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Issues in Current Chemicals Policy Implementation

- Chemical Prioritization

Jessica Schifano, JD, MPH
Policy Analyst
Lowell Center for Sustainable Production
jessica_schifano@uml.edu

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Maine
Toxic Chemicals in Children's Products

Public Law

123rd Legislature

Second Regular Session

Chapter 643

H.P. 1432 - L.D. 2048

An Act To Protect Children's Health and the Environment from Toxic Chemicals in Toys and Children's Products

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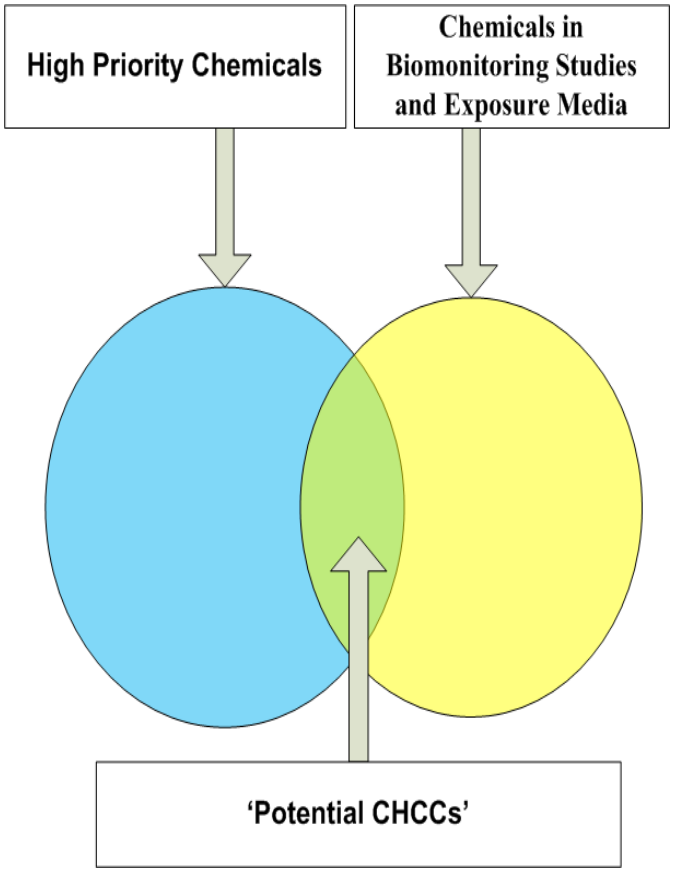
Washington Children's Safe Products Act



<u>High Priority Chemicals:</u>

- Chemicals from authoritative sources
- Chemicals with specific toxicities

<u>Exposure Lists:</u>

- Chemicals found in:
  - Humans
  - Indoor Air and Dust
  - Drinking Water
  - Products

<u>Potential Chemicals of High Concern to Children (CHCCs):</u>

- Intersection of two groups

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Comparing Criteria for Initial Prioritization

Maine

Identification of "Chemicals of High Concern"

Must be identified by an authoritative government entity on the basis of credible scientific evidence as being known as:

(a) A carcinogen, a reproductive or developmental toxicant or an endocrine disruptor;
(b) Persistent, bioaccumulative and toxic; or
(c) Very persistent and very bioaccumulative.

Washington

Identification of "High Priority Chemicals"

Must be identified by a state agency, federal agency, or accredited research university, or other scientific evidence deemed authoritative by the Department on the basis of credible scientific evidence as known to do one or more of the following:

(a) Harm the normal development of a fetus or child or cause other developmental toxicity;
(b) Cause cancer, genetic damage, or reproductive harm;
(c) Disrupt the endocrine system;
(d) Damage the nervous system, immune system, or organs or cause other systemic toxicity;
(e) Be persistent, bioaccumulative, and toxic; or
(f) Be very persistent and very bioaccumulative.

