

Nanotechnology and Voluntary Standards*

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U.S. Consumer Product Safety Commission
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**The views expressed in this presentation are those of the CPSC staff and have not been reviewed or approved by, and may not necessarily reflect the views of, the Commission.*



U.S. Consumer Product Safety Commission

- Independent regulatory agency (1973)
- Products in and around the home (schools)
- Generally, food, drugs, cosmetics, medical devices, pesticides, automobiles not included
- Does include child-resistant packaging for household chemicals, drugs, and cosmetics
- Staff of 530; budget of \$118 M
- 5 Commissioners appointed by President

CPSC National Product Testing and Evaluation Center



- **State of the Art Testing Facility**
- **Consolidated Technical Staff**

Rockville, MD



CPSC Strategic Plan

- **Mission**

- Protecting the public against unreasonable risks of injury from consumer products through education, **safety standards activities**, regulation, and enforcement.

- **Goal 2: commitment to prevention**

Engage public and private sector stakeholders to build safety into consumer products.

- **Objective 2.1**

- Minimize hazardous defects early in the manufacturing process through increased participation in **voluntary standards activities**.

CPSC Voluntary Standards Activities

• CPSC staff provided technical support to or monitored the development of **over 62** voluntary standards activities in FY2010.

- Air Cleaners
- Amusement Rides (Portable)
- Bassinets and Cradles
- Batteries
- Beds: bunk, toddlers
- Candles
- CO Alarms
- Gasoline Containers
- Generators
- Heaters
- Infant Swings
- Ladders
- Lighters, Cigarette
- Mattresses
- Mowers
- Off-Road Vehicles (ATVs)
- **Phthalates**
- Playground equipment
- Swimming pools and spas
- Toys

Voluntary Standards Considerations

- Compliance with a voluntary standard is likely to result elimination or adequate reduction of the risk of injury identified
- Substantial compliance with the voluntary standard.
- Developed based on consensus within voluntary Standards Development Organizations (SDOs)
- Composed of industry, agency, and consumer representatives.

CPSC Nanomaterial Statement

- Released in 2005
- The potential safety and health risks of nanomaterials can be assessed under existing CPSC statutes, regulations, and guidelines.
- CPSC staff assesses a product's potential chronic health effects to consumers under the Federal Hazardous Substances Act (FHSA).
- The analysis may require unique exposure and risk assessment strategies.

Data Needs

- Determination of consumer products that contain nanomaterials and the specific nanomaterials that are incorporated into these products.
- Exposure studies that quantify the releases of nanomaterials from products containing nanomaterials.
 - Into a variety of media including air and liquids (e.g., surrogate sweat and saliva).
- Estimates of potential human exposure and uptake of released nanomaterials.
- Development/validation of risk assessment approaches to estimate potential health effects

Nanotechnology Standards

Meeting Identified Needs

- Terminology
 - Products that contain nanomaterials
 - Materials released from products
- Test methods
 - Characterize and quantify releases from products
 - Exposure assessment

Challenges

- Consensus
- Validation
- Awareness
- Compliance
- Efficacy

Thank you

- CPSC Web Site
 - www.cpsc.gov
- Incident reports and recalls
 - www.saferproducts.gov
- Chronic Hazard Guidelines
 - <http://www.cpsc.gov/BUSINFO/chronic.pdf>