Substantial Product Hazard List: Hand-Held Hair Dryers

AGENCY: Consumer Product Safety Commission.

ACTION: Notice of proposed rulemaking.

SUMMARY: The Consumer Product Safety Improvement Act of 2008 ("CPSIA"), authorizes the United States Consumer Product Safety Commission ("Commission") to specify, by rule, for any consumer product or class of consumer products, characteristics whose existence or absence shall be deemed a substantial product hazard under certain circumstances. In this document, the Commission is proposing a rule to determine that any hand-held hair dryer without integral immersion protection presents a substantial product hazard.

DATE: Written comments in response to this notice must be received by ________ [insert date that is 75 days after publication in the Federal Register].

ADDRESSES: You may submit comments, identified by Docket No. CPSC-2010-0042, by any of the following methods:

Electronic Submissions
Submit electronic comments in the following way:
Follow the instructions for submitting comments. To ensure timely processing of comments, the Commission is no longer accepting comments submitted by electronic mail (e-mail) except through www.regulations.gov.

Written Submissions

Submit written submissions in the following way:

Mail/Hand delivery/Courier (for paper, disk, or CD-ROM submissions), preferably in five copies, to: Office of the Secretary, Consumer Product Safety Commission, Room 820, 4330 East West Highway, Bethesda, MD 20814; telephone (301) 504-7923.

Instructions: All submissions received must include the agency name and docket number for this rulemaking. All comments received may be posted without change, including any personal identifiers, contact information, or other personal information provided, to http://www.regulations.gov. Do not submit confidential business information, trade secret information, or other sensitive or protected information electronically. Such information should be submitted in writing.

Docket: For access to the docket to read background documents or comments received, go to http://www.regulations.gov.
FOR FURTHER INFORMATION CONTACT: Randy Butturini, Office of Hazard Identification and Reduction, Consumer Product Safety Commission, 4330 East-West Highway, Bethesda, MD 20814; telephone (301) 504-7562, rbutturini@cpsc.gov.

SUPPLEMENTARY INFORMATION:

A. Background and Statutory Authority


Section 223 of the CPSIA expands section 15 of the Consumer Product Safety Act ("CPSA") to add a new subsection (j). That subsection delegates to the Commission authority to specify by rule for a consumer product or class of consumer products, characteristics whose presence or absence the Commission considers present a substantial product hazard. Those characteristics must be readily observable, have been addressed by an applicable voluntary standard that has been effective in reducing the risk of injury, and there must be substantial compliance with the voluntary standard. 15 U.S.C 2064(j).
Underwriters Laboratories ("UL") Standard for Safety for Household Electric Personal Grooming Appliances, UL 859, is a voluntary standard that specifies immersion protection requirements for certain household appliances, including hand-held hair dryers. The current immersion protection provisions have been in effect since 1991. UL Standard for Safety for Commercial Electric Personal Grooming Appliances, UL 1727, specifies immersion protection requirements for grooming appliances, including hand-held hair dryers, which are “intended for use by qualified personnel in commercial establishments such as beauty parlors, barber shops, or cosmetic studios.” UL 1727 requires the same integral immersion protection as UL 859. Such “commercial” hand-held hair dryers may be consumer products if they are available for sale to, or use of, consumers.

The Commission is proposing a rule to deem any hand-held hair dryer without integral immersion protection, as specified in UL 859 or UL 1727, a substantial product hazard. Hand-held hair dryers, most often used in bathrooms and near water, are subject to accidental immersion during their use. Section 15(a) of the CPSA defines “substantial product hazard” to include, 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. 1064(a)

On November 25, 2002, CPSC’s Director of the Office of
Compliance sent a letter to manufacturers and importers of
hand-held hair dryers stating that CPSC staff considers
hair dryers available for sale to, or use by, consumers to
present a substantial product hazard if they do not have
immersion protection as required by UL 859. The letter
urged manufacturers and importers to assure that their
hand-held hair dryers provide immersion protection. The
letter noted that “[s]ome firms market hand held hair
dryers that they contend are intended for professional use
only, that is, for use by professionals in hair salons.
However, the staff also considers ‘professional’ hair
dryers that are available for sale to consumers and that
fail to provide immersion protection to be defective and to
present a substantial product hazard.”

