CPSC MEETING LOG

97 JUL 11 P3:49

Subject: Upholstered Furniture Flammability

Date: July 8, 1997

Place: Society of the Plastics Industry
1801 K St., NW, Washington, DC

CPSC Participant: Dale Ray, Project Manager, Upholstered Furniture project

Non-CPSC Participants: Kenneth Adams, SPI moderator; 9 other speakers on flammability topics; Sam Christy, Product Safety Letter; plus attendance by 25-30 representatives of plastics producers, other industry organizations, and fire safety groups

Log Entry Source: Dale Ray, EC, x1323

Summary:

A CPSC spokesperson on upholstered furniture flammability was invited to speak on the agency's activities on upholstered furniture flammability at SPI's Summer 1997 Coordinating Committee on Fire Safety meeting, held on July 8, 1997. Any voluntary or proposed mandatory standard pursuant to the Commission's ANPR of June 15, 1994, may affect suppliers of plastic component materials used in upholstered furniture. SPI submitted a response to the ANPR in 1994, noting various concerns about the rulemaking process and urging the Commission to consider risk and economic data in its decisions about possible actions to reduce small open flame ignited furniture fires.

Mr. Ray described the ANPR and the CPSC staff's recent project activities, and various technical (e.g., testing) issues. A copy of 22 CPSC presentation slides is attached.

Kurt Reimann, BASF Corporation, also spoke about the progress of a test method review being conducted by a work group of ASTM's E-5.15 Subcommittee on Furnishings & Contents (a unit of ASTM's E-5 Committee on Fire Standards). He noted that the work group was awaiting additional fire hazard and laboratory test data from CPSC before taking further action toward developing any new small open flame test method that might be suitable for incorporation into a voluntary standard. Dr. Reimann provided no presentation slides or other information but stated that the work group would be communicating its recent findings to CPSC in the near future.

