36; Sherman 741-45).

On May 20, 1969, Newberry voluntarily prepared and immediately distributed a notice to the managers of each of the 82 Newberry stores to which the subject fabric had been delivered. The notice stated that tests of the subject fabric had shown it to be highly flammable and that it should be removed from sale immediately and held for return to Memblatt & Haas. After receiving this notice, each store immediately removed the subject fabric from sale and subsequently returned the subject fabric to Memblatt & Haas for credit to Newberry's account. (CX 1, ¶14; CX 6; RX 18)

Although there is no question as to the good-faith effort of respondent to remove the questioned fabric from sale, the parties disagree as to the exact amount that may have been sold before the recall notice. Respondent contends that of the 23,390 yards that it purchased, approximately 21,000 to 22,000 yards were "destroyed or returned" (RPF, ¶91, p. 52). Complaint counsel contends that the yardage returned amounted to only about 19,400 yards, leaving nearly 4,000 yards unaccounted for and presumably sold (CPF, ¶14-16, page 11; CPF-A, pp. 38-40). The testimony regarding the amount of fabric returned is somewhat confused (Heely Tr. 1082-1129; CX 14; RX 12; Memblatt 870-76), but there is a substantial basis for finding that 3,983 yards were not returned and may have been sold (Heely 1128-29). 2/ The record does not support respondent's contention that any of the fabric was destroyed by Newberry stores.

2/ The yardage figures were calculated by dividing the cost per yard (47.5 cents) into the dollar amount purchased and the dollar amount returned. The discrepancy arises from the fact that Newberry's return invoices from the stores totaled $9,218.76, whereas Memblatt & Haas gave Newberry a credit of $10,259.01 (Heely 1083). Despite testimony to the contrary, it appears that the larger figure may have included freight and handling charges. (See Heely 1093-97; compare Heely 1083-84)

At Newberry's Culver City store -- the only store selling the subject fabric that was investigated by the Commission -- the subject fabric was immediately removed from sale. As a result, of the $138.58 worth of the subject fabric distributed to the Culver City store, $124.99 was returned. Thus, $13.59 worth or approximately 28 1/2 yards of the subject fabric was sold by that store. (Kent 1256-57; Heely 1084)

Aside from the disagreement as to the yardage returned, the foregoing basic facts are undisputed. The primary issue in determining whether Newberry thereby violated the Flammable Fabrics Act is whether the subject fabric was properly subject to the flammability standard (Commercial Standard 191-53) applicable to articles of wearing apparel or fabrics intended for use or which may be reasonably expected to be used in wearing apparel. This issue was created by Newberry's denial answer (¶2) and also incorporated in its First Affirmative Defense. A further issue is whether Newberry intended or could have reasonably expected that the subject fabric would be used in wearing apparel. 3/

Before considering the evidence bearing on these issues, it is necessary to review briefly the statutory basis for this case.

Whereas the original 1953 statute (15 U.S.C. § 1191(e)) related to fabric "which is intended or sold for use in wearing apparel," the 1967 amendment, among other things, made the prohibition applicable to fabric "which is intended for use or which may reasonably expected to be used" in any article of wearing apparel (15 U.S.C. § 1191(f),(h)). 4/ The amendment thus extended the applicability of the statute beyond fabrics that were intended or sold by the seller for use in wearing apparel to fabrics "which may reasonably be expected to be used" in wearing apparel. Thus, the fact that a seller did not intend the fabric to be used in wearing apparel and did not sell it for such purpose no longer provides a defense. If

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3/ Although "interior furnishing" products, including curtains and draperies and fabrics intended for curtain and drapery use, are within the coverage of the amended Flammable Fabrics Act (15 U.S.C. § 1191(e),(f),(h), the Secretary of Commerce has not promulgated a flammability standard for such products.

4/ Compare original text in 15 U.S.C.A. (1963 ed.) with amended text in 1972 Pocket Part.

a fabric may reasonably be expected to be used in wearing apparel, then the flammability standard applies.

At the outset, we may rule out any question as to the intent or actual expectation of Newberry concerning the use of the fabric. It purchased the fabric as curtain and drapery fabric and intended that its retail stores would display it, promote it, and sell it as curtain and drapery fabric. The evidence supports a finding that it was the intent and expectation of the manufacturer of the subject fabric, of the jobber who sold it to Newberry, and of Newberry that it would be sold for use as curtain and drapery fabric (Chace 835-38, 858, 861; Memblatt 869; Maxson 925). It was identified on Newberry's purchase order ("common order") that was sent to each of the 82 stores receiving the subject fabric as follows:

> "Expensive Sheer Flocked Drapery Fabric, Perfect for Drapes, Cafes or Tailored Curtains.... Sheer Flocked Drapery & Curtain Fabric...." (CX 1, ¶8; CX 2)

However, there is also substantial evidence to support a finding that the fabric was of such a nature that it might reasonably be expected to be used in wearing apparel. Seven witnesses unequivocally testified to this effect, and the record reflects their competence to so testify. Four were Commission employees -- the Consumer Protection Specialist who investigated the case and three textile technologists employed in the Commission's testing laboratory. The other three were fabric buyers employed by retail stores in Washington, D. C. By education and experience, including in several instances, years of experience as purchasers of fabric for home sewing, they were qualified to testify as to the reasonably probable use of the fabric here in question. The fact that some of them recognized that the subject fabric might also be used as curtain and drapery fabric does not detract from their testimony as to its probable alternative use in wearing apparel. Several of the witnesses emphasized that purchasers of fabric used such fabric in a manner they thought most suitable, regardless of the purpose for which the fabric may have been advertised, promoted, and sold. (Sierichs 311-12, 361-62, 369-70; Brophy 422-25, 427, 433-34, 449-50; Neily 476-82, 486-89; Jones 492-97, 500-02; Ficke 464-66; Green 515-18, 523-28; Barovick 551)

The contrary testimony of a Newberry executive (Sherman 764-66, 786, 819) that the subject fabric was not suitable for use in wearing apparel is not sufficient to overcome this evidence. As a matter of fact, the fabric was actually used by another purchaser in the manufacture of dresses (Chace 846-48).

The evidence that the subject fabric might reasonably be expected to be used in wearing apparel was supplemented by the testimony of Miss Helen Sierichs, a Commission investigator, that at Newberry's Culver City store (the only store receiving the fabric that was investigated by the Commission), the subject fabric was on a table with other fabrics suitable for use in wearing apparel; that it was not designated as curtain and drapery fabric, either by a label on the bolt or by a sign on the table; and that she saw a customer draping the fabric on a small child, which supports an inference that this customer was at least considering using the fabric as apparel for a child (Tr. 327, 344-45, 350-51, 356-61, 376, 381, 400-01).

Miss Sierichs also testified that curtain and drapery fabric was not identified as such in two other Newberry stores in the Los Angeles area (which had not received the subject fabric). (Tr. 360, 382-83, 392-93, 398-400) She further testified that the managers of the Culver City store and of the Venice Boulevard store both told her that they did not use signs designating the intended use of the fabrics they sold (Tr. 357, 360-61, 397-401). The Venice Boulevard store manager confirmed his statement in writing:

> "We do not specify what the fabric we sell to consumers is to be used for. They may purchase any type fabric in our store and use as they wish." (CX 13)

His explanation on the witness stand that this statement was intended to mean only that customers were not orally told how to use fabrics that they purchased and was not intended to refer to the absence of signs (Ostrander 1009-10, 1030-33) is not persuasive. If respondent had the strict policy claimed and if this policy had been strictly enforced, it is inconceivable that a store manager would have made a contemporaneous statement to a Commission investigator contradicting such policy and practice.

Finally, although the manager of the Rodeo Road store told her that curtain and drapery fabrics were identified by appropriate signs in his store and so stated in writing (RX 20), Miss Sierichs testified that she did not see any such signs (Tr. 360, 397-400).

The undersigned rejects respondent's argument that the testimony of Miss Sierichs regarding the lack of signs should not be credited (RPF, ¶85, pp. 48-49; RB, pp. 24-30; RRB, pp. 6-13). The undersigned does not agree that her testimony

contains inconsistencies and contradictions that make it unworthy of belief or that the contrary statements of Newberry personnel should be credited instead. In crediting the testimony of the Commission investigator in the face of Newberry's evidence on the policies and practices of its stores, the undersigned has taken into account the lack of motivation on the part of the investigator to fabricate her testimony and also the generalized and self-serving nature of respondent's evidence.

In its attempt to discredit the testimony of the Commission investigator, respondent cites the testimony of Harvey Kent, who was manager of Newberry's Culver City store at the time of the Commission investigation (Tr. 1250-1327). Noting that Mr. Kent had not been employed by Newberry since 1971, respondent argues that his testimony lacks any self-interest and is entitled to considerable weight (RB, p. 25). However, the reliability of his testimony, including his failure of memory as to any contact with the Commission investigator, may be tested by reference to an affidavit that he signed (but did not prepare) on February 25, 1970 (CX 16), in which he referred to the visit by an FTC investigator. He did not deny that the conversations testified to by Miss Sierichs took place but merely stated that he did not recall (Tr. 1257, 1266, 1270-74, 1316, 1323-26). As to the sale of the subject fabric, both his testimony and his affidavit simply express Mr. Kent's assumptions as to the manner of display, etc.

Neither is the testimony of Miss Sierichs discredited by the fact that she did not recall the exact layout of the fabric department in the Culver City store, including the number of tables (RRB, p. 9; compare CX 7 with CX 17 and CX 16 C; Sierichs 319-25, 377-78; Kent 1286-89, 1308).

In addition to presenting testimony tending to contradict Miss Sierichs' testimony regarding the use of curtain and drapery fabric signs in the three Los Angeles stores (Kent 1251-56, 1285; CX 16; Ostrander 991-92, 999-1001, 1021; MacIsaac 1061-62, 1067-71), respondent presented extensive testimony and evidence designed to show, first, that there was no basis for any reasonable expectation on its part that the subject fabric might be used in wearing apparel and, secondarily, that even if it could have reasonably expected that the subject fabric would be used in wearing apparel, it took appropriate steps to avoid such use (RPF, ¶ 9-52, pp. 14-36). Respondent's evidence supports a finding that, in general, Newberry and its stores had a policy and practice of segregating curtain and drapery fabrics from wearing apparel fabrics, including the use of signs identifying curtain and drapery fabrics as such (Porter 665-69, 711; Sherman 748-49; Maxson 898-913, 919-925, 932; RX 8 A-C; RX 9; RX 13 A-Z31; RX 16; Ostrander 989-1034; MacIsaac 1052-78; Endicott 1151-65; Crowe 1170-82; Rahlfs 1184-94; Kent 1250-1327).

Moreover, Newberry has had its own testing laboratory, where it tests fabrics for flammability. Before the investigation that led to this proceeding, Newberry required flammability tests only for products it considered subject to the Flammable Fabrics Act -- articles of wearing apparel and fabrics for use in wearing apparel. It did not consider curtain and drapery fabric to be subject to the Act. Since May 20, 1969, as a result of this proceeding, all fabric, regardless of its intended or expected use, is subjected to flammability testing. (Porter 679-81, 709; Sherman 723, 727-29, 794, 820; Maxson 893, 927, 938, 940)

In the opinion of the undersigned, respondent's generalized evidence is not sufficient to overcome the specific testimony of the Commission investigator as to the merchandising of curtain and drapery fabrics in the Culver City store and in two other Los Angeles stores that she inspected. Whatever may have been the policy of Newberry and the practices of other stores with respect to the segregation of curtain and drapery fabric and its identification as such by counter signs, there is substantial evidence that the subject fabric was on a table with other fabrics suitable for use in wearing apparel and that there were no signs designating these fabrics as curtain or drapery fabrics. The evidence indicates that Newberry headquarters did not furnish signs for the subject fabric (Maxson 958; Porter 699; Sherman 756-58; Kent 1282).

Even if the segregation and sign policy had been followed in the Culver City store and the other two Los Angeles stores, this would not necessarily absolve Newberry from a finding of violation. In the view taken by the undersigned, the policy and practice of Newberry with respect to the segregation and identification of curtain and drapery fabrics are not controlling. Although such evidence is relevant to the intent of Newberry, it does not resolve the question of its "reasonable expectation" as to the use to which customers might put the fabric that it sold. 5/ Neither counsel has cited any legislative history as to the intent of Congress in amending the definition of "fabric" to include (subject to certain exceptions not applicable here) any material "which may reasonably be expected to be used" in "any article of wearing apparel." However, if any interpretation is needed, an analogy may be found in the concept of "foreseeability" in the law of negligence. For example, American Jurisprudence states that "in order to impute knowledge of a dangerous thing or

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5/ This is contrary to the opinion expressed by the Commission investigator (Sierichs 407-08).

place, the danger therefrom must have been such as is recognized by common experience or by the special experience of the actor, or such as might reasonably have been expected by a person of ordinary prudence and of ordinary foresight. The risk reasonably to be perceived defines the duty to be obeyed...." (38 Am. Jur., Negligence § 24, pp. 669-70; footnotes omitted) Similarly, Corpus Juris Secundum states that a basic question for determination in a negligence case is "whether or not the injurious consequences that resulted from such negligence are such as should reasonably have been foreseen, or anticipated...." (65 A C.J.S. Negligence § 264, p. 923; see also 65 CJS. Negligence § 109.)

Thus, the concept of "reasonable expectation" embodied in the statute is a concept firmly established in general law. Accordingly, the test of liability here is not whether Newberry actually intended or expected the subject fabric to be used in wearing apparel but whether it could reasonably have foreseen the likelihood of such use. As a retailer engaged in the sale of fabrics, Newberry is chargeable with knowledge that purchasers may use fabrics for purposes other than that intended by the seller -- specifically, that they may use drapery and curtain fabrics to make wearing apparel (supra, p. 7). 6/

Support for the foregoing interpretation is found in the case of Brown v. Chapman, 304 F.2d 149 (9th Cir. 1962). This was a suit against the seller of a hula skirt which ignited while being worn by plaintiff. The case did not directly involve the Flammable Fabrics Act but turned on the question whether there was a breach of an implied warranty as to the suitability of the skirt for the purpose sold. The Court upheld the jury instruction of the District Court that the scope of the implied warranty was such as to include uses "which the seller should reasonably have anticipated at the time of sale."