B. The Product

A hand-held hair dryer is a portable electrical
appliance with a cord-and-plug connection. Typically, they
have a big barrel-like body with a pistol grip handle.
Frequently, such hair dryers have two control switches or
knobs: one turns the unit on and off and may allow the user
to adjust the blower speed; the second adjusts the heat setting, often “cool/low/high.” Hand-held hair dryers routinely contain open-coil heating elements that are, in essence, uninsulated, electrically energized wires across which a fan blows air. These dryers are typically used in bathrooms near water sources, such as sinks, bathtubs, and lavatories. Being uninsulated, if the heating element were to contact water, an alternative current flow path could easily be created, posing the risk of shock or electrocution to the user holding the dryer (or retrieving it after dropping it into a sink, bathtub, or lavatory).

The proposed rule would define “hand-held hair dryer” as “an electrical appliance, intended to be held with one hand during use, which creates a flow of air over or through a self-contained heating element for the purpose of drying hair.”

The characteristics of a hand-held hair dryer with integral immersion protection are readily observable. The power cord of a hand-held hair dryer with integral immersion protection has a large block-shaped plug that incorporates a type of circuit interrupter which is either a Ground Fault Circuit Interrupter (“GFCI”), an Appliance Leakage Circuit Interrupter (“ALCI”), or an Immersion Detection Circuit Interrupter (“IDCI”). The plug usually
also has buttons labeled “Test” and “Reset.” If the hair dryer should become wetted or immersed in water enough to cause electrical current to flow beyond normal circuitry, the circuit interrupter will sense the flow and, in a fraction of a second, disconnect the hair dryer from its power source, preventing serious injury or death to a consumer.

An estimated 23 million units of hand-held hair dryers are sold annually. The staff does not know exactly how many companies supply hand-held hair dryers. Sixteen suppliers of hand-held hair dryers are listed in the UL Online Certifications Directory as being in compliance with UL 859. An additional 42 companies are listed in the Intertek ETL Listed Mark Product Directory as complying with the UL 859 standard. Ten firms are listed to the UL 1727 standard on UL’s Online Certifications directory and another four firms are listed in the Intertek ETL Listed Mark Product Directory as being in compliance with UL 1727. In 2007, the three largest suppliers listed accounted for approximately 92% of domestic hand-held hair dryer sales.

C. The Risk of Injury

The Commission has reports of 104 deaths and 43 electric shock injuries due to hair dryer immersion/water contact from 1984 to 2004. Of the 104 electrocutions
resulting in death, the most incidents (91) occurred during 1984-90 (before the current immersion protection provisions of UL 859 took effect) compared to 12 during 1991-97, and one during 1998-04.

During 1980-86, before the introduction of the initial UL requirements for hair dryers, a total of 110 electrocutions (15.7 annual average) were reported due to hair dryer immersion/water contact. In 1987, UL implemented a change to voluntary standard UL 859 to require immersion protection for hand-held hair dryers if the dryer switch was in the “off” position. During 1987-90, a total of 39 such electrocutions (9.75 annual average) were reported. In 1991, a revision to the UL standard requiring immersion protection in the “off” as well as “on” position took effect. During 1991-97, after the enhanced standard took effect, a total of 12 electrocutions (1.71 annual average) were reported and three electrocutions (0.3 annual average) were reported during 1998-2007, a period when most hair dryers made before 1991 were likely to be out of use. Reporting is ongoing for the years 2006 and 2007.

D. Voluntary Standards

Hand-held hair dryers are included in UL 859, Standard for Safety for Household Electric Personal Grooming
Appliances. In 1985, UL revised this standard to require protection against electrocution when a hair dryer is plugged into an electrical outlet, with its switch in the “off” position, and is immersed in water. The requirement took effect in October 1987. Between 1987 and 1990, the average number of reported deaths from hair dryer immersion/water contact dropped to approximately 10 deaths per year.

In 1990, the National Electrical Code (NEC) (Article 422-24, 1990 edition) instituted requirements for protection against electrocutions from immersion of hair dryers when the switch is in either the “on” or the “off” position.

In 1987, UL, in keeping with NEC, revised its immersion protection standard to require that “A hand-supported hair-drying appliance (such as a hair dryer, blower-styler, heated air comb, heated air hair curler, curling iron-hair dryer combination, a wall-hung hair dryer or hand unit of a wall-mounted hair dryer, or similar appliance) shall be constructed to reduce the risk of electric shock when the appliance is energized, with its power switch in either the “on” or “off” position, and immersed in water having an electrically conductive path to ground.” This revision, which took effect January 1, 1991,
expanded immersion protection to cover the appliance whether the switch was in the “on” or “off” position.