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Authoritative Lists by Hazard

Hazard	Authoritative List(s)
Carcinogen	– NTP 11th Report on Carcinogens – California Proposition 65 – EU Directive on Dangerous Substances (Directive 67/548/EEC) – REACH Substances of Very High Concern – International Agency for Research on Cancer (IARC) – IRIS
PBT	– EPA National Waste Minimization Program Priority Chemicals – EPA Priority PBT Chemicals – EPA EPCRA/TRI PBT Chemicals – EPA TRI PBT Chemical List – Washington PBT List – EU PBT List – REACH Substances of Very High Concern – Canada Domestic Substance List – OSPAR List of Substances of Possible Concern – OSPAR List of Chemicals for Priority Action
vPvB	– EU PBT List
Developmental Toxicant	– NTP CERHR List – California Proposition 65
Reproductive Toxicant	– NTP CERHR List – California Proposition 65 – EU Directive on Dangerous Substances (Directive 67/548/EEC)
Endocrine Disruptors	– EU List of Endocrine Disruptors
Neurotoxicants	– Grandjean & Landrigan (2006). Developmental neurotoxicity of industrial chemicals – a review. *The Lancet*, 368(9553): 2167-2178.
Other	– EC Chemicals Identified for Risk Assessment – EPA VCCEP

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State Criteria for Authoritative Lists—Carcinogens

Hazard	Authoritative List(s)	Maine Criteria for Inclusion	Washington Criteria for Inclusion
Carcinogen	NTP 11th Report on Carcinogens	Included chemicals known to be human carcinogens and chemicals reasonably anticipated to be human carcinogens.	Included chemicals known to be human carcinogens and chemicals reasonably anticipated to be human carcinogens.
	California Proposition 65	Included all chemicals identified as carcinogens.	Included all chemicals identified as carcinogens.
	EU Directive on Dangerous Substances (Directive 67/548/EEC)	**Included category 1 carcinogens.**	**Did not include chemicals from this list.**
	REACH Substances of Very High Concern	Included all chemicals identified as CMRs.	Included all chemicals identified as CMRs.
	International Agency for Research on Cancer (IARC)	Included chemicals listed as **Group 1, 2A**.	Included chemicals listed as **Group 1, 2A, 2B**.
	IRIS	Included chemicals listed as Group A, B1, B2, known/likely human carcinogen, carcinogenic to humans, likely to be carcinogenic to humans.	**Included chemicals listed as Group A, B1, B2, C, known/likely human carcinogen, carcinogenic to humans, likely to be carcinogenic to humans, suggestive.** **Included four chemicals with non-cancerous impacts based on oral reference dose.**

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State Criteria for Authoritative Lists—PBTs

Hazard	Authoritative List(s)	Maine Criteria for Inclusion	Washington Criteria for Inclusion
PBT	EPA National Waste Minimization Program Priority Chemicals	Included all chemicals.	Included all chemicals.
	EPA Priority PBT Chemicals	**Included all chemicals.**	**Did not include chemicals from this list.**
	EPA EPCRA/TRI PBT Chemicals	Included all chemicals.	Included all chemicals.
	EPA TRI PBT Chemical List	**Included all chemicals.**	**Did not include chemicals from this list.**
	Washington PBT List	Included all chemicals.	Included all chemicals.
	EU PBT List	Included chemicals listed as fulfilling PBT criteria.	Included chemicals listed as fulfilling PBT criteria.
	REACH Substances of Very High Concern	Included all chemicals.	Included all chemicals.
	Canada Domestic Substance List	Included chemicals listed as PBiT.	Included chemicals listed as PBiT.
	OSPAR List of Substances of Possible Concern	Included all chemicals.	Included all chemicals.
	OSPAR List of Chemicals for Priority Action	Included all chemicals.	Included all chemicals.

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Authoritative List Criteria—Persistence

Criteria	EU REACH	Canada DSL	EPA EPCRA/TRI PBT	OSPAR	Washington PBT List
Persistence					
Half-life in Fresh Water	> 40 days (5.7 weeks)	≥182 days (26 weeks)	≥60 days (8.5 weeks) considered persistent, moderate hazard Not persistent if half life <60 days, low hazard	>50 days (7.1 weeks)	≥60 days (8.5 weeks)
Half-Life in Marine Water	>60 days			>50 days	
Half-Life in Soil	>120 days	≥182 days			≥60 days
Half-Life in Sediment	>120 days in freshwater sediment or >180 days in marine sediment	≥365 days	≥60 days (8.5 weeks) considered persistent, moderate hazard Not persistent if half life <60 days, low hazard		≥60 days
Half-Life in Air		≥2 days or is subject to atmospheric transport from its source to remote place			
Very Persistent		No ``very persistent`` category		No ``very persistent`` category	No ``very persistent`` category
Half-Life in Water	>60 days in marine or freshwater		>190 days, considered high hazard		
Half-Life in Sediment	>180 days in marine or freshwater sediment		>190 days, considered high hazard		
Half-Life in Soil	>180 days		>190 days, considered high hazard		

