# MEMORANDUM

To: Rep. Amy Sheldon
From: Michael O'Grady
Re: State Regulation of Chemicals
Date: December 1, 2015.

You asked for a summary of how other states regulate toxic chemicals. I have reviewed statutes and rules in other States. Generally, most states regulate or address toxic chemicals individually on a chemical-by-chemical basis. For example, several states have enacted laws that specifically address the presence of bisphenol A (BPA) in products but not other chemicals.

In contrast, several states, including Vermont, have enacted comprehensive chemical regulations frameworks that require identification of toxic chemicals in products. These framework laws typically provide a state entity with the authority to ban the sale of products that contain chemicals. However, these framework laws were enacted recently, and have not been fully implemented by any of the enacting states.

Additionally, some states, such as Vermont, have toxic use reduction programs, which require manufacturers to identify toxic chemicals used and develop plans for reduction in use. Most of these state laws were enacted in the late 1980s, and states have implemented them with varying degrees of vigor and success. For example, the Vermont toxic use reduction program is effectively a notification program, with little emphasis on specific reduction of the use of identified toxic chemicals.

I have summarized the varying types of state laws regulating toxic chemicals. However, I do not consider this memorandum exhaustive because there may be other state laws or regulations addressing toxic chemicals that I did not find. In addition, I have summarized these state requirements. I can provide more in-depth information at your request.

## A. IDENTIFICATION AND REGULATION OF TOXIC CHEMICALS IN PRODUCTS

1. ***California***

i. California Health & Safety Code § 25252—Rules; Identify Chemicals

- On or before January 1, 2011, the California Department of Toxic Substances Control (Department) shall adopt regulations to establish a process to identify and prioritize those chemicals or chemical ingredients in consumer products that may be considered a chemical of concern, in accordance with the review process specified in Cal. Health & Safety Code § 25252.5.
- The regulations adopted shall establish an identification and prioritization process that includes, but is not limited to, all of the following considerations:
  - The volume of the chemical in commerce in this state.
  - The potential for exposure to the chemical in a consumer product.
  - Potential effects on sensitive subpopulations, including infants and children.
- In adopting regulations pursuant to this section, the Department shall develop criteria by which chemicals and their alternatives may be evaluated. These criteria shall include the traits, characteristics, and endpoints that are included in the clearinghouse data pursuant to Cal. Health & Safety Code § 25256.1.

ii. California Health & Safety Code § 25252.5—Multimedia Life Cycle Evaluation

- The Department, in adopting the regulations pursuant to Cal. Health & Safety Code §§ 25252 and 25253, shall prepare a multimedia life cycle evaluation conducted by affected agencies and coordinated by the Department, and shall submit the regulations and the multimedia life cycle evaluation to the California Environmental Policy Council for review.
  - The multimedia evaluation shall be based on the best available scientific data, written comments submitted by interested persons, and information collected by the Department in preparation for adopting the regulations.
  - "Multimedia life cycle evaluation" means the identification and evaluation of a significant adverse impact on public health or the environment, including air, water, or soil, that may result from the production, use, or disposal of a consumer product or consumer product ingredient.
- The multimedia evaluation shall address, but is not limited to, the impacts associated with all the following:
  - Emissions of air pollutants, including ozone-forming compounds, particulate matter, toxic air contaminants, and greenhouse gases.
  - Contamination of surface water, groundwater, and soil.
  - Disposal or use of the byproducts and waste materials.
  - Worker safety and impacts to public health.

