

# CPSC MEETING LOG

## UPHOLSTERED FURNITURE

CPSC 6 (b)(1) Cleared  
2/2/02  
No Mfrs. Products  
Products Identified  
Excluded  
Firms Notified  
Comments Processed

2002 APR - 1 10 24 12

**Meeting Between:** CPSC staff and attendees at the American Furniture Manufacturers Association / Upholstered Furniture Action Council Flammability Workshop

**Date of Meeting:** March 5, 2002

**Meeting Site:** Sheraton Four Seasons Hotel, Greensboro, NC

**Log Entry By:** Dale R. Ray, Project Mgr., EC, (301) 504-0962 x1323 *DR*

**Participants:** Joe Ziolkowski, Upholstered Furniture Action Council  
Pamela Rivette, California Department of Consumer Affairs,  
Bureau of Home Furnishings & Thermal Insulation  
John McCormack, California BHF  
Ed Gerken, Chairman, UFAC  
Lou Peters, Executive Director, Polyurethane Foam Ass'n.  
Kurt Reimann, BASF Corp/Alliance for the Polyurethanes Industry  
Dale Ray, CPSC  
+ about 200 attendees representing furniture, textile, chemical,  
and polyurethane foam industry sectors, including  
manufacturers, suppliers, distributors and retailers

### Summary:

This annual flammability workshop was held to provide members of AFMA and related organizations with the latest information on flammability issues of concern to the industry. Approximately 200 people attended. The workshop program is attached.

Mr. Ray presented an update of CPSC activities on upholstered furniture and mattresses and bedding (presentation slides are attached). He discussed the latest revision of the CPSC staff's small open flame performance standard for upholstered furniture, the progress of CPSC's laboratory testing, issues regarding flame retardant chemicals, and other technical information contained in the staff's October 2001 briefing package for the Commission. An element of the draft standard that engendered much discussion was a new alternate seating test that would allow the use of fire-blocking barriers. He also discussed the relationship between the CPSC staff's work and the ongoing program at the California Bureau of Home Furnishings & Thermal Insulation (BHFTI) to revise the existing state furniture regulation, Technical Bulletin 117.

Ms. Rivette and Mr. McCormack of the California BHFTI presented a report on the recently released draft revisions to the small open flame provisions of TB-117. Ms. Rivette reported that she intends to propose revisions in 2002, and asked for comments



by July 1, 2002. She said she intends to hold meetings with stakeholders on technical and business issues, and plans to issue final amendments by late 2003. The revised TB-117 contains performance test requirements for components and for composite mockups; the basic composite tests would allow a maximum of 4% weight loss over a period of 10 minutes. These provisions could require the use of barriers or flame retardant (FR) fabrics as well as FR filling materials.

The BHF presentation generated substantial discussion. Questions covered issues such as the technical rationale for the acceptance criteria, the application of composite tests to complying components, testing and certification costs, and how a California regulation may be affected by CPSC action.

Mr. Gerken presented UFAC's position on the regulatory activities of CPSC and BHF. He expressed a preference for a UFAC-style voluntary approach to reducing the small open flame risk associated with upholstered furniture, and discussed issues such as industry costs, availability and utility of complying materials, FR chemicals, and strategies such as increased smoke alarm usage as alternatives to regulation. He pledged AFMA's cooperation with CPSC and BHF to develop reasonable standards that met AFMA's goal of providing furniture that is safe, effective and saleable.

Mr. Peters presented a technical review of flexible polyurethane foam characteristics and applications. He discussed various aspects of FR and non-FR foam properties, including the small open flame ignitability of various foam products and the role of FPF in reducing smoldering ignition risks.

Dr. Reimann presented a technical overview of the small open flame-related research conducted by BASF and Omega Point Laboratories, and sponsored by the API. He emphasized the interaction of components, and the importance of considering composite flammability test performance. Dr. Reimann stated that the research suggested a composite test approach would most effectively and accurately evaluate small open flame performance; however, he also agreed with the CPSC staff's conclusion that cover fabrics were a much more important determinant of small open flame performance than were interior filling materials. The API study also concluded that a weight loss acceptance criterion would be suitable and easily incorporated into a possible standard.

