CPSC and the Mattress Industry
The Latest from the CPSC

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Session Overview

- Introduction
- 16 CFR part 1633 – The First Ten Years
- Lessons Learned
- Request for Information
- ISPA Tech to Tech
- Organohalogen Flame Retardants
- On the Horizon
Acting Chairman Ann Marie Buerkle (2\textsuperscript{nd} Left)
Commissioners: Robert Adler, Elliot Kaye, Marietta Robinson
CPSC Mattress Requirements

16 CFR part 1632
- Cigarette Ignition
- Mattresses and Mattress Pads
- Excludes Foundations

16 CFR part 1633
- Open-Flame Ignition
- Mattresses and Mattress Sets
- Excludes Mattress Pads

CPSIA Requirements
- Certifications
- Children’s Products
  - Lead
  - Phthalates
- Tracking information
1973 – 16 CFR part 1632 issued

2001 – ANPR; Standard to Address Open Flame Ignition of Mattresses/Bedding
66 Federal Register 51886; October 11, 2001

2005 – ANPR; Possible Revocation or Amendment of Standard for the Flammability of Mattresses and Mattress Pads (Cigarette Ignition)
70 Federal Register 36357; June 23, 2005

May 2006 – Interim Enforcement Policy for Mattresses Subject to 16 CFR parts 1632 and 1633

March 2006 – Final Rule: Standard for the Flammability (Open Flame) of Mattress Sets (Effective July 2007)
71 Federal Register 13498; March 15, 2006

November 2017 – Regulatory Flexibility Act Section 610 Review of the Standard for the Flammability (Open Flame) of Mattress Sets
81 Federal Register 91923; December 19, 2016

February 2017 – Request for Information Regarding Mattress Materials
82 Federal Register 8923; February 1, 2017
Regulatory Flexibility Act Section 610 Review of the Standard for the Flammability (Open Flame) of Mattress Sets

81 Federal Register 91923; December 19, 2016

- Small business impact review at 10-year mark
- No proposed changes
- Industry comments support 16 CFR part 1633
- Some comments on 16 CFR part 1632 out of scope, but noted
- Limited data
- Cost of materials decreased by approximately half
- No further review scheduled
Mattress Market (ISPA, 2015)

- Domestic: 75%
- Imports: 25%
- China: 13%
- Mexico: 7%
- Canada: 2%
- Other: 3%
Disclaimers:

• Not a statistical sampling
• Not proportional to market share

>>> *Need to meet all requirements of standard*

>>> *Routinely find non-compliant products*
Mattress Violations, FY 08 - Present

Disclaimer: Not a statistical sampling; not proportional to market share.
Mattress Violations, FY 08 - Present

Mattress Sample Violations, Percent

Disclaimer: Not a statistical sampling; not proportional to market share.
CPSC Laboratory Testing

Disclaimer: Not a statistical sampling; not proportional to market share.
Lessons Learned

• The following stories are inspired by real events
• No relationship or connection to any real case
• Used to illustrate lessons learned
Snooze Retires; Sells to Zeeze

• Eve Snooze retires, sells her business
• Dawn Zeeze buys firm
• Keeps same location, staff, equipment, prototype ID
• Changes thread used to stitch tape edge
• Ms. Zeeze is unaware the thread was not just decorative, but a critical element for flammability compliance.
Snooze Retires; Sells to Zeeze

- CPSC collected samples and tested.
- The mattresses failed the performance requirements of 16 CFR part 1633.

>>> Educate staff about significance of changes in materials and/or methods of assembly.
Lessons Learned

LULULabs, Inc.

• Extinguishes mattresses and stops recording data at 200 kW
• Loses valuable information for troubleshooting failures

>>> Additional data can help troubleshoot failures.
• What happens after 200 kW?
Additional data can help troubleshoot failures.
Happy Industries Sleep Systems (HISS)

- HISS imports mattresses from a plant overseas.
- The manufacturer keeps detailed records of the suppliers, shipments of component materials, any component changes, and related production lots.
- The records are maintained by HISS.
- HISS does periodic testing and detects a failure.

>>> Because of the detailed records and labeling, the importer can manage the scope of the corrective action/recall and may be able to limit the number of affected units.
DreAmerica Corp.

• Mattress prototype is designed for use with or without a foundation
• Sends three sets to test lab to qualify the prototype
• Test lab tests as sets with foundations → Pass (x3)
• CPSC tests mattress only → Fail

>>> The manufacturer did not fully qualify the prototype.

>>> Burden on manufacturer/importer to ensure appropriate testing is conducted.
Maker of Mattresses, Inc. (MoMI)

• Successful mattress manufacturer looking to expand overseas

• Contracts with overseas manufacturer, who provides 3 production samples for testing that were built based on the domestic manufacturer’s specification or build sheet
Lessons Learned

Maker of Mattresses, Inc. (MoMI)

- MoMI tests samples → Pass
- After production begins, foreign supplier changes production to save $$
- CPSC collects at port and tests samples → Fail
- Supplies that were changed in production changed the prototype.