The knowledge or reasonable expectation imputed to the defendant seller in the Brown case provides a precedent for holding here that the subject fabric was of such a nature that its use in wearing apparel could have been and should have been reasonably expected by Newberry.

In view of the fact that Newberry could have and should have reasonably expected that the fabrics might be used in wearing apparel, the question then arises whether Newberry took

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6/ One former store manager recognized the existence of "dual purpose" fabrics (Kent 1320-22), and another manager referred specifically to the possible use of the subject fabric in wearing apparel (Ostrander 1016-17).

appropriate steps to avoid such use. The undersigned finds that it did not. Although there is credible testimony, albeit self-serving, that Newberry sought to segregate curtain and drapery fabric from wearing apparel fabric, the emphasis that its headquarters personnel and its store managers placed on this policy and practice in their testimony appears to have been colored by hindsight in the light of this litigation.

The difficulty with respondent's position is that it has equated "reasonable expectation" with its subjective intent or expectation. To apply the standard of "reasonable expectation" is not to impose absolute liability, as respondent argues. If respondent's position were to be accepted, it would result in a weakening of the statute rather than the strengthening of the statute obviously intended by the Congress.

Contrary to the position taken by respondent (RB, p. 30), complaint counsel did not have the "burden of proving that the subject fabric was intended or reasonably expected by Newberry to be used in wearing apparel." The question is not whether Newberry actually expected the subject fabric to be used in wearing apparel but whether Newberry could have or should have reasonably expected it to be used for that purpose.

Although respondent argues (RB, p. 9) that the amendment "eliminated the previous subjective standard, and substituted a standard susceptible to proof through objective criteria," it nevertheless undertakes to substitute for the "reasonable expectation" standard the seller's subjective standard, as indicated by the manner in which fabric is purchased, distributed, advertised and placed for sale. Although these are factors to be taken into account, they are not controlling in making a determination as to the seller's knowledge, actual or imputed, concerning the uses to which a given fabric may be put by retail purchasers -- that is, the uses that "may reasonably be expected."

The policy of Newberry respecting the display and identification of its fabrics was a merchandising policy of convenience and of practicality. It is true that Newberry personnel testified that one reason for displaying curtain and drapery fabric separate and apart from wearing apparel fabric was the fact that the former was not subject to the Flammable Fabrics Act whereas the latter was subject to the Act (Porter 669; Sherman 748-49). However, there appear to be no contemporaneous documents expressing this rationale to store managers or to store employees -- no indication whatsoever that the policy was designed to avoid the propensity of consumers to use curtain and drapery fabric in wearing apparel or to put such consumers on notice as to the flammability hazards that might be involved.

There was no recognition by respondent or its personnel that curtain and drapery fabric might be used by purchasers to make wearing apparel. Until the institution of the investigation that led to this proceeding, there appeared to be no recognition on the part of Newberry personnel of the change effected by the 1967 amendment. Newberry continued to operate on the basis that the Flammable Fabrics Act was applicable only to articles of wearing apparel and fabric "which is intended or sold for use in wearing apparel." There is no evidence that any Newberry personnel gave consideration to any change in corporate policy or practice to take account of the 1967 amendment. (Porter 703-06, 709, 715; Sherman 742-43, 778-82, 805-09, 820-25; Maxson 927, 938, 968) In other words, there is no showing in this record that Newberry personnel took any special precaution with respect to any fabric -- including the subject fabric -- which might "reasonably be expected to be used" in wearing apparel.

Even during the course of trial, one of its officials primarily responsible for compliance with federal and state law seemed to be of the view that if Newberry neither intended nor expected that fabric that it sold was for use in wearing apparel, then the Flammable Fabrics Act was not applicable. And this was reflected in Newberry's flammability testing program (supra). Mr. Sherman scoffed at the idea that Newberry had to take into account what purchasers might actually do with fabrics purchased from Newberry, provided only that Newberry did not sell or promote the sale of the fabrics as wearing apparel fabrics, kept such fabrics segregated from wearing apparel fabrics, and designated them by appropriate signs as intended for use other than in wearing apparel. (Sherman 742-43, 778-82, 805-09, 820-25) Notwithstanding this narrow interpretation of the amended statute, once Newberry was alerted to a broader interpretation, immediate steps were taken to subject all fabrics to flammability testing (supra, p. 10).

On the basis of the foregoing findings of fact and legal principles, it is concluded that:

1. Respondent J. J. Newberry Co., a corporation, has sold and offered for sale in commerce and has introduced, delivered for introduction, transported, and caused to be transported in commerce, and has sold or delivered after sale or shipment in commerce, fabrics as the terms "commerce" and "fabric" are defined in the Flammable Fabrics Act, as amended, which fabrics failed to conform to an applicable standard or regulation continued in effect, issued, or amended under the provisions of the Flammable Fabrics Act, as amended.

2. The fabric so sold, offered for sale, etc., was a fabric that respondent J. J. Newberry Co. could and should reasonably have expected to be used in wearing apparel, although it did not intend it to be used for such purposes. Such fabric was a material which may reasonably be expected to be used in wearing apparel and was, therefore, subject to Commercial Standard 191-53, duly established by the Secretary of Commerce pursuant to the Flammable Fabrics Act.

3. The acts and practices of respondent, as herein found, were in violation of the Flammable Fabrics Act, as amended, and the rules and regulations promulgated thereunder, and constituted unfair methods of competition and unfair and deceptive acts and practices in commerce within the intent and meaning of the Federal Trade Commission Act.

CONCLUSIONS

A violation of the Flammable Fabrics Act and of the Federal Trade Commission Act having been found, a cease and desist order is the usual corollary. However, the administrative law judge has concluded that, as a matter of discretion, this complaint should be dismissed without the entry of an order to cease and desist. In view of this disposition, it is not necessary to reach respondent's Second, Third, and Fourth Affirmative Defenses. 7/ Certain elements contained in these defenses have been taken into account, but dismissal is not being ordered on the grounds stated therein.

The primary reason for ordering dismissal is that the basic objectives of this proceeding have already been achieved by the voluntary actions of respondent:

7/ The First Affirmative Defense has been dealt with previously (supra, p. 6). Dismissal makes moot respondent's Request for a Decision Pursuant to Section 3.38(a)(5) of the Commission's Rules of Practice filed on October 24, 1972 (revised copy filed on November 6, 1972), since it relates entirely to the Fourth Affirmative Defense. If a ruling should be required, the administrative law judge would deny the motion for a finding that respondent has established its Fourth Affirmative Defense, although certain subsidiary motions related thereto would be granted.

1. [redacted]ngerously flammable fabric being sold [redacted] respondent was immediately withdrawn from sale.

2. Steps were immediately taken to ensure that respondent will not sell in the future any fabric that fails the applicable flammability standards established under the Flammable Fabrics Act, whether or not such fabric is technically within the coverage of the statute.

Immediately upon being advised that curtain and drapery fabric being sold in 82 of its stores had been found to be dangerously flammable, respondent not only stopped the sale of such fabric and otherwise cooperated fully with the Commission in its investigation (Nash 1230-31, 1235-36 A; Finch 1373), but it expanded its testing program so that all fabric that it sells is subjected to testing for flammability, regardless of the purpose for which it may be sold (supra, p. 10). This action is more than is required under the statute at the present time.

Moreover, in December 1969, respondent executed and submitted an Assurance of Voluntary Compliance (RX 6 A-C).

The violation here found was an inadvertent one under what was at the time a relatively new amendment to the Flammable Fabrics Act. This is a case of first impression in applying the Flammable Fabrics Act to a fabric sold by a retailer for use other than in wearing apparel but of such a nature that it might reasonably be expected to be used in wearing apparel.

In that connection, the administrative law judge has taken into account that the Commission generally has not instituted formal proceedings against retailers for engaging in the sale of flammable fabrics (Tr. 286-88). This has been true even in instances where the articles in question were articles of wearing apparel or fabric intended or sold for use in wearing apparel, so that there was no doubt whatever as to the applicability of the flammability standard prescribed by the Flammable Fabrics Act. This is not to embrace the contention in respondent's Fourth Affirmative Defense that it was improperly singled out for an adjudicative proceeding, but it is a factor properly to be taken into account in determining the necessity for an order to cease and desist herein.

The Commission has stated that "only the most unusual set of facts ... would lead to the conclusion that a cease-and-desist order is not necessary to safeguard the public in the future where it has been shown that a violation of the Flammable Fabrics Act has occurred." This statement was made

in dismissing CCM:Arts and Crafts, Inc., Docket No. 8817 (Final Order, February 16, 1972). Although the instant case is not on all fours with the CCM case, there is present in this case such an "unusual set of facts" as to warrant similar action here. The practice complained of has been stopped and surely stopped without any cognizable likelihood of resumption. Since there is no reason to believe that the respondent will violate the Flammable Fabrics Act in the future, no useful purpose would be served by issuing an order to cease and desist.

Accordingly, upon the basis of the entire record, the administrative law judge concludes that:

1. The Federal Trade Commission has jurisdiction of the subject matter of this proceeding and of the respondent.

2. The complaint herein states a cause of action, and this proceeding is in the public interest.

3. The record herein supports all the allegations of the complaint.

4. The acts and practices of the respondent, as herein found, were in violation of the Flammable Fabrics Act, as amended, and the rules and regulations promulgated thereunder, and as such, constituted unfair methods of competition and unfair and deceptive acts and practices in commerce, within the intent and meaning of the Federal Trade Commission Act.

5. As a matter of discretion, no cease-and-desist order should issue herein because the purposes of this proceeding have already been achieved by the voluntary acts of the respondent.

ORDER

IT IS ORDERED that the complaint herein be, and it hereby is, dismissed.

Donald R. Moore,
Administrative Law Judge

January 22, 1973

UNITED STATES OF AMERICA
CONSUMER PRODUCT SAFETY COMMISSION

In the matter of NEIL ROSE, an individual doing business as QUICKSILVER KITES	CPSC DOCKET NO. 75-18

ORDER

This Order is issued under Section 15(c) and Section 15(d) of the Consumer Product Safety Act, 15 U.S.C. 2064(c) and 2064(d). The Consumer Product Safety Commission accepts the attached Consent Agreement entered into by Neil Rose and the Commission Staff.

I.

IT IS THEREFORE ORDERED that the allegations of the Notice of Enforcement issued in this matter be and they hereby are resolved by this Order and the attached Consent Agreement.

II.

IT IS FURTHER ORDERED that Neil Rose never manufacture for sale, sell, or offer for sale in commerce or in any manner affecting commerce, either individually or doing business as Quicksilver Kites or under any other name or names, the aluminized, striped "Dragon" kite, the aluminized striped "Dragon Cub" kite, or any other metallized kite with tail.

III.

IT IS FURTHER ORDERED that Neil Rose shall give notice, as hereinafter set forth, such notice to begin no later than ten days after service on him of this Order. This notice shall state:

> The Staff of the United States Consumer Product Safety Commission believes that polyester film kites having tails of 25 feet to 45 feet, bearing stripes of aluminum coating, which kites were previously manufactured

and sold by Quicksilver Kites, 1622 Castro Street, San Francisco, California 94114, between March 1, 1975 and May 31, 1975, present a severe shock hazard if entangled in high voltage wires. Neil Rose offers to replace the kites with nonmetallized kites or to refund the purchase price upon proof of purchase of said kites manufactured by Quicksilver Kites. Neil Rose will reimburse consumers who accept this offer for any reasonable or foreseeable expense incurred by them in availing themselves of this offer.

This notice shall not state that anyone else holds a belief contrary to that of the Staff.

IV.

IT IS FURTHER ORDERED that Neil Rose shall take the following actions:

A. Mail a certified letter to each distributor and retailer to whom subject kites were sold by Quicksilver Kites.

B. Mail a press release containing the notice set forth in Paragraph III, supra, to a newspaper in each area where the subject kites were sold.

C. Cause the notice set forth in Paragraph III, supra, to be placed in the classified advertising section of Kite Tales, a magazine published by Kitefilers Publications, Inc., 315 North Bayard Street, Silver City, New Mexico.

D. Cause, by securing free time or by paying for advertising time, the notice to be read a minimum of four times on one or more radio stations in one or more of the areas where the subject kites were sold.

V.

IT IS FURTHER ORDERED that the Staff shall set forth and mail to Neil Rose, on stationery with Commission letterhead, its approval of the notice required by Paragraph III, supra.

VI.

IT IS FURTHER ORDERED that Neil Rose shall recall the metallized polyester film kites with tails that he manufactured. This recall shall commence no later than ten days after service on him of this Order. In effecting this recall, he shall not charge any person (other than a manufacturer, distributor, or retailer) who avails himself of this recall for any reasonable and foreseeable expenses incurred by such person in availing himself of this recall. To effect this recall, Neil Rose shall offer to:

Replace each metallized striped polyester film kite with tail with a nonmetallized polyester film kite similar to the sample sent the Staff of the Commission pursuant to the attached Consent Agreement; or

Refund the purchase price of each metallized striped polyester film Quicksilver kite with tail upon proof of purchase.

VI.

IT IS FURTHER ORDERED that Neil Rose shall file two reports with the Commission in which he shall detail fully and specifically what he has done to comply with this Order. The first report shall be filed with the Commission thirty days after service of this Order on Neil Rose. The second report shall be filed sixty days after service of this Order.

VII.

IT IS FURTHER ORDERED that Neil Rose shall for one year from the date of issuance of this Order:

Notify the Commission at least thirty days prior to any change in his business such as incorporation, dissolution, assignment, or sale which would result in the emergence of a successor partnership or corporation, the creation or dissolution of subsidiaries, or any other change which might affect compliance obligations arising out of this Order; and

Notify the Commission of the discontinuance of his present business or employment or his affiliation with a new business or employment. Such notice shall include a description of his current business or employment as well as a description of his new duties and responsibilities.

