Welcome To The Flame Retardants Webinar

The webinar will start promptly 10:00 a.m. PST.

- Please use the Go To Webinar phone number to listen and participate in the meeting.

- If during the webinar you are disconnected, or have difficulty hearing, try disconnecting and calling back in.

- For any technical support, please visit gotowebinar.com and click on Support.
Flame Retardants (ESHB 2545)
Stakeholder Advisory Committee

June 15, 2018
Washington Department of Health
Tumwater WA
Participating in Q&A and Group Discussion

Raise your hand by clicking on the Hand icon and we will unmute your line. After asking the question, put your hand down by clicking the hand icon again.

or

Submit a comment or question by typing into the Questions box. We will read it aloud.
Stakeholder Advisory Members
(June 15th meeting #1)

Vyto Babrauskas, PhD, Fire Science & Technology, Inc.
Richard Henrich, Global Regulatory Compliance, LANXESS Solutions US Inc.
Kimberly Bloor, Deputy State Fire Marshal
Andrea Carey, Biologist, Washington Department of Fish & Wildlife
Holly Davies, PhD, Local Hazardous Waste Management Program, King County Parks and Natural Resources
Elizabeth Friedman, MD, Pediatric Environmental Health Specialty Unit, University of Washington
Andy Hackman, Juvenile Products Manuf. Association
A.J. Johnson, Washington Council of Firefighters
Joe Johnson, Senior Director, Cisco Environmental Affairs
Chief Scott LaVielle, Washington Fire Chiefs Assoc.

Donald Lucas, PhD, Lawrence Berkeley National Laboratory (retired)
Brad Miller, Advocacy & Sustainability, BIFMA
Grant Nelson, Association of Washington Businesses
Cheri Peele, MCP, Clean Production Action
Heather Stapleton, PhD, Associate Professor, Duke University, Nicholas School of the Environment
Shirlee Tan, PhD, Toxicologist, Seattle-King County Public Health
Joel Tenney, Director of Advocacy, ICL (Israel Chemicals Ltd)
Heather Trim, PhD, Executive Director, Zero Waste Washington
Laurie Valeriano, Executive Director, Toxic-Free Future (Erika Schreder, Science Director TFF)
Advisory Committee Introductions

Name, company or organization

Your Perspective
- Briefly, what your company or organization does
- Briefly, your experience with this issue (flame retardants in consumer products)
Role of Stakeholder Advisory committee

To provide:

• Consultation to DOH and ECY.
• Input on evaluations of six flame retardants.
• Advice and expertise as we develop policy options.
• Your perspective as we develop our recommendations.

• Final Report will be authored by DOH, in consultation with ECY.
Group Process

Together we will:
• Stick to the agenda.
• Remain respectful. Be open to other viewpoints.
• Give others a chance to share their thoughts.
• Speak clearly (always into a microphone) so those on the webinar can hear those in the room.
Questions on role of Stakeholders?

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ESHB 2545
Historical context, Review of charge, Implementation timeline

Barbara Morrissey, Toxicologist
Office of Environmental Public Health Sciences
Barbara.Morrissey@DOH.WA.GOV
(360) 236-3368
### Washington Policy Action - Flame Retardants

<table>
<thead>
<tr>
<th>Year</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>2006</td>
<td>State-wide Chemical Action Plan for PBDEs completed (ECY/ DOH)</td>
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<td>2007</td>
<td>Washington passes ESHB 1024 banning PBDEs in a number of consumer products; required agencies to identify a safer alternative before some restrictions could take effect.</td>
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<td>2008</td>
<td>Alternative assessment on decaBDE completed (DOH/ECY)</td>
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<td>2008</td>
<td>Washington passes the Children’s Safe Product Act (CSPA) requiring disclosure of “chemicals of high concern to children” in covered children’s products.</td>
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<td>2011</td>
<td>Ban on decaBDE in TV, computers, upholstered furniture becomes effective.</td>
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<td>2014</td>
<td>Report to legislature on flame retardant market replacements (ECY)</td>
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DOH reviewed flame retardant exposure studies (in 2015)