Results of Initial Prioritization

Maine

List of Chemicals of High Concern containing 1,739 chemicals published in July 2009

Washington

Identified 2,044 High Priority Chemicals

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Comparing Criteria for Secondary Prioritization

Maine

Identification of "Priority Chemicals"

May designate a chemical of high concern as a priority chemical if one or more of the following criteria are met:

(a) Found through biomonitoring to be present in human bodily tissues or fluids;
(b) Present in household dust, indoor air, drinking water, or elsewhere in the home environment;
(c) Present in fish, wildlife or the natural environment;
(d) Present in a consumer product used or present in the home;
(e) Identified as a high production volume chemical by EPA; or
(f) Chemical has been banned in another state.

Washington

Identification of "High Priority Chemicals that are of High Concern to Children"

Identified if one or more of the following criteria are met:

(a) Found through biomonitoring to be present in human bodily tissues or fluids;
(b) Present in household dust, indoor air, drinking water, or elsewhere in the home environment;
(c) Added to or present in a consumer product used or present in the home.

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Results of Secondary Prioritization

Maine

Proposed rulemaking to designate bisphenol A as a priority chemical.

Washington

Identified 2,219 exposure indicator chemicals and 476 potential Chemicals of High Concern to Children (CHCCs).

Additional prioritization activity for potential CHCCs resulted in draft reporting list of 66 chemicals.

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Next Steps—Chemical Use Reporting

Maine

For each priority chemical, *must* report (unless waived):

(a) Description of product(s) containing priority chemical
(b) Number of units sold/distributed
(c) Amount of priority chemical(s) in the product
(d) Function of chemical(s) in the product

M*ay* be required to report (if specified by Board):

(a) Information on the propensity for chemical to be released during use
(b) Likelihood of child exposure to the chemical from use
(c) Pathways by which exposure could occur
(d) Predicted magnitude of exposure
(e) Extent to which chemical(s) is present in environment and humans
(f) Assessment of alternatives

Washington

For each chemical of high concern to children, *must* report annually:

(a) Name of chemical in product and CAS registry number
(b) Description of product and/or product component containing chemical
(c) Description of the function of the chemical
(d) Amount of chemical used in the product or product component
(e) Name, address, and phone number of manufacturer
(f) Any other information deemed relevant to the appropriate use of the product

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Comparison of Chemical Reporting Requirements

Data	Maine	Washington
Product Information		
Chemical Identity	◖	●
• Name of Chemical in Product and CAS#		●
• Priority Chemical(s) Contained in Children's Product	◖	
Description of Product	◖	●
• Description of Product or Products Containing the Priority Chemical	◖	
• Brief Description of the Product or Product Component Containing the Chemical		●
Product Market Data	◖	
• Number of Product Units Sold or Distributed in State or Nationally	◖	
Function of the Chemical(s) in the Product	◖	●
Amount of Chemical in Product	◖	●
• Exact Amount of Chemical in Each Unit of Product	◖	
• Amount of Chemical(s) in Each Unit of Product or Product Component (Ranges Permitted)		●
Any Other Information Relevant to Appropriate Use of Product		●
Manufacturer Contact Information		●
Exposure Information		
Likelihood of Chemical Release During Use	○	
Likelihood of Child Exposure to Chemical from Use	○	
Pathways of Exposure	○	
Predicted Magnitude of Exposure	○	
Extent to which Chemical is Present in Environment and Humans	○	
Alternatives Information		
Alternatives Assessment	○	

Key:
● = Required Data
◖ = Required Data, but May be Waived
○ = Data that May be Required

Confidential Business Information

- What information can be claimed confidential?
- What is the process for claiming information confidential?
- What information can be shared with the public?
- What information can be shared with other states?

Challenges to Collaboration

- Different prioritization frameworks
- Different prioritization criteria
- Varied chemical reporting requirements
- Confidential business information

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Questions?