By direction of the Commission.

Dated: April 20, 1976

Sadye E. Dunn

Sadye E. Dunn, Secretary

UNITED STATES OF AMERICA
BEFORE THE CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of MAURICE A. DWECK, an individual trading as M. A. DWECK	DOCKET NO. 8893 WHEN BEFORE THE FEDERAL TRADE COMMISSION CPSC DOCKET NO. 75-4

INITIAL DECISION ON FURTHER HEARING

By David H. Allard, Administrative Law Judge:

Leonard H. Goldstein,
Counsel in Support of the Complaint.

Herbert S. Shapiro,
Miami Beach, Florida,
Counsel for Respondent.

CONSUMER PRODUCT SAFETY COMMISSION
MAY 13 3 01 PM '75

PRELIMINARY STATEMENT

Pursuant to an order of the Commission dated July 23, 1975, this matter was remanded to the undersigned. In that order the Commission determined it is "clear that the Federal Trade Commission utilized a test procedure that differs from that specified in the CPSC's clarification of November 13, 1973." The CPSC believing "that the garments that are the subject of this proceeding should be tested in accordance with the provisions of CS 191-53 as clarified by the Consumer Product Safety Commission on November 13, 1973, and that Administrative Law Judge David H. Allard should render an initial decision in this matter on the basis of those test results." The Commission then ordered the Consumer Product Safety Commission staff to test the garments in accordance with the provisions of CS 191-53, as clarified by Federal Register notice of November 13, 1973 (38 FR 31289); and ordered the matter remanded to the Judge "so that a decision may be issued as to whether the garments violate the provisions of CS 191-53 and the Flammable Fabrics Act on the basis of the CPSC tests."

FINDINGS OF FACT

Pursuant to Section 3.24 of the Federal Trade Commission Rules of Practice and the Motion for Summary Decision filed by Enforcement Counsel[1] with supporting affidavit and test reports,[2] the Administrative Law Judge makes the following findings of fact:

(1). On September 30, 1975, the Commission's Atlanta Area Office staff obtained from the Respondent samples of garments that are subject to this proceeding, consisting of thirty (30) boys' cardigan sweatshirts and thirty (30) nylon scarves.

(2). A total of twenty (20) of said boys' cardigan sweatshirts and twenty (20) of said nylon scarves were tested for flammability in the Commission's laboratory in accordance with the provisions of CS 191-53 as clarified by FEDERAL REGISTER notice of November 13, 1973 (38 FR 31289). Said testing was performed by or under the direction of Commission textile technologist Elaine Brophy. See Ms. Brophy's affidavit, CX-25.[3]

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[1] Oral argument on the motion was held on April 7, 1976, at Miami, Florida, for the convenience of Respondent. Earlier attempts by the Judge to resolve the matters informally were fruitless. Moreover, even at the hearing in Miami on April 7, 1976, it appeared that the equivalent of a consent agreement could be agreed to by the parties. TR 82-85. If that course of action were practicable, the parties clearly understood that such a document must reach the Judge's office by May 10, 1976. (Tr. 86.) The Judge ordered that if this were not accomplished by May 10 "I will forthwith issue an initial decision in this proceeding." (Tr. 86.) Such documents were not filed.

[2] The exhibits marked and received into evidence are the following. CX-25: Ms. Brophy's affidavit; CX-26A and B through CX-64A and B: Reports of testing performed on the subject garments by the Commission laboratory in accordance with the provisions of CS 191-53 as clarified by FEDERAL REGISTER notice of November 13, 1973, 38 FR 31289; CX-65A and B through CX-66A and B, and CX 67 through CX-81: Laboratory tests on the subject garments performed by U. S. Testing Co., Inc. and Better Fabrics Testing Bureau, Inc.; CX-82A through CX 82E: Affidavit of Elaine Brophy dated April 1, 1976, outlining procedures and describing the equipment utilized by Consumer Product Safety Commission laboratory personnel in conducting tests for flammability under Commercial Standard 191-53; CX-83: Photograph of brushing device manufactured by United States Testing Co., and used by the Consumer Product Safety Commission in preparing raised surface fabrics for testing for flammability under Commercial Standard 191-53; CX-84: Photograph of flammability tester manufactured by United States Testing Co., and used by the Consumer Product Safety Commission in conducting tests for flammability under Commercial Standard 191-53; and CX-85: Copy of Clarification of CS 191-53 published in the Federal Register on November 13, 1973.

[3] A test report for one of the twenty boys' cardigan sweatshirts was not included only because the laboratory data sheet with the only record of test results for that particular test was misplaced before the test was completed.

(3). Because the test procedure previously utilized by the Federal Trade Commission appears to differ from those utilized by the Consumer Product Safety Commission, the procedures utilized herein when the garments were tested in accordance with the provisions of CS 191-53, as clarified by the Consumer Product Safety Commission on September 13, 1973, are set out in Appendix I. Appendix II is a photograph of the brushing device manufactured by United States Testing Co. which device is utilized by the Consumer Product Safety Commission in preparing raised surface fabrics for testing for flammability under Commercial Standard 191-53. (CX-83.) Appendix III is a photograph of the flammability tester manufactured by United States Testing Co., and utilized by the Consumer Product Safety Commission in conducting tests for flammability under Commercial Standard 191-53. (CX-84.)

(4). Results of testing said boys' cardigan sweatshirts in the Commission laboratory show that eight (8) garments were Class 3 (failing), six (6) garments were Class 2 (intermediate flammability), and five (5) garments were Class 1 (passing).

(5). Results of testing said nylon scarves in the Commission laboratory show that eleven (11) scarves were Class 3 (failing) and nine (9) scarves were Class 1 (passing).

(6). In addition to the testing performed in the Commission laboratory, the staff sent five (5) boys' cardigan sweatshirts and five (5) nylon scarves to both U. S. Testing Co., Inc., Hoboken, New Jersey and Better Fabrics Testing Bureau, Inc., New York, N. Y. to be tested in accordance with CS 191-53, as clarified on November 13, 1973. CX-65A and B through CX-66A and B, and CX-67 through CX-81.

(7). Results of testing said boys' cardigan sweatshirts in the above independent laboratories show that six (6) garments were Class 3 (failing), two (2) garments were Class 2 (intermediate flammability) and two (2) garments were Class 1 (passing). Better Fabrics Testing Bureau, Inc. tested the garments on both the inner surface and outer surface. The results on the outer surface were all passing, whereas three (3) of five (5) garments tested on the inner surface failed. The Administrative Law Judge earlier found that the cardigan sweatshirts have the capacity to be worn with the raised surface (inner surface) exposed.4/ No new or additional probative evidence was adduced to form a rational basis in fact or law to reverse that finding. Such garments properly were tested on the inner surface.

4/ Finding of fact 2B, initial decision of April 13, 1973.

(8). Results of testing said nylon scarves in the above independent laboratories show that four (4) scarves were Class 3 (failing) and six (6) scarves were Class 1 (passing).

The Administrative Law Judge, therefore, necessarily finds that there is no genuine issue as to any material fact in this matter,[5/] and that the garments which are the subject of this proceeding fail to conform to the provisions of CS 191-53 as clarified by FEDERAL REGISTER Notice of November 13, 1973 (38 FR 31289). Since the Flammable Fabrics Act, as amended, addresses itself to protecting the public from bodily harm, the Consumer Product Safety Commission must "be allowed effectively to close all roads to the prohibited goal, so that its order may not be by-passed with impunity." Federal Trade Commission v. Ruberoid Co., 343 U.S. 470, 473 (1952). The remedy in the accompanying order has a reasonable relationship to the unlawful practice here found to exist. It is the only reasonable action which could be calculated to preclude a revival of the illegal practices. Accordingly, the Administrative Law Judge issues the following Order:

ORDER

IT IS ORDERED that respondent Maurice A. Dweck, individually and trading as M. A. Dweck, or under any other name or names, his successors and assigns, and respondent's representatives, agents and employees, directly or through any corporation, subsidiary, division or other device, do forthwith cease and desist from manufacturing for sale, selling, offering for sale, in commerce, or importing into the United States, or introducing, delivering for introduction, transporting or causing to be transported in commerce, or selling or delivering after sale or shipment in commerce, any product, fabric, or related material; or selling or offering for sale, any product made of fabric or related material which has been shipped or received in commerce, as "commerce", "product", "fabric" and "related material"

[5/] Further hearing TR. 23.

are defined in the Flammable Fabrics Act, as amended, which product, fabric, or related material fails to conform to an applicable standard or regulation issued, amended or continued in effect, under the provisions of the aforesaid Act.

IT IS FURTHER ORDERED that respondent notify all of his customers who have purchased or to whom have been delivered the products which gave rise to the complaint, of the flammable nature of said products and effect the recall of said products from such customers.

IT IS FURTHER ORDERED that the respondent herein either process the products which gave rise to this complaint so as to bring them into conformance with the applicable standard of flammability under the Flammable Fabrics Act, as amended, or destroy said products.

IT IS FURTHER ORDERED that the respondent shall, within ten (10) days after service upon him of this Order, file with the Commission a special report in writing setting forth the respondent's intentions as to compliance with this Order. This special report shall also advise the Commission fully and specifically concerning (1) the identity of the products which gave rise to the complaint, (2) the number of said products in inventory, (3) any action taken and any further actions proposed to be taken to notify customers of the flammability of said products and effect the recall of said products from customers, and of the results thereof, (4) any disposition of said products since February 23, 1971 and (5) any action taken or proposed to be taken

to bring said products into conformance with the applicable standard of flammability under the Flammable Fabrics Act, as amended, or destroy said products and the results of such action. Such report shall further inform the Commission as to whether or not respondent has in inventory any product, fabric, or related material having a plain surface and made of paper, silk, rayon and acetate, nylon and acetate, rayon, cotton or any other material or combinations thereof in a weight of two ounces or less per square yard, or any product, fabric, or related material having a raised fiber surface. Respondent shall submit samples of not less than one square yard in size of any such product, fabric, or related material with this report.

IT IS FURTHER ORDERED that respondent notify the Commission at least thirty (30) days prior to any proposed sale of respondent's business, any proposed change in the name under which respondent does business, any change in the form of respondent's business such as incorporation or formation of a business partnership, or the entry of respondent into any other business individually or through a corporation, business partnership, or other form of doing business, or other change in respondent's business status which may affect compliance obligations arising out of this Order.

David H. Allard

May 11, 1976

David H. Allard
Administrative Law Judge

CPSC DOCKET NO. 75-4

APPENDIX I

UNITED STATES OF AMERICA

BEFORE CONSUMER PRODUCT SAFETY COMMISSION

AFFIDAVIT OF ELAINE BROPHY

City of Washington)
) ss
District of Columbia)

ELAINE BROPHY, being duly sworn, deposes states that:

I am a citizen of the United States over the age of twenty-one, residing at 16111 Dorset Road, Laurel, Maryland 20810.

I am the supervisory textile technologist for the Flammability Branch of the Bureau of Engineering Sciences Laboratory Division, within the Consumer Product Safety Commission (Commission). I have held this position with the Commission since its inception in May, 1973. Prior to that I was a textile technologist with the Federal Trade Commission (FTC). My term of employment with the FTC was from June 1970 to May 1973. In preparation of the technologist position, I received a Bachelor of Science degree in textiles from the University of Maryland in 1970. The course work required for this degree covered many aspects of the textile industry with an emphasis on testing procedures.

As supervisory technologist I am responsible for the management and the maintenance of the Flammability Branch, including maintenance of present testing equipment and purchase of new equipment. I am responsible for the performance of all technologists in the laboratory including their training, assignments and evaluation of work. I supervise and/or perform flammability tests on items subject to the Flammable Fabrics Act and the Federal Hazardous Substances Act.

Samples to be tested are packaged and prepared by investigators in the field offices. This involves packing individual samples in plastic bags or boxes and attaching an official CPSC seal (CPSC form 164) across the opening of the package. The following information is recorded on the seal; sample number, date and signature of investigator. Attached to each sample is a sample Collection Report which is completed by the investigator. All samples are sent to the sample custodian and then distributed to the appropriate laboratory within the Commission.

Samples that are submitted to the laboratory are logged in. Each sample then receives a laboratory number in addition to the sample number assigned by the investigator. These two numbers are placed on the sample and each paper associated with that sample. At this time a Test Request Form and a Data Sheet are prepared for each sample.

When all recordkeeping procedures are completed, the sample is then ready to be prepared for testing under the requirements of CS 191-53 (sometime hereinafter "Standard"). The required specimen size is 2" x 6". In the case of plain surface fabrics, two specimens are cut, one in each direction (horizontally and vertically). These preliminary specimens are tested to determine if there is a difference in burning characteristics which is dependent on the direction of the fabric. After completion of these preliminary tests, five specimens are cut in the direction of the fastest burning. If the samples to be tested have a raised fiber surface, the preliminary specimens are not necessary and five specimens are prepared and "the direction of the lay of the surface fibers shall be parallel with the long dimension of the specimens."* (*CS 191-53)

The specimens are then mounted individually in metal specimen holders. The specimen holders consist of two metal plates which support the specimen and are held together by means of clamps. To aid in the support of a specimen during the mounting procedure, it is placed on a carriage equipped with a metal template. In accordance with CPSC's Clarification of Flammability Standard for Clothing Textiles (CS 191-53) published in the Federal Register on November 13, 1973, the measurement of the template is 1/8" thick. Plain surface fabrics are mounted in the specimen holder and then placed in a rack which allows approximately five individual specimens to rest in a horizontal position and handled in a convenient and efficient manner. For raised surfaced fabrics the additional step of brushing the specimen must be performed. This is accomplished by using a brushing device. (Refer to photograph of the brushing device which accompanies this affidavit) The device consists of a base over which the carriage is drawn. A specified brush is hinged to the rear of the base. The mounted specimen is placed on the carriage, the carriage is pushed to the rear of the device, the brush is lowered and the carriage is then moved forward by hand, thereby allowing the bristles to brush the surface of the specimen. The specimens are mounted so that the brushing procedure allows the nap to be raised, i.e., the specimens are brushed against

the lay of the nap. The brushing devices used in the CPSC laboratory were purchased from United States Testing Company, Hoboken, N.J. This brushing procedure is done once for each specimen with a raised fiber surface. These specimens are then stacked horizontally in a rack. By virtue of the thickness of the clamps, the specimens are provided with air space between them when held in the rack.