- Looked for evidence of exposure in the general population and in children
  - Biomonitoring studies
  - Environmental sampling of indoor air and dust

- Focused on current uses (not PBDEs)
Flame retardants found in U.S. biomonitoring studies

Most frequently found

Term:
- HBCD
- TPHP
- TDCPP
- TBB
- TCEP
- TBPH
- TCPP

Frequency of detection (%)

Found at highest levels

Term:
- DP
- TBBPA
- TCP
- OBIND
- DBDPE
- DPHP (TPHP)
- BDCIPP (TDCPP)
- TBPH
- BDCIPP (TDCPP)
- HBCD
- TCEP

Concentration (ppb)
Most Prevalent Flame retardants in U.S. house dust (maximum levels reported)
Majority of the flame retardants found in people and house dust are additive flame retardants with home uses.

A number of flame retardants detected in children and pregnant and nursing moms, were rated by EPA as high hazard for reproductive, developmental, or systemic toxicities.

Unavoidable and unwanted exposures continue in people.
Implementation of ESHB 2545
Step 1

- Evaluate whether six flame retardants meet criteria for the Children’s Safe Product Act (CSPA) disclosure list (*Chemicals of High Concern for Children*).

Step 2

- Recruit stakeholders for advisory committee.
- Evaluate, in more depth, potential for health impacts and investigate policy options for reducing impacts.
- Report findings and recommendations to legislature.
Progress to Date

**Step 1: Completed**
- Department of Ecology - lead agency
- CSPA rule update was adopted September 2017
- 12 flame retardants added to reporting list

**Step 2: Starting June 2018**
- Department of Health - lead agency
- Anticipate 3 stakeholder meetings
- Anticipate Legislative Report by December 2018

<table>
<thead>
<tr>
<th>Flame retardants added to CSPA</th>
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<tr>
<td>IPTPP</td>
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<td>TBPH</td>
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<td>EHDPP</td>
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<td>SCCPs</td>
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<tr>
<td>TNBP</td>
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<td>DBDPE</td>
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Create a stakeholder advisory committee for each flame retardant chemical to provide stakeholder input, expertise, and additional information in the development of recommendations.

Include specific categories of stakeholders:
- Large and small business sectors;
- Community, environmental, and public health advocacy groups;
- Local governments;
- Affected and interested businesses;
- Public health agencies.
- Optional: relevant state agencies and other technical experts
For each chemical:

(a) Chemical name, properties, uses, and manufacturers;

(b) An analysis of available information on the production, unintentional production, uses, and disposal of the chemical;

(c) Quantitative estimates of the potential human and environmental exposures associated with the use and release of the chemical;

(d) An assessment of the potential impacts on human health and the environment resulting from the quantitative exposure estimates referred to in (c) of this subsection;
(4)(a) The department of health must submit to the legislature recommendations on policy options for reducing exposure, designating and developing safer substitutes, and restricting or prohibiting the use of the flame retardant chemicals ...

- Rely on credible scientific evidence.
- Consider quantitative information on exposures to the chemical under its intended or reasonably anticipated conditions of use.
- Consider uses in children's products, residential upholstered furniture, or other commercial products or processes.
Anticipated Project Timeline

- **Today**: Post draft of FR reviews
- **June**: Advisory Committee June 15
- **July**: Advisory Committee August 17
- **August**: Written comments by Aug 15
- **September**: Advisory Committee Sept 28
- **October**: Written comments by Oct 15
- **November**: Finalize report w/ DOH, ECY, OFM
- **December 2018**: Report sent to Legislature

Stakeholder Involvement
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Guiding Principles and Agency Goals

Lauren Jenks, Director
Office of Environmental Public Health Sciences
Washington Dept of Health

Darin Rice, Program Manager
Hazardous Waste and Toxics Reduction
Washington Dept of Ecology
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10 Minute Break