Mr. Ziolkowski reported on the activities of the Joint Intra-industry Furniture Coalition, including the work of the coalition's Small Open Flame Technical Committee (SOFTC) to develop a small open flame test method. He described ongoing interlaboratory testing and discussed the relationship of the SOFTC work with that sponsored by API (which is a SOFTC member). The goal of SOFTC is to develop a test method for components, using weight-loss acceptance criteria, that would be predictive of composite test results and that could be the basis for a voluntary program similar to the UFAC cigarette ignition guidelines. Mr. Ziolkowski reiterated UFAC's position in favor of standard that would lead to "safe, effective and saleable" furniture.

Attachments

## SPEAKER INFORMATION

Dale Ray

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# Upholstered Furniture Flammability Workshop

Sheraton Four Seasons

Greensboro, NC

March 5, 2002

8:00 a.m. - 5:00 p.m.

**MONDAY, MARCH 4, 2002**

6:00 p.m. Registration Victoria BC

6:00-7:30 p.m. Reception Victoria BC

**TUESDAY, MARCH 5, 2002**

7:30 a.m. Registration Victoria BC

8:30 a.m. Welcome & Announcements Victoria A

8:45 a.m. Consumer Product Safety Commission  
Fire Safety Activities Update

Dale Ray  
Consumer Product Safety Commission

Break

**California Bureau of Home Furnishings Activities**

And Update of TB117 Revisions

Pamela Rivette - Bureau Chief

John McCormack - Manager of Research & Development  
California Bureau of Home Furnishings  
and Thermal Insulation

No statement made by speakers or participants may be construed as legal conclusions or legal advice regarding any law or regulation. To the extent that member companies require legal conclusions or advice regarding any subject discussed during this program, you should consult with your own legal counsel. The AFMA is not responsible for statements, opinions or materials of speakers.

12:00 p.m. Lunch Grandover Room

1:00 p.m. UFAC's Perspective on

Upholstered Furniture Flammability

Ed Gerken - Chairman  
UFAC

Combustion Modifying Additives  
and Polyurethane Foam

Lou Peters - Executive Director  
Polyurethane Foam Association

Review and Analysis of Small Scale Upholstered  
Furniture Flammability Tests - The Right Approach?

Kurt A. Reimann, Ph.D.  
BASF Corporation

We have several tabletop displays in the meeting room which may be of interest to you and suggest you visit them during coffee breaks and lunch.

**TABLETOP EXHIBITORS**

American Kynol, Inc.

Custom Laminations, Inc.

The Govmark Organization, Inc.

Intek

Jones Fiber Products

Testfabrics, Inc.

Textech Industries

Textile Innovators Corp.

**U.S. Consumer Product  
Safety Commission**



**Staff Activity Update on  
Upholstered Furniture and  
Mattress & Bedding Flammability\***

AFMA Flammability Workshop  
March 5, 2002

**Upholstered Furniture:  
CPSC Staff Briefing Package**

October 2001

- Presents CPSC technical information
- Revised draft small open flame standard
- **Staff recommendation:** publicize data, get public feedback before considering regulatory options
- **Staff recommendation:** deny NASFM polyurethane foam petition

See web files at <http://www.cpsc.gov/library/foia/foia02/brief/briefing.html>

**The Continuing  
Furniture Fire Hazard**

- Leading cause of fire deaths associated with any consumer product
- 1998 addressable fire losses: 420 deaths, 1,080 injuries, \$120 mil. property damage
- 1998 estimated societal costs = \$2.4 billion
- Still no national standard addressing open flame risk

**CPSC Staff Draft Small Open  
Flame Standard - Highlights**

- Objective: evaluate and reduce ignitability & flame spread; limit fire growth
- 2 flame exposure locations: seating areas & dust covers
- 2 seating test options:
  - Small open flame test (e.g., FR cover fabrics)
  - Seating barrier test (e.g., fire-blocking interliners instead of FR fabrics)
- Sampling plan to establish compliance
- Recordkeeping to identify material sources