In accordance with CS 191-53, the specimens are placed in an oven for drying purposes. They are dried for 30 minutes at 105°C. They are then removed from the oven and each rack is placed in a separate desiccator. The desiccators are air tight and moisture tight chambers which allow the samples to cool without regaining moisture. The moisture is controlled by use of silica gel as the desiccant. The specimens remain in the desiccator for 55 minutes at which time they are sufficiently cooled for handling.

A picture of the flammability test chamber used in performing tests under CS 191-53 also accompanies this affidavit. The equipment used by the CPSC laboratory for this test has been purchased from United States Testing Company of Hoboken, N.J. On occassion, repairmen from the manufacturer have serviced the equipment in addition to maintenance provided by CPSC laboratory personnel.

The test is conducted in a draft free environment which is accomplished by means of a sliding glass door which can be shut. The entire assembly, excluding the butane gas supply, is housed in a hood equipped with facilities for removing smoke and fumes after testing. Basically the test chamber consists of a specimen rack which allows the specimen to be held at a 45° angle. A stop cord originates from a spool mounted on the right interior wall of the tester. The thread specified in the Standard is size 50 mercerized, cotton thread. The cord is strung through thread guides on the specimen holder and on the walls and ceiling of the chamber. The first thread guide to be used is the "sky hook" supported from the ceiling; the cord is then threaded through two guides on the specimen holder which allows the thread to be parallel and 3/8" from the specimen holder. The next thread guide is located on the rear wall, and the final guide is on the left wall of the chamber. A weight, which is provided with the equipment at the time of purchase, is applied to the cord as it passes through the final thread guide. The test chamber is also equipped with an automatic one second impingement mechanism which allows the technologist to impinge the flame on the surface of the fabric for one second and record the time of flame spread.

At the end of the conditioning period the samples are tested in the test chamber described above. The gas supply required by the Standard for this test is butane. After the air has been bled from the lines, the gas is ignited and the flame is adjusted to 5/8" from the top of the nozzle to the tip of the flame. The measurement of the flame is checked by a flame measuring device periodically throughout testing and adjusted accordingly. Periodic adjustments are also made of the specimen rack to allow the proper positioning.

The test is now ready to begin. The stop watch which is part of the impingement mechanism is set at 0. The specimens are removed from the desiccator one at a time and placed in the test chamber at a 45° angle. The stop cord is strung through the thread guides as explained above and the weight is attached. The door of the test chamber is closed. The starting lever is activated which simultaneously impinges the flame for one second and starts the mechanism of the stop watch. If the specimen does not burn from the one second impingement, notations to this effect are recorded on the data sheet. If it does burn the length of the specimens, the flame will, in most cases, sever the cord directly above the specimen, thereby releasing the weight which in turn, stops the stop watch. The time is then recorded on the data sheet. If raised fiber surfaced fabrics are being tested, additional observations are made and this information is also recorded. These observations are made on the burning characteristics of the napped surface, the most important one being base fabric ignition or fusion. A partial criteria of a failure in raised fiber surfaced fabrics is base fabric ignition and it must be determined how that ignition was initiated. The base fabric ignition that is required for a failure must be a result of the "propagating surface flame and not the igniting flame."* (*Clarification)

After testing of the five specimens has been completed, an average time of flame spread is computed. Under CS 191-53, the following criteria are provided with regard to test results. Plain surface textiles, Class 1, normal flammability, are those whose average is 3.5 seconds or above. Class 3, rapid and intense burning, are those fabrics whose average is 3.4 seconds or below.

Raised fiber surface fabric, Class 1, is (a) one whose average is above 7.0 seconds or (b) one whose average is 0 - 7.0 seconds with less than 2 specimens having a base fabric ignition. Class 2, intermediate flammability, is a class designated for raised fiber surface textiles only. It includes those fabrics whose average is 4.0 seconds to 7.0 seconds with 2 or more base fabric ignitions. A Class 3 raised fiber surface fabric is one whose average is 3.9 seconds or lower with 2 or more base fabric ignitions.

After the averages have been computed a Class determination is made. If any fabrics are Class 3, an additional 5 specimens are cut in the same direction, prepared and tested according to the steps outlined above. At the end of this phase of testing, a total average is computed. A final determination of failure is made on an average of 10 specimens.

The test is now complete for any fabrics determined to be Class 3. For those fabrics that are Class 1 or 2, they must undergo a dry cleaning and a washing procedure, which is specified in CS 191-53, and the entire process of preparing and testing samples is repeated. After determining the Class of a fabric or garment after laundering, the final result will be based on whichever classification is lowest, the test in the original state or the test after dry cleaning and washing.

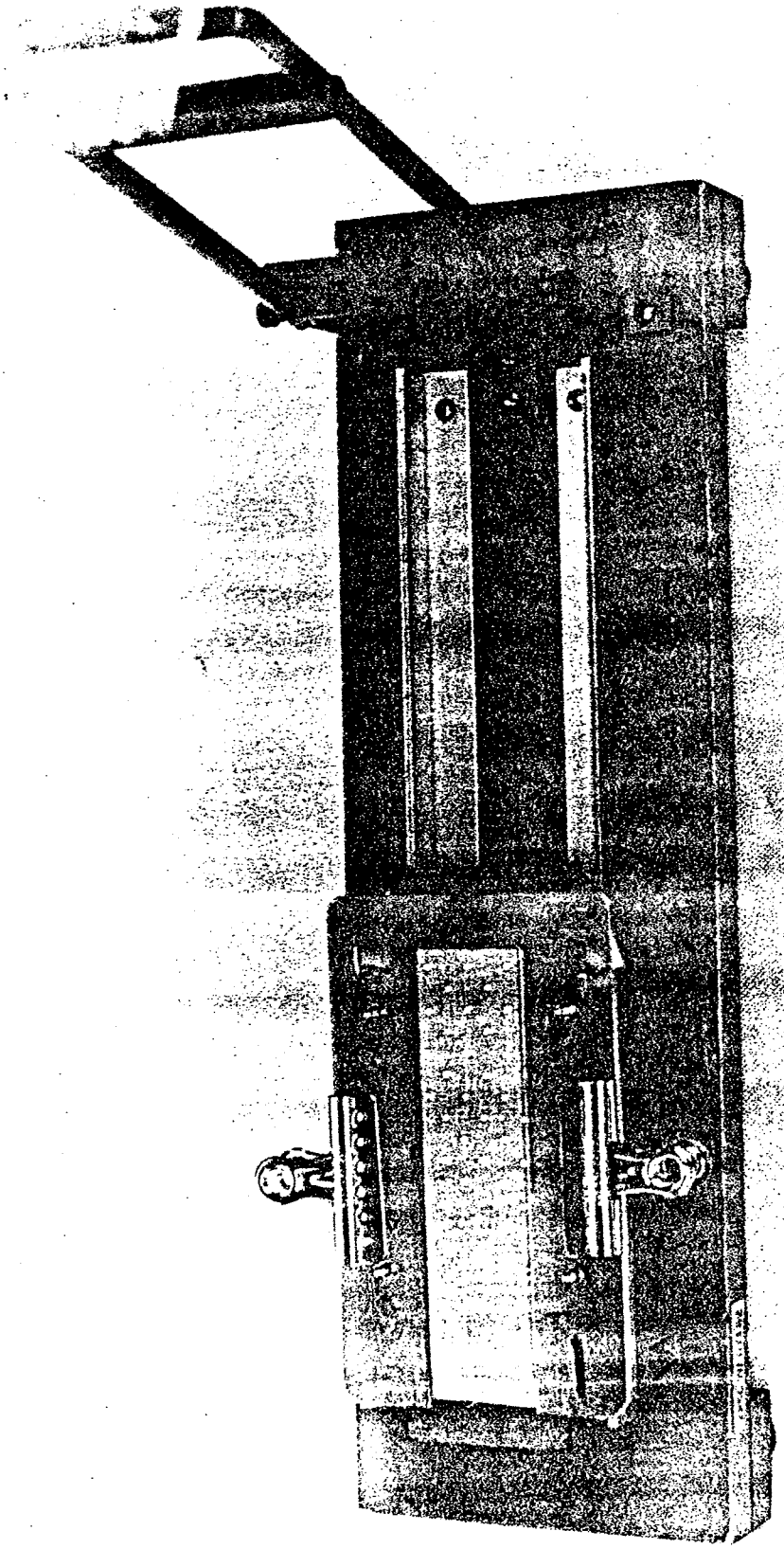
Elaine Brophy
Elaine Brophy

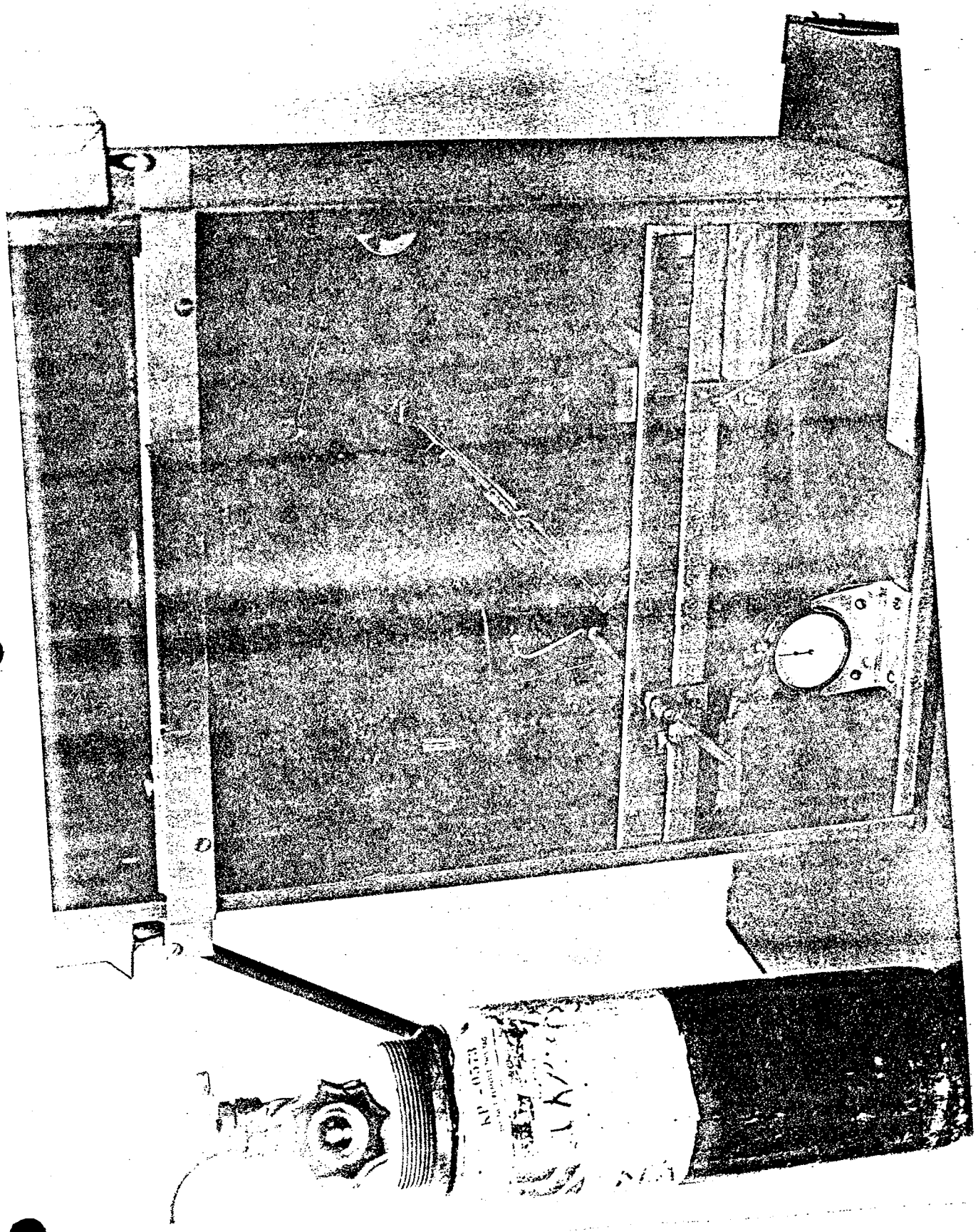
Subscribed and sworn to before me, a Notary Public in and for the District of Columbia, on the 1st day of April, 1976.

Notary Public

My Commission Expires July 14, 1979

APPENDIX II





UNITED STATES OF AMERICA
BEFORE THE CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of CONGOLEUM INDUSTRIES, INC., a corporation	75-3 DOCKET NO. 8896 WHEN BEFORE FEDERAL TRADE COMMISSION OPINION OF THE COMMISSION

COMMISSIONERS: Barbara Franklin, Lawrence Kushner, Constance Newman, R. David Pittle. This matter is before the Commission upon the appeal of respondent from the initial decision of the Administrative Law Judge issued November 12, 1974. In this decision, the Administrative Law Judge held that respondent manufactured, transported and sold quantities of a particular style carpet in interstate commerce which failed to conform to the requirements of the Standard for the Surface Flammability of Carpets and Rugs (DOC FF 1-70), and which violated the Flammable Fabrics Act (15 U.S.C. 1191 et seq.). He entered an order to cease and desist the unlawful practices and to obtain a sample from every roll of the violative style of carpet not previously tested by the Federal Trade Commission for testing by the Consumer Product Safety Commission. Oral arguments were held in this matter on May 20, 1975.