As discussed in section C of this document, the reported incidents of death from immersion-related electrocutions involving hand-held hair dryers significantly declined with implementation of immersion protection requirements in UL 859. The average number of reported hand-held hair dryer electrocutions resulting in death is now less than one per year.

UL 1727, *Standard for Safety for Commercial Electric Personal Grooming Appliances*, originally issued in 1986, was revised to include the same integral immersion protection as UL 859 after the full immersion protection requirements in UL 859 proved to be effective. These requirements in UL 1727 became effective March 31, 1994.

**E. Recalls**

As noted in section A of this document, in November 2002, the director of the Office of Compliance sent a letter to importers and manufacturers of hand-held hair dryers indicating the staff’s expectation that such hair dryers should have immersion protection and that the staff would consider them to present a substantial product hazard if they did not. There have been numerous recalls of hand-held hair dryers due to lack of immersion protection.
Since January 1, 1991, there have been 30 recalls of hand-held hair dryers due to lack of an immersion protection device. Of these, three occurred during the year 2009.

**F. Substantial Compliance**

There is no statutory definition of “substantial compliance” in either the CPSIA or the CPSA. Legislative history of the CPSA provision that is related to issuance of consumer product safety standards indicates that substantial compliance should be measured by reference to the number of complying products, rather than the number of manufacturers of products complying with the standard. H.R. Rep. No. 208, 97th Cong., 1st Sess. 871 (1981).

Legislative history of this CPSA rulemaking provision also indicates that there is substantial compliance when the unreasonable risk of injury associated with a product will be eliminated or adequately reduced “in a timely fashion.” Id. The Commission has not taken the position that there is any particular percentage that differentiates substantial compliance from something that is not substantial compliance. Rather than any bright line, the Commission has been of the view in the rulemaking context that the determination needs to be made on a case-by-case basis.
The staff estimates sales of hand-held hair dryers are about 23 million units annually. There are 16 suppliers of hand-held hair dryers listed in the UL Online Certifications Directory, and an additional 42 suppliers listed in the Intertek ETL Listed Mark Product Directory as supplying hand-held hair dryers compliant with UL 859. Ten firms are listed to the UL 1727 standard on UL’s Online Certifications Directory and another four firms are listed in the Intertek ETL Listed Mark Product Directory as being in compliance with UL 1727.

In 2007, the three largest suppliers listed accounted for approximately 92% of domestic hand-held hair dryer sales. As discussed above, additional suppliers are also listed as supplying hand-held hair dryers that are in compliance with the UL standards. Since the three largest suppliers (which are listed as producing hair dryers that comply with the UL standards) account for 92% of the domestic sales of hand-held hair dryers and additional companies are also listed as producing complying hand-held hair dryers, the staff estimates that over 95% of hand-held hair dryers for sale in this country comply with the UL standards. The Commission, therefore, determines that there is substantial compliance with UL 859 and UL 1727.

**G. Effect of Section 15(j) Rule**
Section 15(j) of the CPSA allows the Commission to issue a rule specifying that a consumer product (or class of consumer products) has characteristics whose presence or absence creates a substantial product hazard. Placing a consumer product on this substantial product hazard list has certain ramifications. A product that is or has a substantial product hazard is subject to the reporting requirements of section 15(b) of the CPSA. 15 U.S.C. 2064(b). A manufacturer who fails to report a substantial product hazard to the Commission is subject to civil penalties under section 20 of the CPSA and possibly to criminal penalties under section 21 of the CPSA. Id. 2069 & 2070.

A product that is or contains a substantial product hazard is subject to corrective action under section 15(c) and (d) of the CPSA. Id. 2064(c) & (d). Thus, the Commission can order the manufacturer, distributor or retailer of the product to offer to repair or replace the product, or to refund the purchase price to the consumer.

Finally, a product that is offered for import into the United States and is or contains a substantial product hazard shall be refused admission into the United States under section 17(a) of the CPSA. Id. 2066(a).