- Other anticipated impacts to the environment.

iii. California Health & Safety Code § 25252.3—Chemicals of Concern in Consumer Products

- On or before January 1, 2011, the Department shall adopt regulations that establish a process for evaluating chemicals of concern in consumer products, and their potential alternatives, to determine how best to limit exposure or to reduce the level of hazard posed by a chemical of concern.
- The regulations adopted pursuant to this section shall establish a process that includes an evaluation of the availability of potential alternatives and potential hazards posed by those alternatives, as well as an evaluation of critical exposure pathways.
- This process shall include life cycle assessment tools that take into consideration, but shall not be limited to, all of the following:
  - Product function or performance.
  - Useful life.
  - Materials and resource consumption.
  - Water conservation.
  - Water quality impacts.
  - Air emissions.
  - Production, in-use, and transportation energy inputs.
  - Energy efficiency.
  - Greenhouse gas emissions.
  - Waste and end-of-life disposal.
  - Public health impacts, including potential impacts to sensitive subpopulations, including infants and children.
  - Environmental impacts.
  - Economic impacts.
- The regulations shall specify the range of regulatory responses that the Department may take following the completion of the alternatives analysis, including any of the following actions:
  - Not requiring any action.
  - Imposing requirements to provide additional information needed to assess a chemical of concern and its potential alternatives.
  - Imposing requirements on the labeling or other type of consumer product information.
  - Imposing a restriction on the use of the chemical of concern in the consumer product.
  - Prohibiting the use of the chemical of concern in the consumer product.

- Imposing requirements that control access to or limit exposure to the chemical of concern in the consumer product.
- Imposing requirements for the manufacturer to manage the product at the end of its useful life, including recycling or responsible disposal of the consumer product.
- Imposing a requirement to fund green chemistry challenge grants where no feasible safer alternative exists.
- Any other outcome the Department determines accomplishes the requirements of this article.

iv. California Health & Safety Code § 25252.3—Green Ribbon Science Panel

- The Department shall establish a Green Ribbon Science Panel. The panel shall be composed of members whose expertise shall encompass all of the following disciplines:
  - Chemistry.
  - Chemical engineering.
  - Environmental law.
  - Toxicology.
  - Public policy.
  - Pollution prevention.
  - Cleaner production methods.
  - Environmental health.
  - Public health.
  - Risk analysis.
  - Materials science.
  - Nanotechnology.
  - Chemical synthesis.
  - Research.
  - Maternal and child health.

v. California Health & Safety Code § 25255—Powers of Green Ribbon Science Panel

- The panel may take any of the following actions:
  - Advise the Department and the Council on Scientific and Technical Matters in support of the goals of:
    - significantly reducing adverse health and environmental impacts of chemicals used in commerce

- reducing the overall costs of those impacts to the state's society, by encouraging the redesign of consumer products, manufacturing processes, and approaches.

- Assist the Department in developing green chemistry and chemicals policy recommendations and implementation strategies and details, and ensure these recommendations are based on a strong scientific foundation.
- Advise the Department and make recommendations for chemicals the panel views as priorities for which hazard traits and toxicological end-point data should be collected.
- Advise the Department in the adoption of the required regulations.
- Advise the Department on any other pertinent matter in implementing this article, as determined by the Department.

vi. California Health & Safety Code § 25256, 25256.2—Toxic Information Clearinghouse

- The Department shall establish the Toxics Information Clearinghouse.
- The Clearinghouse shall provide a decentralized, Web-based system for the collection, maintenance, and distribution of specific chemical hazard trait and environmental and toxicological end-point data.
- The Department shall make the clearinghouse accessible to the public through a single Internet Web portal.
- The Department shall develop requirements and standards related to the design of the clearinghouse and data quality and test methods that govern the data that are eligible to be available through the clearinghouse.

vii. California Safer Consumer Products Regulation— Division 4.5, Title 22, California Code of Regulations Chapter 55. Safer consumer products

- The regulations provide for a four-step continuous, science-based, iterative process to identify safer consumer product alternatives.
- The regulations establish an immediate list of Candidate Chemicals (approximately 1,200) based on the work already done by other authoritative organizations, and specify a process for DTSC to identify additional chemicals as Candidate Chemicals (CCs).
- The regulations require the Department to evaluate and prioritize product/Candidate Chemical combinations to develop a list of "Priority Products" for which Alternatives Analyses must be conducted.
  - A Candidate Chemical that is the basis for a product being listed as a Priority Product is designated as a Chemical of Concern (COC) for that product and any alternative considered or selected to replace that product.
- The regulations require responsible entities (manufacturers, importers, assemblers, and retailers) to notify the Department when their product is listed as a Priority Product.
  - The Department will post this information on its website.