The Commission, having considered the oral arguments of counsel, their briefs and the record in this matter, has concluded that the findings and conclusions of the Administrative Law Judge in the initial decision adequately and correctly dispose of all issues in this case and that the order to cease and desist included in the initial decision is appropriate and proper in all respects.

One issue that was raised during the course of the proceeding was the extent of the Commission's authority to require notification and recall of items that fail to conform to Standards issued under the Flammable Fabrics Act. Part III of the order of the Administrative Law Judge requires that, where samples from rolls of carpet Endureze 9113 are tested under the order and fail to meet the Standard, the respondent must notify purchasers of carpets from those rolls of the flammable nature of the carpet and endeavor in good faith to recall carpet from such rolls when it has not been installed. Carpet from

such rolls that is in the possession of respondent or is returned to respondent must be reprocessed, so as to bring it into conformity with the Standard, or be destroyed by respondent.

The Flammable Fabrics Act is a public safety statute. Its purpose is to protect the public against the unreasonable risk of the occurrence of fire leading to death, personal injury, or significant property damage. Section 3 of the Act provides that, among other things, the manufacture for sale, transportation, or sale of items which fail to conform to a flammability standard issued under section 4 of the Act are unlawful and an unfair method of competition and an unfair and deceptive act or practice in commerce under the Federal Trade Commission Act. Under section 4 of the Act, the Commission may promulgate flammability standards for wearing apparel and interior furnishings when such standards are needed to adequately protect the public. The Flammable Fabrics Act is enforced as provided in section 5 of the Act:

> (b) The Commission is authorized and directed to prevent any person from violating the provisions of section 3 of this Act in the same manner, by the same means and with the same jurisdiction, powers and duties as though all applicable terms and provisions of the Federal Trade Commission Act were incorporated into and made a part of this Act; and any such person violating any provision of section 3 of this Act shall be subject to the penalties and entitled to the privileges and immunities provided in said Federal Trade Commission Act as though the applicable terms and provisions of the said Federal Trade Commission Act were incorporated into and made a part of this Act.

Thus, the "cease and desist" orders provided for in section 5 of the Federal Trade Commission Act (15 U.S.C. 45) are available to the Commission in enforcement of the Flammable Fabrics Act. In addition, section 6 of the Flammable Fabrics Act authorizes the extraordinary remedies of seizure and injunction in appropriate cases.

Neither the Flammable Fabrics Act nor the Federal Trade Commission Act expressly provide the authority to require notification and recall as to items that fail to conform to standards issued under the Flammable Fabrics Act. However, the Commission considers this authority to be inherent. In order to effectively enforce the Flammable Fabrics Act and to carry out the will of Congress, the Commission must be able to be sure, to the greatest extent possible, that the public is not exposed to items that do not comply with flammability standards. In orders to cease and desist from future violations of the Flammable Fabrics Act, in addition to prohibiting the manufacture, sale or transportation of violative items in the future, the Commission must be able to protect consumers and the general public from the continuing risk of injury that is presented by the violative items. The Commission can only adequately protect the public from serious personal injury, death, or property damage associated with the violative items if it can ensure that, to the extent practicable, the public is notified of the flammable nature of the items and that the items are recalled to

the fullest extent practicable from consumers, distributors, and retailers.

By requiring notification and recall, the Commission prevents the continuing danger to the public from items that have been found to violate the Flammable Fabrics Act. If it were otherwise, innocent consumers would be subjected in the future to harmful effects of the past violations of the Act.

The purpose of the notification and recall provisions is not punitive. Although recall and notification may entail some cost to the respondent, the cost involved is only incidental to the need to protect the public.

For the foregoing reasons, the Commission believes that it is appropriate to require notification and recall in this case. Accordingly,

IT IS ORDERED, that respondent's appeal from the initial decision of the Administrative Law Judge be, and it hereby is, denied.

IT IS ORDERED, that the initial decision of the Administrative Law Judge be, and it hereby is, adopted by the Commission as its final decision; and that the order contained in the initial decision be, and it hereby is, adopted and issued by the Commission as its final order;

IT IS FURTHER ORDERED, that the respondent shall, within sixty (60) days after service upon it of this order, file with the Consumer Product Safety Commission, a report, in writing, setting forth in detail the manner and form of its compliance with Part I of the order.

By the Commission.

Sadye E. Dunn

Sadye E. Dunn
Secretary

ISSUED: July 14, 1975

74-5 (6)

UNITED STATES OF AMERICA
BEFORE CONSUMER PRODUCT SAFETY COMMISSION

In the Matter of

CONE MILLS CORPORATION,
a corporation.

FTC DOCKET NO. 8900

INITIAL DECISION

By Eldon P. Schrup, Administrative Law Judge

Melvin I. Kramer,
Phyllis L. Buxbaum,
Counsel Supporting the Complaint.

Charles S. Murphy, Roger W. Langsdorf,
George B. Haddock,
Morison, Murphy, Abrams & Haddock
1776 K Street, N.W.
Washington, D.C. 20006
Attorneys for Respondent.

Of Counsel:

Harper J. Elam III
General Counsel, Cone Mills Corporation
1201 Maple Street
Greensboro, N.C. 27405

RECEIVED
AUG 23 1973
Consumer Product
Safety Commission
Office of the Secretary

STATEMENT OF THE PROCEEDINGS

The complaint in this matter issued by the Federal Trade Commission on October 4, 1972 charges the respondent with violation of the Flammable Fabrics Act, as amended, and the Rules and Regulations promulgated thereunder and as such constituted and now constitutes unfair methods of competition and unfair acts and practices in commerce, within the intent and meaning of the Federal Trade Commission Act.

The Consumer Product Safety Commission under date of May 24, 1973 ordered that Eldon P. Schrup, the undersigned Administrative Law Judge of the Federal Trade Commission be designated and appointed to continue this proceeding before the Consumer Product Safety Commission as provided by Public Law 92-573. The proceeding was ordered to be conducted pursuant to the Rules of Practice of the Federal Trade Commission currently in effect until modified, terminated, superseded, or repealed by this Commission, by a court of competent jurisdiction or by operation of law.

Prehearing conferences were held on November 27, 1972, January 4, January 23 and February 8, 1973. Evidentiary hearings were held on February 20, 21, 26, 27; April 9, 10, 11, 12, 13; May 15, 17; June 12, 13 and 14, 1973.

The official record transcript consists of some 1561 pages of testimony and numerous documentary exhibits, many of complicated technical content. The qualifications of the respective witnesses testifying are set forth in the record transcript of their testimony. Complaint counsel have submitted proposed findings of fact, conclusions, brief and order, together with a reply brief. Counsel for the respondent have submitted proposed findings of fact, conclusions, brief and order, together with a reply brief. A stenographically reported oral argument was held in this matter on August 9, 1973.

All counsel were afforded full opportunity to be heard, to examine and cross-examine all witnesses presented, and to introduce such evidence as provided for under Section 3.43(b) of the Rules of Practice for Adjudicative Proceedings.

The demeanor and the credibility to be accorded all witnesses testifying have been observed and determined in the findings of fact and conclusions made in this Initial Decision.

Proposed findings of fact and conclusions, orders and supporting legal memoranda, replies thereto and oral argument thereon by respective counsel for the parties have been fully considered. All pending motions by the parties not heretofore ruled upon or not granted in substance in this Initial Decision are hereby denied.

Proposed findings of fact and conclusions submitted by the respective parties and not adopted in form or substance in this Initial Decision are hereby rejected as being either irrelevant, immaterial, not necessary of determination and disposition under the pertinent issues, being unduly cumulative, or of insufficient support contra to the greater weight of the substantial credible and reliable factual testimony and exhibits of record in this matter.

After carefully reviewing the entire record in this matter as hereinbefore described and based on said record and the observation of all witnesses testifying, the following findings of fact and conclusions therefrom are made and the following order issued:

FINDINGS OF FACT

1. Respondent Cone Mills Corporation is a corporation organized, existing and doing business under and by virtue of the laws of the State of North Carolina, with its principal place of business located at 1201 Maple Street, Greensboro, North Carolina (Complaint, Para. One; Ans., Para. One).

2. Respondent is engaged in the manufacture, sale and distribution, in commerce, of textile fabrics including but not limited to 100% cotton flannelette Eureka style fabrics, with its principal place of business located at 1201 Maple Avenue, Greensboro, North Carolina (Complaint, Para. One; Answer, Para. One).

3. Respondent is now and for some time last past has been engaged in the manufacture for sale, the sale and offering for sale, in commerce, and has introduced, delivered for introduction, transported and caused to be transported in commerce, and has sold or delivered after sale or shipment in commerce, fabrics, as "commerce" and "fabric", are defined in the Flammable Fabrics Act, as amended, which fabrics are subject to an applicable standard or regulation continued in effect, issued or amended under the provisions of the Flammable Fabrics Act, as amended. Between January 1, 1971 and February 1, 1972 respondent has shipped approximately 29 million yards of Eureka style fabric (CX 242).

This charge of the complaint has been specifically limited to Eureka style cotton flannelette fabric manufactured by respondent prior to February 1, 1972 (Response to Respondent's Motion for More Definite Statement Filed October 25, 1972; statement by complaint counsel at first prehearing conference, November 27, 1972, Tr. 14). In its answer, respondent denied, inter alia, that said fabrics failed to conform to an applicable standard or regulation continued in effect, issued or amended under the provisions of the Flammable Fabrics Act, as amended.

4. The complaint, as so limited by complaint counsel, further alleges that said acts and practices of respondent were in violation of the Flammable Fabrics Act, as amended, and the Rules and Regulations promulgated thereunder, and as such constituted unfair methods of competition and unfair and deceptive acts and practices in commerce, within the intent and meaning of the Federal Trade Commission Act (Complaint, Para. Three). This allegation was denied by respondent in its answer (Answer, Para. Three).

5. The Flammable Fabrics Act (hereinafter referred to as the "Act") was enacted by Congress on June 10, 1953 (67 Stat. 111; 15 U.S.C. 1191). The Act was amended on August 23, 1954 (68 Stat. 770) and again on December 14, 1967 (81 Stat. 568). The 1954 amendment, supra, was enacted to provide for a change in the time of flame spread for plain surface fabrics, as set forth in paragraphs 3.1.1.1 and 3.1.3.1 of Commercial Standard 191-53 which are unrelated to the particular type fabric in this proceeding. The 1967 amendment, supra, amended and revised the Act with the primary purpose being to transfer the power

to amend existing standards or promulgate new standards directly to the Secretary of Commerce. The amended Act also contained a section which continued in effect those standards of flammability existing prior to December 14, 1967. It reads:

> "Sec. 11. Notwithstanding the provisions of this Act, the standards of flammability in effect under the provisions of the Flammable Fabrics Act, as amended, on the day preceding the date of enactment of this Act, shall continue in effect for the fabrics and articles of wearing apparel to which they are applicable until superseded or modified by the Secretary of Commerce pursuant to the authority conferred by the amendments made by this Act." (81 Stat. 574)

6. The Federal Trade Commission was charged by Congress with the responsibility of enforcing and administering the Flammable Fabrics Act, as amended (81 Stat. 568). Section 30(b) of the Consumer Product Safety Act, supra, transferred the enforcement and administration of the Flammable Fabrics Act to the Consumer Product Safety Commission. Until May 24, 1973 the Federal Trade Commission was and the Consumer Product Safety Commission is now the enforcement agency under the Flammable Fabrics Act.

7. The Flammable Fabrics Act. Section 3(b) of the Flammable Fabrics Act (15 U.S.C. 1192; 67 Stat. 111, approved June 30, 1953), under which this proceeding was instituted, provides:

> "The sale or the offering for sale, in commerce, or the importation into the United States, or the introduction, delivery for introduction, transportation or causing to be transported in commerce or for the purpose of sale or delivery after sale in commerce, of any fabric which under the provisions of section 4 of this Act is so highly flammable as to be dangerous when worn by individuals, shall be unlawful and shall be an unfair method of competition and an unfair and deceptive act or practice in commerce under the Federal Trade Commission Act."

Section 4(a) of the Act provides in pertinent part:

> "Any fabric or article of wearing apparel shall be deemed so highly flammable within the meaning of section 3 of this Act as to be dangerous when worn by individuals if such fabric or any uncovered or exposed part of such article of wearing apparel exhibits rapid and intense burning when tested under the conditions and in the manner prescribed in the Commercial Standard promulgated by the Secretary of Commerce effective January 30, 1953, and identified as 'Flammability of Clothing Textiles, Commercial Standard 191-53,' . . . ." (15 U.S.C. 1193; 67 Stat. 112)

8. Commercial Standard 191-53 (CX 214) (hereinafter referred to as CS 191-53), adopted on January 30, 1953, was brought into the Act on June 30, 1953 as a mandatory standard, prescribing the method of testing the flammability of clothing textiles.

Commercial Standard 191-53. To fall within the proscription of the Act, a fabric must be classified as "Rapid and intense burning, Class 3" under Commercial Standard 191-53 */ (CX 214, para. 3.1.3, p. 4). Napped fabrics or other textiles having a raised-fiber surface may be so classified only under the provisions of Paragraph 3.1.3.2, which is as follows:

> "3.1.3.2 Napped, pile, tufted, flocked or other textiles having raised-fiber surface. -- Such textiles in their original state and/or after being dry-cleaned and washed as described in 4.4 and 4.5, when tested as described in section 4, shall be classified as Class 3, rapid and intense burning,

*/ The parties have stipulated that CX 214, certified by the Department of Commerce to be a true copy of Commercial Standard 191-53, is the governing standard in this proceeding (Tr. 348). All references herein to Commercial Standard 191-53 (hereinafter sometimes referred to as "CS 191-53" or "the Standard"), shall be to CX 214.

when the time of flame spread is less than 4 seconds and when the intensity of flame is such as to ignite or fuse the base fabric."