>>> Robust production testing program may limit scope of corrective actions.
Request for Information Regarding Mattress Materials

82 Federal Register 8923; February 1, 2017

• Materials, components, and methods of assembly currently being used to comply with both standards.
• Commission elected to use Request for Information (RFI)
• May pursue survey in future
• Thank you to those who submitted comments.
• Ticking Substitution Procedure in the Cigarette Ignition Standard (16 CFR section 1632.6)
  – Adequate or need revision to reduce variability in the current test procedure

• Stakeholder experiences related to prototyping to meet the requirements of the Open Flame Standard (16 CFR part 1633)
• CPSC staff hosted ISPA and SPSC members at 1\textsuperscript{st} “Tech to Tech” meeting in December.

• All attendees agreed to continue to collaboratively discuss mattress flammability requirements at future meetings.

• Next meeting date not set
• The members presented background information on the current trends in mattress materials and methods of assembly.

• Asserted consumer preference and designs for meeting the flammability requirements of 16 CFR part 1633 have made the cigarette ignition resistance requirements of 16 CFR part 1632 redundant and burdensome.

• CPSC staff invited industry members to share relevant data and present suggestions for staff to consider.
Organohalogen Flame Retardants

- Organohalogen chemicals are organic compounds that contain at least one halogen (fluorine, chlorine, bromine, or iodine) bonded to carbon.

- Organohalogen flame retardants (also referred to as OFRs or halogenated flame retardants) contain bonds between carbon and the elements bromine or chlorine.
  - Includes brominated and chlorinated phosphate ester flame retardants.
• Petition HP 15-1:

16 C.F.R. § 1051 Petition for Rulemaking to Protect Against Consumer Products Containing Additive Organohalogen Flame Retardants

• Submitted July 1, 2015


• Petitioners:

Petition scope:
To ban the following consumer products if they contain non-polymeric, additive OFRs:

– Any durable infant or toddler product, children's toy, child care article, or other children's product (other than children's car seats);

– Any article of residential upholstered furniture;

– Any mattress or mattress pad; and

– The plastic casing of any electronic device.
Petition requested that:

• The products be considered “banned hazardous substances” under the FHSA if organohalogen flame retardants are present.

• Organohalogen flame retardants be treated as a class of chemicals and banned for use in the specified consumer products.
On September 20, 2017, the Commission voted to:

– Grant the petition,
– Direct staff to convene a Chronic Hazard Advisory Panel (CHAP), and
– Publish non-binding guidance.
Published on September 28, 2017, the non-binding guidance recommends:

- Eliminating the use of OFRs in the specified products;
- Obtaining assurances that such products do not contain OFRs; and
- Avoiding products containing OFRs, especially consumers who are pregnant or with young children.

This guidance is a recommendation, not a legal requirement.

Rulemaking Process for OFRs

• CPSC generally regulates hazardous household substances under the FHSA.

• The FHSA is risk based.
  – CPSC staff must assess the health risks from exposure to OFRs in the applicable products cited in the petition if they contain OFRs.

• Commission must establish a CHAP before proposing a regulation to ban a product related to a risk of cancer, birth defects, or gene mutations.
• CPSC staff is working with the National Academy of Sciences (NAS) to develop a plan for assessing the health risks of OFRs.

• FAQs have been posted on the CPSC website at:

• Aware of concerns about SRM cigarette supply
• Monitoring with NIST
• Any guidance will be announced:
  – Mattress Business Info page
  – Mattress Listserv
  – ISPA
On the Horizon

• Staff interested in updating
  – Mattress visuals for safety messaging and social media
  – FAQ and Tips Sheet
  – Searchable laboratory list
    • Domestic
    • Overseas
Furniture Industry “Tech to Tech” meeting

• Wednesday, May 16, 2018

• National Product Testing and Evaluation Center in Rockville, MD

• The one day meeting will bring together industry, government, research, and laboratory stakeholders to collaborate on current topics involving upholstered furniture flammability, manufacturing, technology, and consumer safety.

• Dr. Andrew Lock, alock@cpsc.gov
Compliance Webinar on Violations

- Early planning stages
- June or July 2018 target date
- Will be announced:
  - Public Calendar
  - Mattress Listserv
- Justin Jirgl, jjirgl@cpsc.gov
Designing for Safety - Mattresses

- Comply with all applicable safety requirements
- Conduct required testing
  - Flammability
  - Requirements for children’s products
- Maintain procedures and retain records
- Monitor components and suppliers
- Confirm materials and component specifications
- Maintain consistent methods of assembly
- Report problems early
CPSC Resources

• Regulations and test methods
• Laboratory test manuals
• Business resource page
• Mattress information webpage
• E-mail listserv
• www.CPSC.gov
CPSC Stands for Safety

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