- Manufacturers (or other responsible entities) of a product listed as a Priority Product must perform an Alternatives Analysis (AA) for the product and the COCs in the product to determine how best to limit exposures to, or the level of adverse public health and environmental impacts posed by, the COCs in the product.
- The regulations require the Department to identify and require implementation of regulatory responses designed to protect public health and/or the environment, and maximize the use of acceptable and feasible alternatives of least concern.
  - The Department may require regulatory responses for a Priority Product (if the manufacturer decides to retain the Priority Product), or for an alternative product selected to replace the Priority Product.

## *2. Connecticut*

i. Connecticut General Statutes Chapter 420d, §§ 21a-335 through 21a-350

- Connecticut passed the Act Concerning Child Product Safety in 2008.
- The act prohibits the introduction into commerce of any misbranded hazardous substance or banned hazardous substance.
- The act prohibits the manufacture, distribution, or sale at wholesale or retail of a children's product that is:
  - a banned hazardous substance;
  - a defective children's product subject to a federal corrective action; and
  - not in conformity with consumer safety standards.
- "Banned hazardous substance" is defined to include the following:
  - any toy, or other article intended for use by children, which is a hazardous substance, or which bears or contains a hazardous substance in such manner as to be susceptible of access by a child to whom such toy or other article is entrusted;
  - (i) for the period commencing July 1, 2009, and ending June 30, 2011, any children's product with greater than 300 ppm total lead content by weight for any part of the product;

    (ii) on and after July 1, 2011, any children's product with greater than 100 ppm total lead content by weight for any part of the product, or such stricter standard established in regulation adopted pursuant to CGSA § 21a-342;

    (iii) on and after July 1, 2009, any children's product with lead-containing paint greater than 90 parts per million total lead content; and

    (iv) on and after July 1, 2009, any children's product with lead-containing paint greater than 0.009 milligrams of lead per centimeter squared;
  - any new wood-burning stove, coal-burning stove, solid fuel add-on units offered for sale or installed in any building, dwelling, or structure on or after July 1, 1985 that

has not been tested in accordance with Underwriter's Laboratory Standard Number 1482.

- "Hazardous substance" means any substance or mixture of substances that is:
  - Toxic;
  - Corrosive;
  - An irritant;
  - A strong sensitizer;
  - Flammable or combustible;
  - A substance that generates pressure through decomposition, heat or other means, if such substance or mixture of substances may cause substantial personal injury or substantial illness during or as a proximate result of any customary or reasonably foreseeable handling or use, including reasonably foreseeable ingestion by children;
  - A substance designated by rule as meeting the requirements of a hazardous substance;
  - A substance classified as a hazardous substance pursuant to federal Hazardous Substances Act rules;
  - A radioactive substance, if the substance when used in a product is designated in rule as sufficiently hazardous to require labeling in order to protect public health;
  - A toy or other article intended for use by children which the administrator by regulation determines is an electrical, mechanical, or thermal hazard;
    - "Hazardous substance" shall not mean pesticides, food, drugs, or Atomic Energy Act regulated nuclear material.
- Toxic is defined as any substance, other than a radioactive substance, which has the capacity to produce personal injury or illness to a human through ingestion, inhalation, or absorption through any body surface.
- Under CGSA § 21a-336, the Commissioner of Consumer Protection may by rule:
  - declare any substance to be a hazardous substance;
  - establish safety standards;
  - establish banned hazardous substances;
  - require labeling; and
  - requiring testing for products subject to the Child Protection Act.
- Under CGSA § 21a-348, the Commissioner of Consumer Protection shall compile and, from time to time, amend a list of other toxic substances that potentially should not exist in children's products.
  - The Commissioner shall also compile and from time to time amend a list of safer alternatives to using the listed toxic substances.
- CGSA § 21a-349 requires any lead-containing products that children may come into contact with to bear a warning label.

