

LOG OF MEETING

DIRECTORATE FOR ENGINEERING SCIENCES

SUBJECT: International Sleep Products Association Flammability Shoptalk seminars,
"California TB603—Implementation and Beyond"

DATE OF MEETING: February 2, 3, 10, 12, 2004

DATE OF LOG ENTRY: February 12, 2004

SOURCE OF LOG ENTRY: Margaret Neily, ESFS *MM*

LOCATION: 2/3 Crowne Plaza International Airport, Burlingame, CA
2/4 Sheraton Gateway LAX, Los Angeles, CA
2/10 Hilton Northbrook, Northbrook, IL
2/12 Hilton Charlotte & Towers, Charlotte, NC

CPSC ATTENDEES: Margaret Neily, ES, 2/3 and 2/4
Allyson Tenney, ES, 2/10 and 2/12

NON-CPSC ATTENDEES: Conference attendees.

SUMMARY OF MEETING:

The International Sleep Products Association sponsored the seminars for CEO's production managers, plant managers, and technical staff who will be responsible for meeting new California state regulations for mattresses becoming effective January 1, 2005. Exhibits of materials suppliers were included as part of the program. The Northbrook, IL *SHOPtalk* included a burn demonstration at Underwriters Laboratories.

Gordon Damant, Inter-City Testing & Consulting of California (*SPSC Consultant*), reviewed fire statistics and research leading to development of TB603 as well as technical aspects of standard and components of test.

Dennis Kemp, Spring Air Northwest (*SPSC Combustibility Committee Chair*) shared tips on how to comply with TB603, using two cutaway beds with surrogates of sheet-type and fill-type barriers. He also provided design ideas, pitfalls to avoid, how to avoid failures with reliable construction techniques.

A panel of various suppliers attending the sessions presented technical qualifications and characteristics of individual products, use of "systems" approaches, testing and construction tips.

Lynn Morris, Chief, California Bureau of Home Furnishings and John McCormack, R&D

CPSC NOTIFIED FOR REVIEW
 NO MFPS/PRV/TBLRS OR PRODUCTS IDENTIFIED
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 WITH PORTIONS REMOVED: _____

3/25/04

Manager, California Bureau of Home Furnishings, reviewed the final regulation and enforcement/compliance issues.

Margaret Neily, Director for Combustion & Fire Sciences Division, and Allyson Tenney, Project Officer, ES, U.S. Consumer Product Safety Commission, reviewed the federal rulemaking process and requirements and the status of the current mattress rulemaking. The presentation is attached.



CPSC Rulemaking: Mattress Flammability

ISPA Shoptalk

"California TB603--Implementation and
Beyond"

February 2004

Margaret Neily, Project Manager

*Opinions expressed by Ms. Neily have not been reviewed or approved by and do not necessarily reflect the views of the Commission.

Summary

- Introduction to mattress/bedding fires
- CPSC rulemaking process and requirements
- Defining and measuring the hazard
- Mattress rulemaking in progress
 - ANPR
 - Draft standard and supporting information
 - Bedclothes

*These materials were prepared by Ms. Neily in her official capacity and may be freely copied or reprinted.

Mattresses & Bedding Fires

- **One of leading causes of fire deaths associated with consumer products**
- **1998 total fire losses:**
 - 390 deaths
 - 2,160 injuries
 - \$208.3 million in property damage

Mattress/Bedding Fires

- Small flame often ignites bedding; large bedding fire ignites mattress
- Standard with large ignition source and designed to limit flashover could:
 - address 300 deaths and 1,460 injuries (all ages)
- Industry supports mandatory standard for mattresses and sponsored NIST research on hazards and test method
- Concurrent California Bureau of Home Furnishings (CBHF) regulatory activities

CPSC Three-step Rulemaking Process

1. **Advance Notice of Proposed Rulemaking (ANPR) with public comment**
2. **Notice of Proposed Rule (NPR) with public comment**
3. **Final Rule with date when manufacturers & importers must comply (usually 1-year after publication)**

Flammable Fabrics Act (FFA) Standards

- Needed to adequately protect public from **unreasonable risk of death/injury** from fire or significant property damage
- Reasonable, technologically practicable, & appropriate
- Limited to products presenting the risk
- Stated in objective terms

Additional Considerations

- Preliminary & final regulatory analyses (FFA)
 - Description of potential costs and benefits
 - Costs must bear a reasonable relationship to benefits
- Regulatory Flexibility Act
 - Consider impact on small businesses
- National Environmental Policy Act
 - Consider impact on environment, include disposal
- Enforceability
 - Reliable, repeatable, reproducible--from interlaboratory study (P&B)