9. Test Reports Relied Upon by Complaint Counsel. In support of the allegations in the complaint, complaint counsel have introduced a number of reports of tests conducted in the Federal Trade Commission laboratory */ and in other laboratories **/ in which some of respondent's cotton flannelette was classified as Class 3 under the Standard. ***/ Of the fabric tested, only that tested in the Federal Trade Commission laboratory was shown by complaint counsel to have been introduced into or transported in interstate commerce (CX 1).

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*/ CX 5, 8, 11, 14, 16, 19, 22, 24, 27, 30, 34, 36, 38, 41, 43, 46, 49, 52, 55, 58, 60, 62, 66, 69, 72, 78, 81, 84, 87, 89, 92, 94, 96, 98, 100, 102, 105, 107, 110, 110A, 112, 115, 118, 121, 124; 124A, 127, 130, 132, 135, 137, 137A, 140, 143, 145, 148, 151, 154, 157, 159, 159A, 162, 165, 167, 170, 172, 177, 183, 183A, 185, 187, 192, 198, 205, 205A, 207, 207A, 210, 213, 213A. [In addition complaint counsel introduced as part of their rebuttal certain experimental tests performed in the Commission laboratory: CX 247-255.]

**/ Better Fabrics Testing Bureau, Inc., CX 239-241; United States Testing Company, Inc., CX 215(c) and (d), 231-238; Cone Mills Corporation, CX 215-230.

***/ Some of these reports, however, include a number of "Class 1" ("normal flammability" [Para. 3.1.1]) and "Class 2" ("intermediate flammability" [para. 3.1.2]) results, neither of which constitute violations of the Standard. See, for example, CX 222, which sets forth 29 Class 1 results and only 1 Class 3 result. Respondent has also introduced into evidence 320 reports by these 4 laboratories with Class 1 or 2 results: Commission laboratory: RX 9-226; Better Fabrics Testing Bureau, Inc.: RX 255-330; United States Testing Company, Inc.: RX 331-345; Cone Mills Corporation, RX 236-346. A summary of the results of both sets of tests by the Commission laboratory, Better Fabrics Testing Bureau, Inc. and United States Testing Company, Inc. (except for the experimental tests in the Commission laboratory) is set forth in Table I following.

10.

TABLE I

Summary of Results of Tests by Federal Trade Commission, United States Testing Company and Better Fabrics Testing Bureau Laboratories on Respondent's Eureka Style Cotton Flannelette Fabric

	FTC 1/	USTC	BFTB
Class 1 & 2	213	78	75
Class 3	80	13	7 2/
Total	293	91	82
% Class 3	27.3%	14.3%	8.5%
SPECIMENS - SUMMARY			
DNI or SFI 3/	208	177	152
SF only 4/	859	1015	399
TSF 5/	746	303	
SFBB 6/	120	101	236
TSFBB 7/	641	154	53
Total	2574	1750	840
% Failing Specimens	24.9%	8.8%	6.3%

Source: RX 357

Notes:

1. Experimental tests by F.T.C. laboratory using sky hook excluded (Stam, Tr. 1495).

2. Including three tests (CX 239, 239(a) and 239(b)) in which Class 3 results were recorded even though less than 10 specimens were tested (Stam, Tr. 1496).

3. "DNI" - Did Not Ignite (Stam, Tr. 1497); "SFI" - Surface Flash at point of Impingement only (Stam, Tr. 1498).

4. "SF only" - Untimed Surface Flash without base burning (Stam, Tr. 1502).

(cont'd --)

5. "TSF" - Timed Surface Flash without base burning (Stam, Tr. 1502).

6. "SFBB" - Untimed Surface Flash with Base Burning (Stam, Tr. 1499).

7. "TSFBB" - Timed Surface Flash with Base Burning (Stam, Tr. 1498).

11. The laboratories upon whose test reports complaint counsel have relied in support of their case (with the exception noted below) made no distinction between the two types of base fabric ignition:

(1) Federal Trade Commission. The laboratory technologists did not distinguish between a base burn caused by the tester flame and an ignition over a wide area caused by the surface flash (Neily, Tr. 262). No records were kept as to the type of base burning which may have occurred (id., Tr. 263). The test reports themselves do not disclose which of these phenomena may or may not have occurred (id.).

(2) Better Fabrics Testing Bureau. All base fabric ignitions were counted as base burns in reporting test results whether such ignitions resulted from the tester flame or the surface flash (CX 242(a)-(b); Baker, Tr. 558-59; Rounds, Tr. 1375). Better Fabrics Testing Bureau did not distinguish between the two types of base burning, though it had made this distinction at the time when the Standard was adopted (Buck, Tr. 1464-65). Mr. Baker, its Director of Research and Development (Baker, Tr. 862-63, 881) and Mrs. Rounds, its Director of Flammability Testing (Rounds, Tr. 1368-69, 1375), each independently concluded that such distinction should be made, but stated that such was not done because the staff at the Federal Trade Commission did not make this distinction in conducting its tests (Baker, Tr. 558-59, 881; Rounds, Tr. 1375). Dr. Buck stated that in his opinion the independent laboratories (Better Fabrics Testing Bureau and United States Testing Company) "have to lean over backwards so that they can't be accused of not doing something that the FTC may also have been doing wrong" (Tr. 1465).

In conducting three of the seven tests reported by Better Fabrics Testing Bureau as failures (CX 239, 239(a) and 239(b)) (all of the tests reporting failures which she conducted), Mrs. Rounds did in fact make the distinction in question between the two types of base burning and kept notes in which she recorded the results of her observations (Tr. 1371), even though she did not indicate such conclusions on the test reports themselves. In the case of all three tests, she concluded that the tester flame, not the surface flash, had been the cause of base fabric ignition whenever there had been a timed surface flash accompanied by base fabric ignition (Tr. 1371-74).

(3) United States Testing Company. No distinction was made in reporting the results of the tests between base fabric ignitions caused by the surface flash and base fabric ignitions caused by the tester flame (CX 242(a)-(b)), even though such distinctions had been made by this company at the time when the Standard was adopted (Buck, Tr. 1464-65).

(4) Cone Mills Corporation. No distinction was made in reporting test results between base fabric ignition caused by the surface flash and base fabric ignition caused by the tester flame (Canter, Tr. 1062-63, 1076-77).

12. CS 191-53, Appendix, pages 14, 15 and 17, states in pertinent part:

> II. Paragraphs 3.1.1.2, 3.1.2.1, and 3.1.3.2
>
> * * * * *
>
> When a fabric having a napped, pile, tufted, or other raised-fiber surface burns, two things may occur: (1) A flame may move across the raised fibers, generally rapidly, and (2) the base fabric itself may be ignited, if the flaming of the raised fibers is of sufficient intensity to cause that effect. However, in some cases, the igniting flame itself may set fire to the base material, causing it to burn rather slowly after the surface flashing of the material has terminated. In such a case there exists a combination of two types of burning which are generally considered to constitute no

unusual hazard. There is a nonhazardous surface flash which has not enough intensity to ignite the base fabric itself, and there is a rather slow burning, or normal combustion of the fabric resulting from ignition by the flame of the tester. The real danger from a fabric with a raised-fiber surface results from a rapidly spreading flame which has sufficient intensity to cause the fabric to ignite the base structure over a wide area. This latter effect can easily be observed in the tester, and should not be confused with occasional freak ignitions of the base fabric as described above, where the surface flash may have little volume or intensity.

The intent can be seen in paragraph 3.1.1.2, where the final clause reads "provided the intensity of the flame is so low . . ."; as well as in the similar clause in paragraph 3.1.3.2.

Therefore, in testing fabrics as directed in paragraphs 3.1.1.2, 3.1.2.1, and 3.1.3.2, the observation of flame intensity should be to establish the fact of whether or not the flaming of the raised-fiber surface causes the base fabric to ignite.

IV. Paragraph 4.7.6

As noted, the intensity or volume of flame in a burning textile fabric was recognized by the standing committee to be one of the important factors relating the manner in which the fabric burns to its potential hazard when used as a garment. It was felt that a flame which had insufficient intensity or volume to ignite the base material itself would not transmit sufficient heat or flame through the fabric to the body. Therefore, the committee provided that, to be considered hazardous, a fabric must not only exhibit rapid flame spread, but also must show sufficient intensity or volume of flame so that the basic fabric structure itself will be ignited by that flame.

* * * * *

In summary, the purpose of 4.7.6 is to require the notation of whether the fabric is ignited or fused by the spreading surface flame to a point where the damage is apparent on the surface of the specimen opposite to that which was ignited.

* * * * *

CLARIFICATION OF "NOTE" ON PAGE 3

* * * * *

The committee further wishes it to be understood that this use of visual observation of flame intensity is a temporary expedient effective until the results of investigations now in progress produce a more scientific and definite test procedure.

13. The principal issue in this case is whether the tests in the reports relied upon by complaint counsel in support of the allegations in the complaint were conducted "under the conditions and in the manner prescribed in" Commercial Standard 191-53. Respondent's position is that material and substantial departures from the Standard were made in conducting and reporting each of these tests, and therefore that none of such tests may properly be used as a basis for a finding of violation. The following are the principal deviations from the Standard cited by respondent:

(1) Failure to determine and record the cause of base fabric ignition;

(2) Excessive brushing resulting from the use of an improper "template" in the brushing device;

(3) Failure to maintain the stop cord in the proper position.

14. Turning to respondent's contention that the tests in the Federal Trade Commission laboratory were not conducted under the conditions and in the manner prescribed in Commercial Standard 191-53 in that there was:

(1) Failure to determine and record the cause of base fabric ignition.

There is in evidence a two-page letter (CX 246A & B) dated November 4, 1966 from Mamie Hardy, Project Manager, Product Standards Section, National Bureau of Standards, U.S. Department of Commerce, to the members of the Standing Committee for CS 191-53, Flammability of Clothing Textiles, for approval of a provision (termed Section 9.3.3) which would discard in a testing procedure a timed surface flash with accompanying base burns caused only by the impingement of the tester flame alone. The letter reads in pertinent part:

> The objection of the Federal Trade Commission is based on the Committee's action in approving a provision (Section 9.3.3) which would discard timed surface flashes with accompanying base burns caused by the impingement of the flame. The National Bureau of Standards agrees that this provision would not be in the public interest inasmuch as it would cause a relaxation in the requirements concerning the flammability of clothing textiles. The Federal Trade Commission is of the opinion that it is not possible in every instance to determine if base burns are caused by the surface flash or by the impingement of the flame.

This letter states only the opinion of the staff employees of the Federal Trade Commission and the National Bureau of Standards and the record does not disclose any official position of approval or disapproval taken on this particular point by the Federal Trade Commission itself, then charged with the enforcement of the Act. This letter further states that the objection was voiced by Mr. Stringer of the Federal Trade Commission while attending a Standing Committee meeting. Mr. Stringer was not made available for direct testimony and cross-examination as to the opposing views attributed to him and his expert qualifications are unknown.

Further, the disapproving views attributed to the employees of the National Bureau of Standards in 1966 were not adopted by the National Bureau of Standards or by the U.S. Department of Commerce (Mackay, Tr. 1272).

The statement that the proposed provision (Section 9.3.3) would not be in the public interest inasmuch as it would cause a relaxation in the requirements concerning the flammable fabrics is open to question. It presupposes that the alleged relaxation stated to follow and adoption of Section 9.3.3 would be improper because CS 191-53 provides for the inclusion of base burns caused by the impinging tester flame rather than by only the surface flash itself. This is one of the points to be determined in this proceeding.

15. The "visual observation" necessary to make the distinction between the two forms of base burning is specifically suggested by the Standard. The Note at the beginning of the Standard suggests that a "visual observation of flame intensity" be made to permit determining the three classes into which a fabric should be placed (CX 214, p. 3). While the Committee noted that "this use of visual observation of flame intensity is a temporary expedient effective until the results of investigations now in progress produce a more scientific and definite test procedure" ("Clarification", CX 214, p. 17), the Standard has never been amended to obviate the need for this observation.

Complaint counsel has sought to rule out the need for making the distinction between tester flame ignition and surface flash ignition on the grounds that it is "difficult" or "impossible" and requires a supposedly "subjective" determination. This Standard, like other standards, requires that a number of judgments must be made by the operator (Buck, Tr. 1460; Rounds, Tr. 1378).

16. At the commencement of the presentation of its case in defense, respondent showed a film depicting various types of ignition of cotton flannelette and other fabrics (RX 1). One sequence showed a timed surface flash followed by base fabric ignition starting at the point of tester flame impingement (described by Mr. Baker at Tr. 536-37 and 553). Another sequence showed a timed surface flash followed by base fabric ignition over a wide area (described by Mr. Baker at Tr. 537). The distinction between the two scenes was obvious, even to the untrained eye. In the first, as Mr. Baker testified, after the surface flash, "the flame proceed[ed] to burn relatively slowly up the fabric, starting at the point where the [tester] flame impinged . . . the flame gradually spreading" (Tr. 536). In the

second, as Mr. Baker narrated the scene, "The burning is general. In other words, from the surface flash itself the entire fabric ignited along its length, not just at the point of flame impingement. */ Notice the blackening here and here, showing the entire back of the material is afire. . . . [T]he entire sample burns up caused by the heat of the surface flash itself" (Tr. 537).

The record transcript of testimony at pages 600-601 shows the following with regard to the testimony of respondent's witness Dr. Sandholzer with 29 years experience at the National Bureau of Standards:

> Q. When you compute your average where you have surface flashes as base burnings, do you make any distinction between a base burn which is caused by the surface flash and a base burn which is caused by the impinging flame?
>
> A. I find it very difficult to make any distinction.
>
> Q. Just because it starts at the base of the fabrics, base burn does not necessarily mean it is the impinging flame that did it. Mostly I do not find it easy to tell which -- whether the impinging flame did it or the surface flash. Of course, if it begins to burn further up the sample, it is obvious. When the base burn begins at the bottom of a specimen, I think it is difficult to tell what started it.
>
> JUDGE SCHRUP: You mean when it starts down adjacent to the impinging flame, then it is very difficult to determine whether ---
>
> THE WITNESS: Whether it is the impinging flame or the burning surface. A few cases it might be clear, but mostly I find it difficult to distinguish which started it.