### ***3. Maine***

i. 38 M.R.S.A. § 1693—Initial List of Chemicals of High Concern

- Under 38 M.R.S.A. § 1693, the Maine Department of Environmental Protection (DEP) was required to publish a list of chemicals of high concern by January 1, 2010.
- A chemical could be included on the list only if it had been identified by an authoritative governmental entity on the basis of credible scientific evidence as being:
  - A carcinogen, a reproductive or developmental toxicant, or an endocrine disruptor;
  - Persistent, bioaccumulative, and toxic; or
  - Very persistent and very bioaccumulative.
- The Department could revise the list and remove chemicals from the list.
- Any person could petition the Department to remove a chemical from the list.

ii. 38 M.R.S.A. § 1693-A—Updated List of Chemicals of High Concern

- Under 38 M.R.S.A. § 1693-A, DEP in conjunction with the Department of Health and Human Services shall publish a list of no more than 70 chemicals of high concern.
- To be listed as a chemical of high concern, several requirements must be met:
  - a chemical must be on the list of chemicals of concern published under 38 M.R.S.A. § 1693; and
  - DEP, in concurrence with the Department of Health and Human Services, must determine that there is strong credible scientific evidence that the chemical is:
    - a reproductive or developmental toxicant, endocrine disruptor, or human carcinogen; and
  - there must strong credible scientific evidence that the chemical meets one or more of the following criteria:
    - the chemical has been found through biomonitoring studies to be present in human blood, human breast milk, human urine, or other bodily tissues or fluids;
    - the chemical has been found through sampling and analysis to be present in household dust, indoor air or drinking water, or elsewhere in the home environment; or
    - the chemical has been added to or is present in a consumer product used or present in the home.
- The Commissioner of DEP shall review the published list every three years. The Commissioner may add chemicals to the list, but the list may not exceed 70 chemicals.
- A chemical will be removed from the list of chemicals of high concern if it is designated a priority chemical.

iii. 38 M.R.S.A. § 1694—Priority Chemical.

- DEP may designate a chemical of high concern as a priority chemical if it finds, in concurrence with the Department of Health and Human Services, that:
  - the chemical has been found through biomonitoring to be present in human blood, including umbilical cord blood, breast milk, urine, or other bodily tissues or fluids;
  - the chemical has been found through sampling and analysis to be present in household dust, indoor air or drinking water, or elsewhere in the home environment; or
  - the chemical is present in a consumer product used or present in the home.
- The Commissioner shall designate at least two priority chemicals by January 1, 2011, and may designate additional priority chemicals if a chemical meets one of the criteria for designation.
  - DEP has designated five chemicals as priority chemicals—bisphenol A (BPA); Nonylphenol (NP) and Nonylphenol Ethoxylates (NPE); cadmium; mercury; and arsenic.
- The Commissioner shall adopt rules to implement the requirements for priority chemicals.

iv. 38 M.R.S.A. §1695. Disclosure of Information on Priority Chemicals

- A manufacturer or distributor of a children's product for sale that contains a priority chemical in an amount greater than a de minimis level shall notify DEP unless waived by DEP or exempt.
- De minimis level means:
  - For a chemical of high concern or priority chemical that is an intentionally added chemical in a component of a children's product, the practical quantification limit; or
  - For a chemical of high concern or priority chemical that is a contaminant present in a component of a children's product, a concentration of 100 parts per million.
- The written notice must be made within 180 days after a priority chemical is identified.
- This written notice must identify:
  - the children's product;
  - the number of units sold or distributed for sale in the State or nationally;
  - the priority chemical or chemicals contained in the children's product;
  - the amount of such chemicals in each unit of children's product; and
  - the intended purpose of the chemicals in the children's product.