CPSA 6 (b)(1) Cleared
X No Mfrs/PrvtLblrs or Products Identified
7/11/97

U.S. CONSUMER PRODUCT SAFETY COMMISSION

Activities on Upholstered Furniture Flammability

July 8, 1997

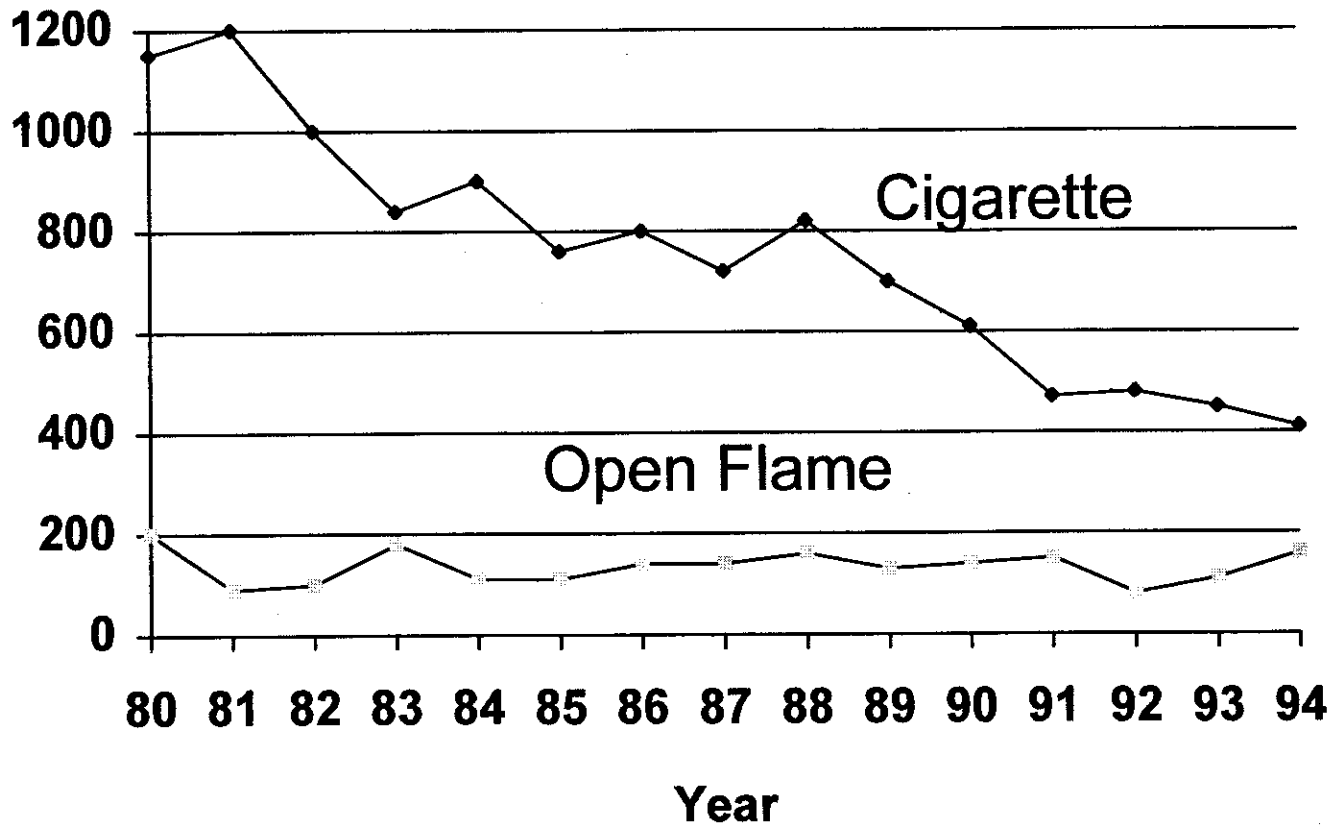
Dale R. Ray, Project Manager

(301) 504-0962

Overview

- NASFM Petition
- Standards Development: Small Open Flame Ignition
- Performance/Conformance Evaluation: Cigarette Ignition

Upholstered Furniture Fire Deaths 1980-1994



Open Flame Fire Losses

- 1990-1994: annual average of 130 deaths, 530 injuries, $60 million property damage
- No significant decline since 1980
- CPSC lighter rule to prevent some but not all losses
- Small flame ignitions: lighters, matches, candles

Small Open Flame Fire Losses

	Small Open Flame Losses* 1990-94	Avg. % total Open Flame 1990-94
Fires	3,100	82
Deaths	100	77
Injuries	460	87
Prop. Damage	$50m	80

*Ignitions of upholstered furniture by matches, lighters & candles

ANPR -- June 1994

- Small Open Flame ignited furniture fires may present unreasonable risk
- CPSC staff to develop possible standard; alternatives solicited
- No commitment to mandatory rule

CPSC Options

- No action (withdraw ANPR)
- Defer to voluntary action
- Propose labeling rule
- Propose performance rule
  - »Fabrics, components or finished products

ANPR Responses

- Fire hazard data
- Standards justification
- Laboratory testing issues
- Economic impacts
- FR chemical toxicity
- Voluntary alternatives

Commenters' Suggestions

- Voluntary std. / Mandatory std.
- Adopt TB-117 / BS-5852 / CEN1021-2
- Ignition resistance / Heat release
- Full scale tests / bench scale tests
- Composite tests / component tests
- FR foams / FR upholstery materials

SPI Recommendations

- Use risk assessment principles:
  - --Hazard evaluation
  - --Risk reduction alternatives
  - --Comparative cost analysis
- Consider component test approach to reduce costs
- Include non-regulatory actions to help reduce risk

CPSC Small Open Flame Activities

- Fire Investigation Study
- Laboratory Testing
- Standards Development & Analysis

Fire Investigation Study

- Ignitions of upholstered furniture by lighters, matches or candles
- Ignition locations & scenarios
- 76 in-scope fire investigations 10/94-2/97

CPSC Laboratory Tests-- Small Open Flame

- Full Scale: UFAC, California, British
- Bench Scale:
  - » Composites
  - » Fabrics
  - » Test Fixture Evaluations
  - » Temperature Measurements
  - » Relation to Cigarette Ignition

CPSC Laboratory Tests -- Small Open Flame

- Most conventional materials ignite
  - » Upholstery materials
  - » Interior materials above dust cover
- FR Foams & inert barriers may limit fire growth but not prevent upholstery ignition
- FR upholstery materials may prevent ignition and fire growth

Existing Approaches -- Small Flame Resistance

- FR Filling Materials
  - » Treated
  - » CMHR
- FR Barriers
  - » Interliners
- FR Upholstery Materials
  - » Inherent
  - » Treated

Draft CPSC Standard

- Seating furniture: upholstery + filling material
- Home or other consumer use
- Primary small open flame ignition locations
- Performance requirements/ bench scale tests

Effect on Cigarette Ignition

- Small open flame ignition resistance: impact on cigarette ignition resistance
- Beneficial vs. adverse impacts

Statutory Considerations

- Nature of risk
- Technical feasibility
- Cost & benefits
- Existing standards

Cigarette Evaluation

- Ignitability of Currently-Manufactured Furniture
- Conformance to UFAC Performance Criteria

CPSC Lab Tests -- Cigarette Ignition

- Product ignitability estimates based on full scale test results + mfrs survey data
- Industry conformance, based on UFAC component tests, & relation to full scale ignition resistance
- Small % furniture ⇨ Large % fires

Statutory Considerations

- Significant, addressable risk? Potential for further fire loss reductions?
- Voluntary program adequate?
- Standard or other action feasible? Potential impact on costs, choice?

CPSC Decision Schedule

- Staff Briefing Package (with recommendations) to Commission: **Summer 1997**
- Whether to propose rule on small open flame ignition risk
- Whether to initiate action on cigarette ignition risk