---

*/ Finding No. 32 proposed by complaint counsel reads: That the film made by respondent for demonstration purposes (RX-1) showed examples of base burns which were clearly caused by the surface flash (Baker, Tr. 861).

By Miss Buxbaum:

Q. Would it make any difference if you did know for a fact that it was the impinging flame that ignited the base fabrics?

A. Well, I suppose that depends on how you read the standard.

Q. Under the standard?

A. If you read the standard without the appendix and consider that statement of the flame is sufficient to burn the base fabric, if you will restrict your interpretation of that flame to the surface flame, it would make a difference.

Q. I don't understand. Under the standard itself, excluding the appendix, would it make any difference whether the base fabric were ignited with the surface flame or the impinging flame?

A. I don't think it is stated very clearly in the standard.

17. Table I set forth in preceding Finding No. 10 herein, records the number of "TSFBB" - Timed Surface Flash with Base Burning found as Class 3 or failing tests in Federal Trade Commission laboratory tests and by the United States Testing Company and the Better Fabrics Testing Bureau. Table I reflects that in a total of 2574 tests conducted in the Federal Trade Commission laboratory, 24.9% were found as failing specimens; of a total of 1750 tests conducted by the United States Testing Company, 8.8% were found as failing specimens; of a total of 840 tests conducted by the Better Fabrics Testing Bureau, 6.3% were found as failing specimens. Table I does not reflect whether or not these failing tests were due to impinging tester flame or the surface flash alone. In this connection, see preceding Finding No. 11 herein.

According to respondent's witnesses Canter, Baker and Buck, in the "vast majority" of tests of cotton flannelette in which there is base fabric ignition, such base fabric ignition is caused not by the surface flash but by the tester flame (Canter, Tr. 1064). Mr. Baker testified that in his experience "the major portion, up to say 98 percent" of base fabric ignition is caused by the tester flame rather than the surface flash (Tr. 859), since "there is not enough surface nap present under ordinary circumstances" for the spreading flame of the nap to ignite the base fabric (Tr. 861). Dr. Buck testified that "in the fabrics I have seen, I would say the proportion of base fabric ignitions stemming from the impinging flame is somewhere over 80 percent, maybe 90 percent" (Tr. 1387). Unless the person conducting the test makes and records his observations as to the cause of base fabric ignition, there is no way in which a determination can subsequently be made that in any case such ignition was caused by the surface flash (Buck, Tr. 1394).

Other than the opinion estimates as expressed by respondent's witnesses, the record does not disclose any confirmed specific figures as to the number of failing or Class 3 results disclosed on Table I which were due solely to the impinging tester flame alone. Neither does the record disclose any confirmed specific figures as to the number of failing or Class 3 results disclosed on Table I which are due only to the surface flash alone.

Section 3.43 of the Federal Trade Commission's Rules of Practice for Adjudicative Proceedings reads:

> §3.43 Evidence.--(a) Burden of proof.--Counsel representing the Commission, or any person who has filed objections sufficient to warrant the holding of an adjudicative hearing pursuant to §3.13, shall have the burden of proof, but the proponent of any factual proposition shall be required to sustain the burden of proof with respect thereto.

18. Respondent's second contention reads:

(2) Excessive brushing resulting from the use of an "improper" template in the brushing device.

Pages 7 and 8, 4.3 "Brushing device" of CS 191-53 state:

4.3.1 This device consists of a baseboard over which a smaller carriage is drawn. This carriage runs on parallel tracks attached to the edges of the upper surface of the baseboard. The brush is hinged with pin hinges at the rear edge of the baseboard and rests on the carriage vertically with a pressure of 150 grams.

4.3.2 The brush consists of two rows of stiff nylon bristles mounted with the tufts in a staggered position. The bristles are 0.016 inch in diameter and 0.75 inch in length. There are 20 bristles per tuft and 4 tufts per inch. A clamp is attached to the forward edge of the movable carriage to permit holding the specimen on the carriage during the brushing operation.

4.3.3 After the specimen has been put in place on the carriage and fastened by means of the clamp, the brush is raised, the carriage pushed to the rear, and the brush lowered to the face of the specimen. The carriage is then drawn forward by hand at a uniform rate.

Figure 3 at page 8 pictures a Brushing device.

No statement providing for a "template" appears in CS 191-53 or its Appendix. No statement appears in the Appendix relating to the "Brushing device." There is a conflict between the picture, Figure 3, at page 8 of CS 191-53 showing the brush resting in part on the specimen holder and the text of 4.3.3 above, which states the brush is to be lowered to the face of the specimen. The Federal Trade Commission laboratory adopted the text of 4.3.3 above.

The 1/8 of an inch template used in the brushing device by the Federal Trade Commission since July 1971 (formerly a template of lower height was used) positions the specimen so that the brush will rest on the "face of the specimen" as prescribed in the text of Section 4.3.3 of CS 191-53 (Neily, Tr. 638-41; Ryan, Tr. 1132). The brushing of a specimen in a position other than by the lowering of the brush "to the face of the specimen" as prescribed in Section 4.3.3 of CS 191-53 and as followed by the Commission in its use of the 1/8 inch template would appear to result in a more severe standard than that portrayed by the picture Figure 3, Brushing device.

During the period between May 25 and September 25, 1972 (Neily, Tr. 1194-95), the Federal Trade Commission laboratory utilized a ragged and uneven brush in its laboratory (Buck, Tr. 677, 698; Baker, Tr. 868; Canter, Tr. 1047-48). The use of this brush had "a gross effect on the amount of napping that took place during the brushing operation" (Baker, Tr. 869), thereby significantly increasing the likelihood of failure (Buck, Tr. 677, 699-700; Baker, Tr. 868-69) in the tests conducted during that period. Of the 80 failing tests conducted by the Federal Trade Commission laboratory during this time period, however, only five and possibly six failing tests were conducted using the ragged and uneven brush (Neily, Tr. 1194-95). Complaint counsel have not proposed a finding of Class 3 results on these tests, respectively CX 110 and CX 110A, CX 145, CX 148, CX 177.

The purpose of brushing is to raise the nap or raised fibers (Buck, Tr. 774), to attempt to reproduce the conditions of normal wear (RX 349(a); Baker, Tr. 1323-24).

At the time when the Standard was adopted, the carriages in the brushing devices sold by United States Testing Company and then in use contained 1/16 inch or 3/32 inch "templates". Mr. Baker testified that the brushing devices then in use had 1/16 inch templates, including that used by United States Testing Company, by whom he was then employed (Tr. 870, 1326), as well as Better Fabrics Testing Bureau (Tr. 870, 1327). The carriage in the brushing device obtained by the Federal Trade Commission "when the standard was promulgated" (Neily, Tr. 638), however, had a template of .091 inch (Buck, Tr. 684), or slightly less than 3/32 inch (.09375 inch).

The witness Buck testified that there was no basis "in the language of the Standard, in the pictures in the Standard, in the practices that were followed when the Standard was adopted or anywhere else for using the template that is an eighth of an inch thick" (Tr. 1440). Similarly, the witness Baker testified that the intent of placing the specimens in the specimen holder for brushing was to recondition the upper surface of the specimens (Tr. 1318), while preventing the brush "from creating new nap" (Tr. 1324). He concluded that the 1/16 inch template was the correct one to be used under the Standard (Tr. 871).

A number of years after the adoption of the Standard, United States Testing Company began to substitute and market a 1/8 inch template for the thinner templates previously placed on the carriages in the brushing device, although there was no official authorization for this modification of the equipment (Ryan, Tr. 1155; Buck, Tr. 691, 1440, 1442).

The 1/8 inch template was first used in the Federal Trade Commission laboratory in July 1971 (Neily, Tr. 638), a few months before the Commission laboratory began to conduct the tests on respondent's product upon which complaint counsel is relying on in this case. There is no evidence in the record that the Commission laboratory in the period of some 17 years in which the lesser height template was used, had ever recorded a Class 3 or failing result on respondent's Eureka style cotton flannelette fabric. */

In the use of the 1/16 inch or 3/32 inch template, the brush brushes the nap and not the base fabric structure (Buck, Tr. 687): "[T]he brush just catches the top layer of nap and loosens the surface fibers only slightly" (RX 348(b)). The effect is "to recondition the upper surface

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*/ See pages 1686-1688 of oral argument held herein on August 9, 1973. These pages deal with the change by the Federal Trade Commission laboratory from the lower height template to the use of the greater height 1/8 inch template.

of the fibrous surface of the textile specimens prior to testing" (Baker, Tr. 1318). Figure 3, page 8 of CS 191-53 shows the ends of the brush to rest partially on the frame of the specimen holder. In response to an inquiry asked of Dr. Buck whether the fact that the ends of the brush rest on the frame, does that take a little pressure off the brushing of the specimen? Dr. Buck answered: "Definitely. It brushes just the nap and not the basic fabric structure" (Tr. 778), thus brushing the raised fibers and not creating any new nap (Buck, Tr. 795; Baker, Tr. 1324).

The 1/8 inch template causes the fabric to be brushed more severely, it makes it more likely that a surface flash will occur; it increases the likelihood that a surface flash will ignite the stop cord; and it increases the possibility that due to increased intensity of the surface flash base burns may more often occur (Buck, Tr. 688). The increase in the severity of the brushing is particularly significant in fabric such as cotton flannelette in which brushing is a sensitive matter (Buck, Tr. 691).

The use of the 1/8 inch template, as opposed to one of the thinner templates, increases the likelihood of failure in a test of cotton flannelette performed under the Standard (Buck, Tr. 689, 1441, 1443, 1452-53; Baker, Tr. 871; Canter, Tr. 1057; Stam, Tr. 1526). The comparable effect of the use of the 1/8 inch template as opposed to the thinner template is set forth in Table I (RX 357). The results shown may be further affected by an incorrect or faulty positioning of the stop cord (RX 357).

The results tabulated on Table I demonstrate that the use of the 1/8 inch template is likely to result in more test failures than the thinner template. The reported test failure rate of the Federal Trade Commission laboratory and United States Testing Company was 27.3% for the former and 14.3% for the latter as opposed to a rate of but 8.5% at Better Fabrics Testing Bureau using the lesser height template. These results appear confirmed by the witness Stam's analysis of the results of the tests of individual specimens by the three laboratories appearing on Table I (Neily, Tr. 638; Buck, Tr. 684; Stam, Tr. 1522-26).

19. Respondent's third contention reads:

(3) Failure to maintain the stop cord in the proper position.

Section 4.2.7 of CS 191-53 states:

4.2.7 Stop cord (G, fig. 2).--This cord, stretched from the spool (P, fig. 2) through suitable thread guides provided on the specimen frame and chamber walls, permits the lacing of the cord in the proper position exactly 5 inches from the point where the center of the ignition flame impinges on the test specimen. The stop cord consists of a No. 50 mercerized sewing thread and measures the rise and spread of the flame from the test specimen.

There is no definition in CS 191-53 or its Appendix of the terms "suitable thread guides" or "the proper position of the stop cord" other than that it must be exactly 5 inches from the point where the center of the ignition flame impinges on the test specimen.

Two forms of thread guides are in use. The Federal Trade Commission laboratory uses "rounded" specimen holder thread guides (Baker, Tr. 875). The National Bureau of Standards (Sandholzer, Tr. 580), the two leading independent laboratories (Baker, Tr. 875-76; CX 242(b)), and apparently every other laboratory performing tests under the Standard (Baker, Tr. 875) use specimen holder thread guides which have the shape of an inverted letter L. This guide is bent at a right angle (Sandholzer, Tr. 580), whereas the guide in use in the Federal Trade Commission laboratory is curved. In addition, the National Bureau of Standards (Sandholzer, Tr. 582-83; Ryan, Tr. 1172) and the two leading independent laboratories (CX 242(b)) use an additional thread guide, known as the "sky hook", for the purpose and with the effect of maintaining the stop cord in a uniform position parallel to the specimen at the top of the thread guides (Sandholzer, Tr. 582-83; RX 2(b)).

It has been stipulated that the rounded thread guides, which are shown in both Figure 2 (p. 6) and Figure 3 (p. 8) of the Standard (CX 214) and which were apparently in use when the Standard was adopted, meet the requirements of the Standard, and that the Standard does not require the use of a sky hook (Tr. 814-15, 828-30). Mrs. Neily testified, and the witnesses who observed test demonstrations in the Federal Trade Commission's laboratory agreed that in the tests conducted in such laboratory the stop cord is located at the top of the "rear" thread guide, precisely 5/16ths of an inch from the specimen holder, but that the position on the "front" thread guide is "variable". Sometimes it is "near the bottom" of the front thread guide; sometimes it is "near the middle" (Neily, Tr. 239). Mr. Baker referred to "the random location of the stop cord in the performance of the test itself" in the Commission laboratory (Baker, Tr. 871). "It varied essentially from zero to three-eighths of an inch [from the specimen] on the near side or operator side of the equipment, to three-eighths on the far side" to form a "triangular configuration" (Baker, Tr. 871-72). Accord: Buck, Tr. 724; Canter, Tr. 1038. Mrs. Neily expressed the opinion that the stop cord is always in the proper position "no matter what the height", be it the top, middle or bottom on the near or front side (Tr. 240).

Dr. Sandholzer of the National Bureau of Standards testified as follows to tests performed in the laboratory of the National Bureau of Standards at Transcript pages 581-84; 589-90; 592-93; 602-03:

> Q. In the tests which you conduct under CS-191-53 where is the stop cord positioned on the thread guide?
>
> A. It is at the top of the thread guides that we have on the sample holders now and it is three-eights of an inch above the top plate, I believe, now.
>
> Q. Is it in a parallel position?
>
> A. Yes.