- The manufacturer or distributor of a children's product that contains a priority chemical shall provide additional information if requested by DEP, including an assessment of:
  - availability, cost, feasibility, and performance of alternatives to the priority chemical; and
  - the reason the priority chemical is used in the manufacture of the children's product in lieu of identified alternatives.
- DEP may waive all or part of the notification for one or more specified uses of a priority chemical if DEP determines that substantially equivalent information is publicly available, the information is not needed, or the specified use or uses are minor in volume.
- DEP may assess a fee on the manufacturer or distributor for the notification to cover DEP's reasonable costs in managing the information collected. The fee shall be adopted by rule.

v. 38 M.R.S.A. § 1696. Sales Prohibition; Safer Alternatives to Priority Chemicals

- The Maine Board of Environmental Protection may adopt rules prohibiting the manufacture, sale, or distribution in the State of a children's product containing a priority chemical in an amount greater than a de minimis level if the Board finds that:
  - distribution of the children's product directly or indirectly exposes children and vulnerable populations to the priority chemical; and
  - one or more safer alternatives to the priority chemical are available at a comparable cost.
- If there are several available safer alternatives to a priority chemical, the Board may prohibit the sale of children's products that do not contain the safer alternative that is least toxic to human health or least harmful to the environment.
- A rule established pursuant to this subsection must specify the effective date of the prohibition, which may not be sooner than 12 months after notice of the proposed rule is published.
- No later than 180 days prior to the effective date of a prohibition, the manufacturer or distributor of a children's product that contains the priority chemical and that is subject to the prohibition at the time of adoption shall file a compliance plan with the commissioner or seek a waiver.
- A compliance plan must:
  - identify the children's product that contains the priority chemical;
  - specify whether compliance will be achieved by discontinuing the sale of the children's product in the State or by substituting a safer alternative in the product; and
  - if compliance is achieved by substitution of a safer alternative in the product, identify the safer alternative and the timetable for substitution.

- A manufacturer or distributor of a children's product containing a priority chemical shall notify persons that offer the product for sale or distribution in the State of the requirements of this chapter.
- The manufacturer or distributor of a children's product that contains a priority chemical and that is subject to a prohibition may apply to DEP for a waiver for one or more specific uses of the priority chemical.

vi. 38 M.R.S.A. §1697—Exemptions

- The chemicals of high concern and priority chemical requirements do not apply to the following:
  - chemicals in used products;
  - priority chemicals used in or for industry or manufacturing;
  - motor vehicles or watercraft;
  - priority chemicals generated solely as combustion by-products or that are present in combustible fuels;
  - a container or packaging for a food or beverage product, unless that product is intentionally marketed or intended for the use of children under three years of age;
  - a priority chemical contained in a component of a children's product that during reasonably foreseeable use and abuse would not come into direct contact with a child's skin or mouth, such as inaccessible components of children's products.
- The requirements of 38 M.R.S.A. §§ 1695 and 1696 do not apply to a priority chemical that occurs in a product component only as a contaminant if the manufacturer had in place a manufacturing control program and exercised due diligence to minimize the presence of the contaminant in the component.

vii. 38 M.R.S.A. § 1699-A—Enforcement

- A children's product containing a priority chemical may not be sold, offered for sale, or distributed for sale in Maine if the manufacturer or distributor failed to provide information required under 38 M.R.S.A. § 1695 by the date required.
- If there are grounds to suspect that a children's product is being offered for sale in violation of requirements, DEP may request the manufacturer or distributor of the product to provide a certificate of compliance. Within 30 days of receipt of a request under this subsection, the manufacturer or distributor shall:
  - provide DEP with a certificate that the children's product does not contain the priority chemical; or
  - notify persons who sell the product in the State that the sale of the children's product is prohibited and provide DEP with a list of the names and addresses of those notified

