

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

Alameda County Green
Purchasing Roundtable 5/20/15

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
- ✓ Foam Furniture
- ✓ Wires and Cabling

Health Effects of Flame Retardants

Neurodevelopmental Effects

- Decreased memory and learning
- Reduced IQ
- Hyperactivity

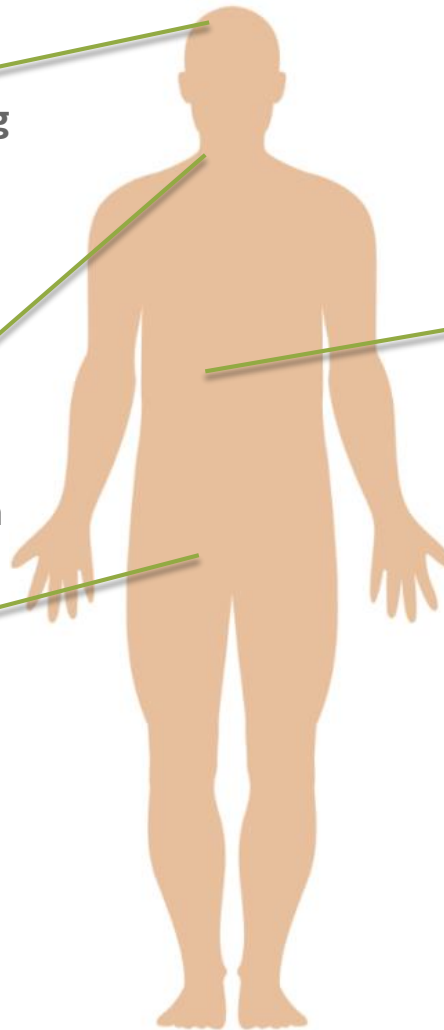
Endocrine System Disruption

- Obesity
- Chemicals that mimic estrogen
- Alters thyroid hormone

Reproductive Toxicant

- Decreased fertility
- Decreased birth weight
- Decreased sperm quality

Diabetes
Cancer



Flame Retardants Are Ubiquitous



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



TBI 17-2013: 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 \neq Flame Retardant Free

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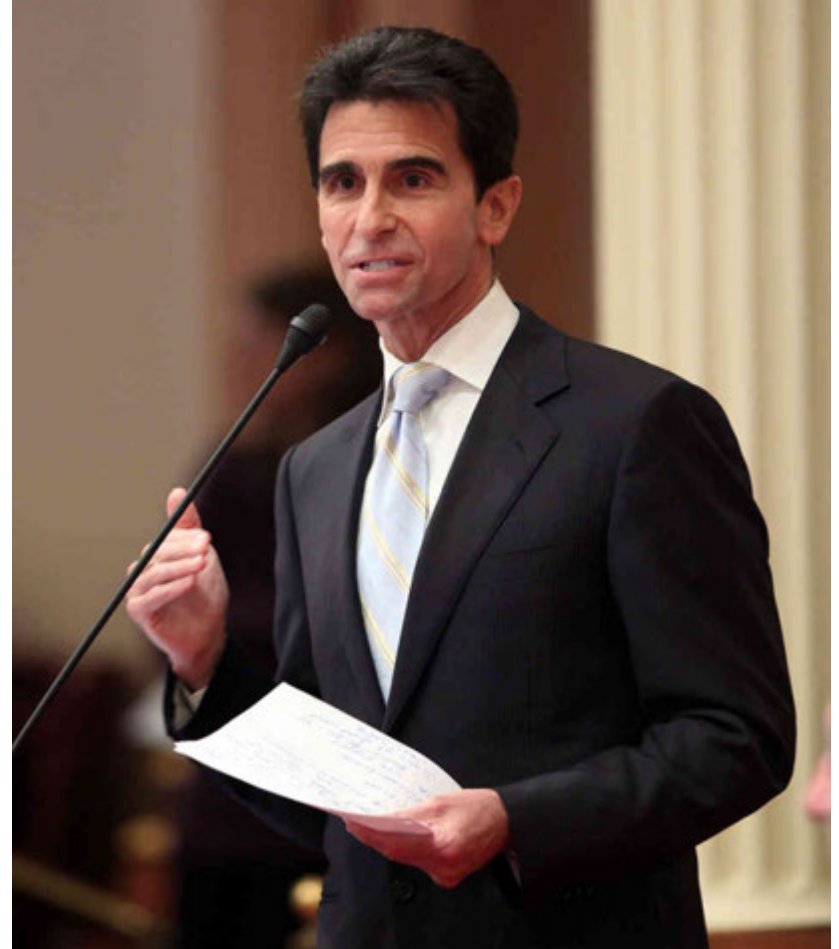
- **New standard provides way to pass new test without FRs**
BUT.....
- **Does not prohibit the use of FRs**
- **You must ask the manufacturer re: their use of FRs**



Flame Retardant Disclosure Bill SB 1019 (Leno)

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- Require manufacturers to label furniture as to whether they contain or do not contain flame retardant chemicals.
- Children's products are not labeled



What label to look for?

SB 1019 Label

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NOTICE
THIS ARTICLE MEETS THE FLAMMABILITY REQUIREMENTS OF CALIFORNIA BUREAU OF ELECTRONIC AND APPLIANCE REPAIR, HOME FURNISHINGS AND THERMAL INSULATION TECHNICAL BULLETIN 117-2013. CARE SHOULD BE EXERCISED NEAR OPEN FLAME OR WITH BURNING CIGARETTES.

The upholstery materials in this product:
 contain added flame retardant chemicals
 contain NO added flame retardant chemicals

The State of California has updated the flammability standard and determined the fire safety requirements for this product can be met without adding flame retardant chemicals. The State has identified many flame retardant chemicals as being known to, or strongly suspected of, adversely impacting human health or development.

Technical Bulletin 133



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.



Technical Bulletin 133

- 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
- City of Portland
- Dignity Health
- Facebook
- Genentech
- 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 ?**



Furniture Survey

Sample Questions:

- Does your company have upholstered seating products made entirely without added flame retardant chemicals **including in plastic parts?**
- If some or all of your seating products still contain added FRs, please indicate timeline for eliminating.
- How will you let purchasers know that your upholstered seating furniture products do not contain added flame retardant chemicals?

Manufacturers who Have All Flame Retardant-Free Products

HAWORTH®

arcadia

WIELAND

Humanscale®

And
Andreu World

GLOBAL

9to5®
seating

NeutralPosture

L e l a n d

Martin Bratrud

fc freshcoast

DAVID EDWARD



Manufacturers who Have Some Flame Retardant-Free Products



HermanMiller



OFS BRANDS



Reupholster or Replace Cushions

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Ask for flame retardant-free foam when:

Reupholstering:

- ❑ Prolongs life
- ❑ Reduces waste

or

Replacing cushions:

- ❑ Can remove vast majority of FRs
- ❑ Cost \$45-\$95 per cushion



Why Make the Switch?

- Reduced toxics in work environment
- Concern for employee and community health
- Potential cost savings
- 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 and ask for your suppliers' help in meeting your toxic reduction objectives**
- ❑ **Find out your org's furniture contract timeframe**
- ❑ **Prefer those companies who offer FR-free products**
- ❑ ***Advocate for your company to sign the purchaser pledge***
- ❑ ***Call CEH for assistance***

Questions?

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