**CPSC Staff Draft Standard:  
Small Open Flame  
Performance Requirements**

| Test            | Ignition Source            | Minimum Flaming | Maximum Smoldering/Glowing |
|-----------------|----------------------------|-----------------|----------------------------|
| Seating Area    | 35 mm butane flame, 20 sec | 2 min.*         | 15 min.                    |
| Alternate       | U.K. (BS 5852)             |                 |                            |
| Seating Barrier | Cy1b #5                    | 10 min.         | 60 min.**                  |
| Dust Cover      | 35 mm butane flame, 20 sec | 2 min.*         | 15 min.                    |

\*With no burning to any edge of the test specimen

\*\*With limited spread of continuation of foam filling material, no dripping, and no uncontrolled flaming

**CPSC Staff Draft Standard:  
Fabric / Barrier  
Sampling Requirements**

| Sampling Level | # Samples (@ 4 specimens each) | Production Unit (max. # lin. yds.)* |
|----------------|--------------------------------|-------------------------------------|
| Initial        | 3                              | 1,000                               |
| Normal         | 2                              | 5,000                               |
| Reduced        | 2                              | 10,000                              |

\*Multiple smaller runs may be tested together; short runs < 50 lin. yds. exempt.

Initial Sampling: products for which compliance is undetermined

Normal Sampling: products consistently passing initial sampling tests

Reduced Sampling: products consistently passing normal sampling tests

## Flame Retardant Chemicals

- CPSC Public Hearing - 1998
- CPSC staff toxicity reviews
- NAS study - 2000
  - 8 compounds: minimal health risk
  - 8 compounds: further study recommended
- NIOSH worker study
- EPA new use rule
- EU Risk Assessment
- PDBEs in urethane foam

## CPSC Staff Risk Assessment

- Toxicity reviews of 16 chemicals
- Evaluated risk for 8 most likely/greatest concern
  - 4 compounds: no hazard (DBDPO, HBBD, CPE, PA)
  - 1 compound: probably no hazard (EHDP)
  - 1 compound: probable chronic hazard (TDCP)
  - 2 compounds: incomplete data
    - AT (inhalation route only)
    - THPC (identity / toxicity of migration products)

## Next Steps

- Solicit public input before staff makes recommendations to the Commission on regulatory options
  - Public meeting to discuss technical information
- Review draft revision of Cal. TB-117
- Continue working with industry & voluntary standards groups to develop possible alternatives to CPSC regulation

## CPSC Public Meeting

- Outside input on briefing package technical information & draft standard;
- Public discussion & participation
- *Federal Register*, CPSC Public Calendar, + direct notification to representatives of:
  - Industry
  - Fire safety organizations
  - Government agencies
  - Consumer groups

## CPSC Public Meeting Topics

- Technical data issues
- Industry efforts to develop safer materials and products
- Voluntary action status
- Recommendations to CPSC re: regulatory alternatives

## CPSC Public Meeting Technical Information Topics

- Fire data & analysis
- Standards development / laboratory testing
- Draft small open flame standard provisions
- FR chemical risk assessment
- Economic analysis
- California, ASTM/SOFTC actions
- New product R & D
- Cooperative efforts

## Mattresses & Bedding: Activity Update

- ANPR published October 2001  
re: open flame risk
- Comments indicated general support  
for NIST test method approach
- Industry, NIST, CPSC, California  
research & testing continuing

See web files at <http://www.cpsc.gov/library/foia/foia01/brief/briefing.html>  
and <http://www.cpsc.gov/businfo/foiupdates/fr02/openflam.pdf>

## Mattresses & Bedding: Major Issues

- Bedding interaction: separate  
requirements?
- Need for reliable test data
- Full-scale / small-scale correlation
- Integrate California BHF research  
(standard to be effective by Jan. 2004)

## For Further Information:



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\*Mr. Ray's views are not necessarily those of the Commission. Because Mr. Ray prepared this presentation  
as a part of his official duties as a CPSC employee, the information herein is in the public domain, and may be freely reprinted.