H. Regulatory Flexibility Certification
The Regulatory Flexibility Act ("RFA") generally requires that agencies review proposed rules for their potential economic impact on small entities, including small businesses. 5 U.S.C. 601-612. As noted in section B of this document above, CPSC has identified 58 suppliers of hand-held hair dryers to the U.S. consumer market which provide products listed to the UL standard. Three large firms supply approximately 92% of the U.S. market share. According to the Small Business Administration Size Standards, these three firms are not small businesses. According to the UL Online Certifications Directory and the Intertek ETL Listed Mark Products Directory, these three firms plus an additional 55 firms are UL listed to produce complying hair dryers. All but one of these 55 firms appears to be a small business. Thus, the overwhelming majority of hair dryers sold in the United States are already UL listed. Since the majority of businesses (both large and small) are already in compliance with the voluntary standard, the proposed rule is not expected to pose a significant burden to small business. Therefore, the Commission certifies that, in accordance with section 605 of the RFA, the rule, if promulgated, will not have a significant economic impact on a substantial number of small entities.
I. Environmental Considerations

A rule determining that hand-held hair dryers without immersion protection in accordance with UL 859 or UL 1727 present a substantial product hazard is not expected to have an adverse impact on the environment and is considered to be a “categorical exclusion” for the purposes of the National Environmental Policy Act according to the CPSC regulations that cover its “environmental review” procedures (16 CFR 1021.5(c)(1)).

J. Paperwork Reduction Act

This proposed rule would not impose any information collection requirements. Accordingly, this rule is not subject to the Paperwork Reduction Act, 44 U.S.C. 3501-3520.

K. Effective Date

The proposed effective date of Part 1120, which declares that any held-held hair dryer without immersion protection, as specified in UL 859 or UL 1727, is a substantial product hazard, is 30 days from issuance of any final regulation in the Federal Register. Thus, it would apply to hand-held hair dryers imported or introduced into commerce 30 days or more after publication of any final rule in the Federal Register.

L. Preemption
The proposed rule would place hand-held hair dryers without integral immersion protection on a list of products that present a substantial product hazard. The proposed rule does not establish a consumer product safety standard. The preemption provisions in section 26(a) of the CPSA, 15 U.S.C. 2075(a), apply when a consumer product safety standard is in effect. Therefore, section 26(a) of the CPSA would not apply to this rule.

M. Request for Comments

The Commission invites interested persons to submit their comments to the Commission on any aspect of the proposed rule. Comments should be submitted as provided in the instructions in the ADDRESSES section at the beginning of this notice.

List of Subjects in 16 CFR 1120


Therefore, the Commission proposes to amend Title 16 of the Code of Federal Regulations by adding part 1120 to read as follows:
PART 1120 – SUBSTANTIAL PRODUCT HAZARD LIST

Sec.
1120.1 Authority
1120.2 Definitions
1120.3 Substantial product hazard list


§ 1120.1 Authority.

Under the authority of section 15(j) of the Consumer Product Safety Act (CPSA), the Commission determines that consumer products or classes of consumer products listed in § 1120.3 have characteristics whose existence or absence presents a substantial product hazard under section 15(a)(2) of the CPSA. The Commission has determined that the listed products have characteristics that are readily observable and have been addressed by a voluntary standard, that the voluntary standard has been effective, and that there is substantial compliance with the voluntary standard. The listed products are subject to the reporting requirements of section 15(b) of the CPSA and to the recall provisions of section 15(c) and (d) of the CPSA, and shall be refused entry into the United States under section 17(a)(4) of the CPSA.

§ 1120.2 Definitions.
The definitions in section 3 of the Consumer Product Safety Act (15 U.S.C. 2052) apply to this part 1120.

(a) **Substantial product hazard** means 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.

(b) **Hand-held hair dryer** means an electrical appliance, intended to be held with one hand during use, which creates a flow of air over or through a self-contained heating element for the purpose of drying hair.

§ 1120.3 **Substantial product hazard list.**

The following products or class of products shall be deemed to be substantial product hazards under section 15(a)(2) of the CPSA.

with 5 U.S.C. 552(a) and 1 CFR part 51. You may obtain a
copy from UL, Inc., 333 Pfingsten Road, Northbrook, IL
60062. You may inspect a copy at the Office of the
Secretary, U.S. Consumer Product Safety Commission, Room
502, 4330 East West Highway, Bethesda, MD 20814, telephone
301-504-7923, or at the National Archives and Records
Administration (NARA). For information on the availability
of this material at NARA, call 202-741-6030, or go to:

May 11, 2010
Dated: _________  // SIGNED //

_______________________________________
Todd Stevenson, Secretary
U.S. Consumer Product Safety Commission