Q. What is the reason that it is placed in that position at the top of the thread guides in a parallel position?

A. We believe that that is the intent of the standard, that it should be parallel.

Q. What is the basis for that opinion?

A. Because the guides were made the same height, one on each side, at the same height, and in any of the meetings or discussions of the standard that I ever heard no discussion was ever brought up about it not being at the top and I am certain that they intended it to be level across, in a level position across the specimen.

* * * * *

Q. Dr. Sandholzer, in the tests which you conduct how do you make sure the stop cord is maintained at the top of the thread guides?

A. We at present have a hook in the end of our cabinet which is above the top of the specimen holder in the back, so that the cord comes down to the specimen holders from above, which keeps it at the top of the pin.

Q. In your opinion is the use of that device consistent with the standards?

A. Yes.

Q. In your opinion are the tests run with the use of that device in accordance with the standard?

A. Yes.

Q. In your experience, Dr. Sandholzer, can the stop cord be kept at the top of the thread guides parallel to the specimen without the use of this extra hook?

A. With enough care, yes.

* * * * *

JUDGE SCHRUP: The absence of the sky hook, would that invalidate the test procedure?

THE WITNESS: Well, no. Not according to the standards because it was not stated definitely in the standard just where the thread had to be positioned. But I am sure they assumed it would be at the top.

* * * * *

Q. You said also that you do not believe it can be parallel without the L-shaped hooks?

A. Yes, I do. I said with enough care you can make it parallel.

JUDGE SCHRUP: In the absence of the skyhook?

THE WITNESS: Yes.

By Miss Buxbaum:

Q. When did you begin to use a skyhook and the L-shaped hooks?

A. As for date I cannot give you an exact date, but when we observed sometimes it slipped down one side a little.

Q. You observed that?

A. If we were not very careful, we found it was inclined to slip down on one side.

JUDGE SCHRUP: You are talking about the stop cord, without the use of appropriate care it could not be exactly parallel to the specimen?

THE WITNESS: That's right. It might not.

* * * * *

JUDGE SCHRUP: Let me ask you this again and maybe the witness can answer this, but I would like to be informed. Now there are occasions apparently where the stop cord is parallel to the specimen and other cases where it is not parallel to the specimen. What difference does that make in the validity of the test?

MISS BUXBAUM: I would like to ask the witness to answer that question.

THE WITNESS: For most of the fabrics, probably it would not make any difference in actual practice. I think there would probably be occasions when it might make a difference.

JUDGE SCHRUP: What type of fabric would that involve?

THE WITNESS: Raised surface fabric.

JUDGE SCHRUP: Is that the type of fabric involved in this proceeding?

THE WITNESS: I believe so.

Mr. Ryan, also of the National Bureau of Standards, testified that in his opinion, "the correct interpretation of the Standard is to position the 'stop cord' parallel to the specimen surface and at the top of the guides" (Tr. 608-09).

There is in evidence RX 2, being a letter dated September 22, 1972 from Richard O. Simpson, Acting Assistant Secretary for Science and Technology, U.S. Department of Commerce, providing information to the Honorable Sam J. Ervin, Jr., Chairman, Committee on Government Operations, U.S. Senate, in response to an inquiry made by the Senator relative to the flammability testing of cotton flannel produced by Cone Mills Corporation. The letter from Mr. Simpson reads in pertinent part:

> Question 1: "To the best of your knowledge, is there a difference in either the method or equipment used in the FTC laboratory in making flammability

tests on cotton flannel from the methods and equipment used by -- (a) The Bureau of Standards; (b) The United States Testing Company, the Better Fabrics Testing Bureau; or (c) The textile industry generally?"

(a) Testing at the National Bureau of Standards is usually conducted using the "sky hook" referred to in the Cone Mills letters. It is our understanding that the Federal Trade Commission does not use this modification. The "sky hook" provides a more reproducible string-up in that the thread is positioned at the top of the thread guide on the specimen holder and parallel to the specimen surface. We also understand that the FTC does not position the "stop cord" parallel to the specimen surface, but positions the "stop cord" in a triangular configuration. Although CS 191-53 is ambiguous on correct "stop cord" positioning (see paragraph 4.7.4 of CS 191-53 (copy enclosed)) and several "stop cord" positions could result from this ambiguity, it is our opinion that the correct interpretation of the standard is to position the "stop cord" parallel to the specimen surface and at the top of the guides.

(b) (c) We have no valid information for comparing FTC equipment or procedures to those used by the United States Testing Company, the Better Fabrics Testing Bureau; or the textile industry in general.

Question 2: "In testing cotton flannel for flammability in the Bureau of Standards, is the 'stop cord' positioned parallel to the specimen?"

Yes, parallel and at the top of the guides.

Question 3: "If the 'stop cord' is not in a parallel position, is the likelihood of test failures increased in the case of cotton flannel?"

> Conducting a test in the CS 191-53 apparatus with the "stop cord" not parallel to the surface of the specimen could either increase or decrease the likelihood of failure, depending on the nature of the fabric being tested. More important than parallelism is the distance the "stop cord" is away from the fabric surface. Neither of these parameters is specified in CS 191-53. Because of this and several other ambiguous features CS 191-53, we have initiated the development of a revision and clarification of this standard.
>
> Cotton flannel (and other napped fabrics) frequently exhibit a low but rapidly spreading flame (surface flash). Such flames have been observed to pass under and not burn the "stop cord" where the latter is parallel and at the maximum possible height from the fabric. Putting the "stop cord" nearer to the surface, either parallel and near all across or not parallel and nearest at one end, increases the likelihood that such flames will burn the "stop cord". If the fabric base burns rather than surface flashes, the precise positioning of the "stop cord" for this type fabric, will probably have little effect on the test results.

Dr. Buck testified "There is absolutely no possible shadow of doubt in my opinion that the cord must be parallel to the surface of the specimen holder and the specimen and at that full distance, 3/8ths of an inch from the base of the top specimen holder" (Tr. 732). Dr. Buck further pointed out that "No one in his right mind would devise a test in which one of the critical parameters could be varied up or down, thereby giving you a spread of results" (Tr. 1453).

Mr. Baker testified that the correct position of the stop cord is at the top of the guides, parallel to the face of the fabric (Tr. 872), and that this was also the intent of the other members of the committee which developed the

Standard (Tr. 874). He testified that the reason for having a thread guide of a certain height was to put the stop cord at that height (Tr. 872-73). In his opinion, it could not have been the intent of the Standard or of the committee which developed the Standard either "that the stop cord be placed near the bottom of one of the thread guides" or "that the stop cord be placed in variable positions so that it would not be in the same position each time" (Tr. 875).

20. Complaint counsel's contention in support of the variable position followed in the Commission laboratory appears to be that since it is allegedly impossible to maintain the stop cord at the very top of the rounded thread guides in use in the Commission laboratory without the aid of a "sky hook", no effort must be made to keep it as close to the top as possible, and consequently that the cord may be allowed to slip down to the very bottom of the front thread guide. It is by no means clear that it is in fact "impossible" to maintain the stop cord at the apex of the rounded thread guide in a parallel position, even without a sky hook.

If it is not in fact possible to maintain the stop cord at the absolute top of the rounded thread guides without a sky hook, it by no means follows that the stop cord should be permitted to slip down to the middle or the absolute bottom of the front thread guide, or that the stop cord should be permitted to rest in a different position each time.

Dr. Buck testified that it could be kept "very near" to a parallel position (Tr. 817). Mr. Canter agreed that the stop cord could be kept "essentially in a parallel position" (Tr. 1053). Mrs. Neily testified that the highest she could place the cord was 3/16 of an inch from the specimen holder (Tr. 1196). Mr. Baker testified to having observed that Mrs. Neily had been in fact able to maintain the cord essentially at the top of the near guide in a demonstration performed by her which he had witnessed (Tr. 879).

The record does not show the exact position of the stop cord or how it may have varied in the number of the actual tests conducted in the Federal Trade Commission laboratory on the respondent's Eureka style fabrics.

Mr. Ryan, although stating that "it is theoretically impossible for the thread to stay at the top of a rounded guide" (Tr. 1137) (the position, he testified, was "correct" under the Standard [Tr. 608-09]), conceded that the thread could be placed somewhere in the upper 1/8 of an inch and possibly within the upper 1/16 (Tr. 1168). The difference between the absolute top and the position in which Mr. Ryan believed the cord could be maintained is only 1/16 or at the most 1/8 of an inch, in contrast to a "possible difference of five-sixteenths of an inch" (Ryan, Tr. 618) between the top of the thread guide and the bottom, where it is sometimes allowed to lie in the Commission laboratory.

Assuming that the stop cord cannot be maintained at the top of the rounded guides without a sky hook, it would clearly appear that the stop cord should be uniformly maintained. Only in this way will consistent, reproducible results be achieved and will the intent of the framers of the Standard be realized.

Mr. Canter stated that he agreed with complaint counsel's statement on cross-examination that it was "a fact that you would get more failures if the thread were closer to the fabric" than at the top of the thread guides parallel to the specimen (Tr. 1098). (See also, Tr. 1054-55). He also testified that in demonstration tests which he had observed in the Commission laboratory, in which the stop cord had been "practically touching the test specimen" (Tr. 1038), some "low volume surface flashes . . . were actually burning that stop cord" (Tr. 1039).

As shown in RX 357, Table I, of the specimens tested in the Commission laboratory, there were 1,387 which had timed surface flashes (746 timed surface flashes only [TSF] and 641 timed surface flash plus base burning [TSFBB]). (Stam, Tr. 1527) This constitutes 54% of the total of 2,574 specimens tested in the Commission laboratory (id.) In the United States Testing Company laboratory, there were only 457 timed surface flashes (303 TSF and 154 TSFBB) or 26% of the Total of 1,750 specimens tested (id.) The rate of timed surface flashes in the Commission laboratory, which did not maintain the stop cord in the proper position, was over twice as high as the rate at United States Testing Company which did. In terms of final test results, 14.3% of the tests in the United States Testing Company laboratory were recorded as failures, whereas 27.3% were alleged to be failures in the Federal Trade Commission laboratory (RX 357; Table I).

21. Complaint counsel's proposed Finding No. 36 reads:

> 36. That Commission laboratory test reports identified as CX-5, CX-8, CX-11, CX-14, CX-16, CX-19, CX-22, CX-24, CX-27, CX-30, CX-34, CX-36, CX-38, CX-41, CX-43, CX-46, CX-49, CX-52, CX-55, CX-58, CX-60, CX-62, CX-66, CX-69, CX-72, CX-78, CX-81, CX-84, CX-87, CX-89, CX-92, CX-94, CX-96, CX-100, CX-102, CX-105, CX-107, CX-112, CX-115, CX-118, CX-121, CX-124, CX-127, CX-130, CX-132, CX-135, CX-137, CX-140, CX-143, CX-151, CX-154, CX-157, CX-159, CX-162, CX-167, CX-170, CX-172, CX-183, CX-185, CX-187, CX-192, CX-198, CX-205, CX-207, CX-210 and CX-213 all showed Class III results and were performed in accordance with CS 191-53 in all material respects.

The record in this proceeding refutes and does not permit a finding that "All showed Class III results and were performed in accordance with CS 191-53 in all material respects." For one, among other examples, see Findings Nos. 7, 8, 9, 10, 11, 12, 15, 16,17, supra.

Respondent's three principal contentions are:

> (1) Failure to determine and record the cause of base fabric ignition;
>
> (2) Excessive brushing resulting from the use of an improper "template" in the brushing device;
>
> (3) Failure to maintain the stop cord in the proper position.

If respondent's three contentions are accepted as being adequately supported by the credible, reliable record evidence, it follows that the Class 3 results reported on respondent's Eureka Style fabrics have been shown to be faulty and erroneous. If that be so, it further follows that the dictate of Section 3(b) of the Flammable Fabrics Act has not been violated and the complaint in this proceeding should be dismissed for failure of proof.

Section 3(b) of the Flammable Fabrics Act prohibits "any fabric which under the provisions of Section 4 of this Act is so highly flammable as to be dangerous when worn by individuals." Section 4(a) of the Flammable Fabrics Act makes mandatory the employment of Commercial Standard 191-53 under which fabrics of "rapid and intense burning, Class 3" may be so classified and prohibited. Complaint counsel have the burden of proof to show that the interpretation given CS 191-53 by the laboratory staff of the Federal Trade Commission is not only correct, but further, that the test procedures used are free of material fault and erroneous conclusions in making the classification that respondent's Eureka style flannelette fabric is of "rapid and intense burning, Class 3." This required showing is not supported by the preponderant credible and reliable evidence of record.

The stenographically reported oral argument held on August 9, 1973 discloses various points raised by complaint counsel and counsel for respondent. Respondent's principal three contentions were fully discussed by counsel for the parties at pages 1634-75 of the transcript. Full consideration was given to the oral argument on the facts at these pages in the making of all the findings of fact herein.

The so-called variability factor which may occur in the structure of the fabrics tested may influence the end results as to whether or not a fabric is to be classified as "rapid and intense burning, Class 3." The presence or absence of this factor, however, does not excuse the nonemployment of proper testing procedures prescribed as mandatory by Commercial Standard 191-53. This problem is discussed in the oral argument by counsel for the parties and appears at pages 1684-85; 1688-94 of the transcript.

CONCLUSIONS

1. The Federal Trade Commission had and the Consumer Product Safety Commission now has jurisdiction over the parties and the subject matter and this proceeding is in the public interest.

2. Based on the findings of fact made in this proceeding, the complaint must be dismissed for failure of proof under the Federal Trade Commission Rules of Practice for Adjudicative Proceedings, Section 3.43 Evidence.--(a) Burden of proof.

ORDER

IT IS ORDERED that the complaint in this proceeding be, and it hereby is, dismissed for failure of proof.

Eldon P. Schrup
Administrative Law Judge

August 28, 1973