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



#### 16 CFR Part 1633: After the Effective Date

American Home Furnishings Alliance Flammability Workshop

Greensboro, North Carolina March 20, 2008 Allyson Tenney, Project Manager Directorate for Engineering Sciences

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### **Summary of Discussion**

- Background
- Implementation of the standard
- Selected problem areas observed by CPSC staff
- New materials, references, and resources
- Closing remarks

### Background

- Mattress fires are one of the leading causes of fire deaths and injuries associated with consumer products
- CPSC project work began in 2000

   ANPR: October 2001
  - NPR: December 2004
  - Final Rule: March 2006
- Standard addresses hazards associated with mattress fires

## Mattresses (open-flame) 16 CFR Part 1633

- 16 CFR Part 1633: Standard for the Flammability (Open-Flame) of Mattress Sets
- Final Rule published March 15, 2006
- Effective: <u>JULY 1, 2007</u>

## Mattresses with Conventional Materials

#### > 1,000 kW fire

#### at 5 minutes



#### **Improved Mattress Performance**

#### Peak rate of heat release after exposure to burners





Under 100 kW

Under 50 kW

#### Implementation of 16 CFR Part 1633

- Conducted two staff seminars for manufacturers, East and West coasts
- Held seminar for retailers
- Participated in industry sponsored meetings and seminars
- Dedicated Mattress Information Webpage
- Developed informational brochure
- Compiled Question & Answer document

## 16 CFR Part 1633: Selected Problem Areas Observed by CPSC Staff

- Scope
- Prototypes and subordinate prototypes
- Recordkeeping requirements
- Labeling requirements
- Establishment inspections

#### 16 CFR Part 1633: Scope

- All mattress sets <u>manufactured</u> on or after July 1, 2007 and sold in the U.S.
- In scope
  - Mattress sets (mattress + foundation/ mattress alone)
  - Any size (e.g., Crib, Twin, Full, Queen, King)
  - Futons, multi-purpose items, mattresses in furniture
  - Mattresses in non-motorized trailers
  - Renovated products, not sterilization

#### 16 CFR Part 1633: Scope

#### • Not in scope:

- Mattress pads
- Water/air mattresses that do not contain filling materials between the core and ticking
- Furniture that does not contain a mattress
- Juvenile product pads
- Pet beds
- Ask CPSC Staff (Office of Compliance) for guidance

## **Prototypes**

- All items in scope must be based on a tested prototype
- Prototype is a specific mattress set design that serves as a model for production units; same with respect to materials, components, and methods of assembly
- Types of Prototypes
  - Qualified
  - Confirmed/pooled
  - Subordinate

#### **Qualified & Confirmed Prototypes**

- Qualified prototype:
  - Tested and meets the requirements
  - Requires 3 consecutive passing tests before sale
- Confirmed (pooled) prototype:
  - Same as qualified prototype with respect to materials, components, design, assembly
  - Pooled based on another manufacturer's qualified prototype
  - Requires 1 passing test

#### Subordinate Prototypes

- Subordinate prototype:
  - Based on qualified or confirmed prototype
  - Represented and need not be tested
  - Same except as permitted by §1633.4(b)
- §1633.4(b) permits:
  - Differences in length and width, not depth
  - Ticking changes, unless used to improve performance
  - Changes to any component, material, design, or method of assembly if it can be demonstrated on an objectively reasonable basis that the change will not cause a failure

#### **Objectively Reasonable Basis**

- Decision made by individual manufacturer based on factual information— objectively reasonable criteria
- Based on test data
  - Type of data
  - Amount of data
  - Quality of data
- Identical properties/specifications
- Equivalent performance
- Component performance and system interaction
- Documented and recorded in detail

#### **Recordkeeping Requirements**

- Required recordkeeping:
  - Prototype records
  - Test records (prototype, production)
  - Quality assurance records
- Prototype records:
  - Kept for life of prototype + 3 years
  - Detailed list of materials, components, assembly methods, design description
  - Identify prototypes
  - Correspond to label information

## Labeling Requirements

- Requires permanent, conspicuous, and legible label in English
  - Allows alternate language on reverse
- Manufacturer name and address
- Month and year of manufacture
- Model identification
- Prototype identification number
  - Qualified, subordinate, or confirmed
  - Must correspond to records
- Certification statement
- Set information
- Bar codes/tracking information is allowed

#### **Establishment Inspections**

- Compliance Establishment Inspection
  - Typically unannounced
- Obtain information regarding:
  - Business operations and management
  - Manufacturing & production
  - Testing
  - Inventory
  - Sales & distribution
  - Recordkeeping
- Confidentiality
  - Confidential business information or trade secret shall be treated as confidential\*
- After the inspection
  - Written response will be received from Office of Compliance

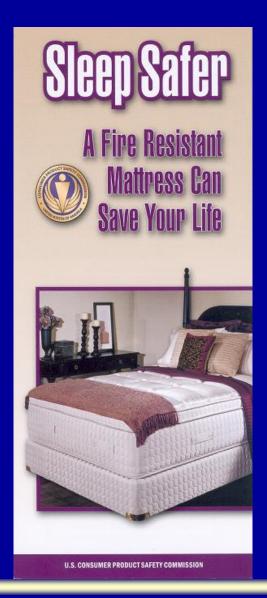
## New Materials, References, & Resources

- 16 CFR Part 1633 Correcting Amendment
  - Edits & technical corrections
  - Federal Register, Vol. 73, No. 25, 6842-6843
  - February 6, 2008
- Laboratory Test Manual
- List of testing laboratories
- Website & subscriber list-serve

# www.cpsc.gov/businfo/mattress

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Mattress Flammability Information	
Last updated February 7, 2008	
The links contained on this page are to be used as a tool to help easily access an overview of mattress flammability information. Much more information and many additional links are available on the CPSC site and can be located by conducting a <u>search</u> .	
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Standard for the Flammability of Mattresses and Mattress Pads - 16 CFR 1632	
Regulation 1632	
Test Manual	
Regulatory Summary for Mattresses	
Interim Enforcement Policy	
New Standard: Standard for the Flammability (Open Flame) of Mattress Sets - 16 CFR 1633	
Regulation 1633	
New! Final Rule; Standard for the Flammability (Open Flame) of Mattress Sets; Correction, February 6, 2008 [Text] [PDF]	
Interim Enforcement Policy	
Office of Compliance and Field Operations' Enforcement Guidance Concerning CPSC Mattress Set Rule for Mattress Sets that are Medical	

# **Closing Remarks**



#### For Further Information:



# Allyson Tenney U.S. Consumer Product Safety Commission Directorate for Engineering Sciences Tel: 301-504-7567 *atenney*@cpsc.gov

www.cpsc.gov