Kicking Toxics Out of the Work Place: Eliminating the Use of Unnecessary Flame Retardant Chemicals

Sustainable Purchasing Leadership Council 5/27/15
The Center for Environmental Health (CEH)

A non-profit organization dedicated to protecting public health from exposures to toxic chemicals.

The Center for Environmental Health works with large purchasers to utilize their buying power to incentivize the production of environmentally preferable products.

www.ceh.org
Flame Retardants

What are flame retardants?
Inhibit ignition or spread of flames

Where are flame retardants used?
- Electronics
- Building Insulation
Health Effects of Flame Retardants

**Neurodevelopmental Effects**
- Decreased memory and learning

**Neurodevelopmental Effect**
- Hyperactivity

**Endocrine System Disruption**
- Chemicals that mimic estrogen
- Alters thyroid hormone

**Endocrine System Disruption**
- Reproductive Toxicant
- Chemicals that mimic estrogen
- Alters thyroid hormone

**Cancer**

**Diabetes**
Flame Retardants Are Ubiquitous

Slide Courtesy of Green Science Policy Institute
How are We Exposed?

- Inhalation or ingestion of contaminated dust particles
- Ingestion from food, especially meat and dairy
- Occupational Exposure

**Unique to Children**

- Absorption across the placenta
- Breast milk
- Frequent hand-to-mouth activity
Flame Retardants: Lack of Fire Safety Benefit

• No significant difference in fire growth between foam with flame retardants formulated to pass TB 117 and untreated foam. Source: U.S. Dept. of Commerce, National Bureau of Standards.

• Chairs with flame retardant foam offered no practically significant difference than those without FR-treated foam. Source: CPSC, 2012.
Additional Considerations

- Presence of Automatic Fire Sprinklers in Buildings
- People not allowed to smoke
- No fire data supports need for flame retardant chemicals in office furniture
Furniture Flammability Regulations

**NOTICE**

This article meets the flammability requirements of California Bureau of Home Furnishings Technical Bulletin 117. Care should be exercised near open flame or with burning cigarettes.

**NOTICE**

This article is manufactured for use in public occupancies and meets the flammability requirements of California Bureau of Home Furnishings Technical Bulletin 133. Care should be exercised near open flame or with burning cigarettes.
TB117-2013: Smolder test on fabric

- Addresses smoldering ignition which is the leading cause of furniture fire deaths
- Focus on fabric where fires actually start, more realistic
- Flame retardants are not needed

Increased fire safety without toxicity
TB 117-2013 ≠ Flame Retardant Free

- **New standard** provides way to pass new test without FRs
  
  **BUT** ……

- **Does not** prohibit the use of FRs

- **You must ask the manufacturer re:** their use of FRs
Seating Furniture for Public Buildings or Assembly Areas

CA includes:

- Hospitals, health care facilities, nursing homes, board and care homes, convalescent homes
- Jails, prisons, penal institutions
- Stadiums, auditoriums,
- Public assembly areas of hotels/motels.
More expensive
- $15-100 more per chair
- $200-$500 more per couch

Flame retardants typically used in the foam, fabric and/or barrier

Fewer design choices
PURCHASER STRATEGY
ADVISORY GROUP TOOLS

- Purchaser Pledge
- Letter to Suppliers
- Furniture Survey
- Technical Specifications/RFP Questions and Guidance
- Fact sheet
“Purchaser Pledge” Signers

- Autodesk
- Blue Cross Blue Shield of MA
- Hackensack University Medical Center
- HDR
- Healthy Building Science
- Kaiser Permanente
- Kay Chesterfield Reupholstery
- Multnomah County
- New Resource Bank
- One Workplace
- Perkins + Will
- San Francisco Dept. of the Environment
- Staples
- Yahoo!
- YOUR ORGANIZATION?
Sample Questions:

How will you let purchasers know that your upholstered seating furniture products do not contain added flame retardant chemicals?
Why Make the Switch?

- community health

  More durable and comfortable
  - Consistent with organizational mission/values
  - Success story for sustainability report
  - Businesses can influence the market faster than regulations or legislation
NEXT STEPS?

- Develop team of key stakeholders to build org. awareness and create an action plan
- Utilize existing tools to express your preference
  - Develop team of key stakeholders to build org. awareness and create an action plan
  - Utilize existing tools to express your preference and ask for your suppliers' help in meeting your toxic reduction objectives
- Find out your org's furniture contract timeframe