Defining and Measuring the Hazard

- Roundtable discussion at CPSC in 1998
- Positive relationship with ISPA/SPSC in evaluating need for a possible standard
- NIST research to characterize hazard and develop performance test *
- Work based upon fire incident data from NFIRS (NFPA)

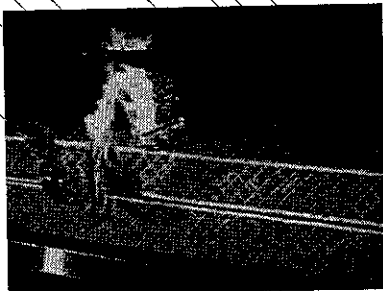
*Funding provided by Sleep Products Safety Council

CPSC Rulemaking

- CPSC began mattress rulemaking in October 2002 with ANPR
 - Granted two petitions from the Children's Coalition for Fire-Safe Mattresses
 - Commenters supported NIST test method development
 - » Measures/defines risk of residential mattress fire
 - » Tests and analysis form basis of effective standard
 - CBHF later suggests CPSC adopt TB 603 (10/03)
 - Some commenters recommended additional regulations for bedclothes

Rulemaking continued

- NIST began development of screening tests for practical product design and enforcement
- CBHF proposed and revised TB 603, based on the NIST test, in 2003.
- CBHF intends to propose a standard for "filled" bedclothes as well.
- CPSC, CBHF, SPSC, & NIST are conducting an interlaboratory study of the NIST test method (P&B study)

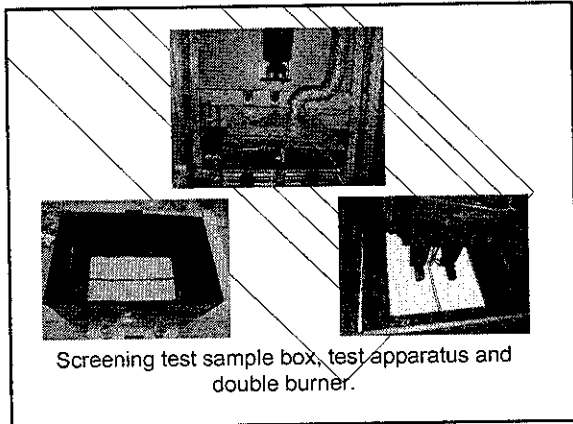


Gas burners simulating exposure to burning bedding in NIST test & California TB 603

Screening Test Development

- NIST developing surrogates for full-scale test*
- Small-scale screening tests for typical laboratory are critical
 - compliance screening
 - mattress design/materials/construction screening
- Concepts have changed as we learn more
- Test resistance to burn-through
- Test susceptibility to "grin" failure (new)

* Funding provided by CPSC and US Fire Administration



Rulemaking continued

- CPSC staff is preparing decision package for Commission consideration that will.
 - Respond to ANPR comments--mattress & bedclothes issues
 - Include draft proposed standard for mattresses (Notice of Proposed Rulemaking)
 - Provide support for the standard, including Preliminary Regulatory Analysis
 - Provide Bedclothes options, including a draft Advance Notice of Proposed Rulemaking

CPSC Staff Draft Standard

- Based on NIST test method (in TB 603)
 - Criteria, test duration, and other requirements based on effectiveness, cost/benefit & enforcement needs
- Requirements initially conservative
 - Scope and product definitions
 - Prototype and confirmation concepts
 - Numbers of tests needed for each (R&B study)
 - Possible pooling provisions
 - Recordkeeping
- Reduce burden w/ industry technical support

Support for Draft Standard

- Define/measure the fire hazard--technical rationale for the test & performance criteria
- Estimate effectiveness based on performance criteria and test parameters
 - Use NFIRS data and in-depth investigations
 - Estimate potential death/injury reductions
 - Consider human factors, toxicity of combustion products, fire growth, egress issues

Support continued

- Estimate costs and benefits
 - Comprehensive cost/benefit modeling
 - Benefits of reduced deaths/injuries
 - Costs of compliance, new materials, tests, recordkeeping
 - Flame retardant use, including potential health issues
- Evaluate impact on small businesses
 - Costs of compliance, competition, etc.
- Evaluate impact on the environment
 - Use of flame retardants and other materials

Bedclothes

- Review of public comments on Mattress ANPR
- Review of incident data
- Current market information
- Technical information & existing standards
 - NIST and CBHF tests indicate that bedclothes can contribute substantially to these fires
 - California BHF development of TB 604
- Options including Advance Notice of Proposed Rulemaking

Project Schedule

- Briefing Package is scheduled to go to CPSC management later this year.

CSPC Project Contacts

- **Mattresses/Bedding--**

Margaret Neily

301-504-7530, mneily@cpsc.gov

Allyson Tenney

301-504-7567, atenney@cpsc.gov