### *4. Michigan*

i. *Executive Directive 2006-6* (issued in 2006)

- Requires the Michigan Department of Environmental Quality (DEQ) to establish a Green Chemistry Support Program to promote and coordinate state green chemistry research, development, demonstration, education, and technology transfer.
- Green Chemistry is defined as "chemistry and chemical engineering to design chemical products and processes that reduce or eliminate the use or generation of hazardous substances while producing high quality products through safe and efficient manufacturing processes. Green chemistry is based upon the following 12 principles:
  1. prevent waste.
  2. design safer chemicals and products.
  3. design less hazardous chemical syntheses.
  4. use renewable feedstocks.
  5. use catalysts, not stoichiometric reagents.
  6. avoid chemical derivatives.
  7. maximize atom economy.
  8. use safer solvents and reaction conditions.
  9. increase energy efficiency.
  10. design chemicals and products to degrade after use.
  11. analyze in real-time to prevent pollution.
  12. minimize the potential for accidents.
- The Green Chemistry Program shall be designed to achieve 11 specified goals, including:
  - encouragement of green chemistry;
  - incentivizing use of green chemistry products and process;
  - facilitating adoption of green chemistry;
  - educating the public and industry regarding green chemistry;
  - collection of information on green chemistry; and
  - promoting voluntary, cooperative efforts with industry to develop green chemistry plans.
- DEQ is required to: 1) maintain a website to provide information about green chemistry; and 2) coordinate state efforts to implement the Green Chemistry directive.
- DEQ released an action plan for advancing green chemistry in 2008.[1]

[1] Advancing Green Chemistry: An Action Plan for Michigan Green Chemistry, Research, Development and Education (2008), available at https://www.michigan.gov/documents/deq/deq-ess-p2-chemistry-actionplan_236382_7.pdf

**5. *Minnesota***

i. Minnesota Statutes § 116.9402—Identification of Chemicals of Concern

- By July 1, 2010, the Minnesota Department of Health (DOH), after consultation with the Minnesota Pollution Control Agency, shall generate a list of chemicals of high concern.
- A "chemical of high concern" means a chemical identified on the basis of credible scientific evidence by a state, federal, or international agency as being known or suspected with a high degree of probability to:
  - harm the normal development of a fetus or child or cause other developmental toxicity;
  - cause cancer, genetic damage, or reproductive harm;
  - disrupt the endocrine or hormone system;
  - damage the nervous system, immune system, or organs, or cause other systemic toxicity;
  - be persistent, bioaccumulative, and toxic; or
  - be very persistent and very bioaccumulative.
- DOH must periodically review and revise the list of chemicals of high concern at least every three years and may add chemicals to the list if the criteria are met.
- DOH shall consider chemicals listed as a suspected carcinogen, reproductive or developmental toxicant, or as being persistent, bioaccumulative, and toxic, or very persistent and very bioaccumulative by a state, federal, or international agency.
- DOH may consider chemicals listed by another state as harmful to human health or the environment for possible inclusion in the list.

ii. Minnesota Statutes § 116.9403—Identification of Priority Chemicals

- DOH may designate a chemical of high concern as a priority chemical if it finds that the chemical:
  1. has been identified as a high-production volume chemical by the U.S. EPA; and
  2. meets any of the following criteria:
     - the chemical has been found through biomonitoring to be present in human blood, including umbilical cord blood, breast milk, urine, or other bodily tissues or fluids;
     - the chemical has been found through sampling and analysis to be present in household dust, indoor air, drinking water, or elsewhere in the home environment; or
     - the chemical has been found through monitoring to be present in fish, wildlife, or the natural environment.

- By February 1, 2011, DOH shall publish a list of priority chemicals in the State Register and on the department's website and shall update the published list whenever a new priority chemical is designated.

iii. Minnesota Statutes § 116.9405—Exemptions and Applicability

- The requirements related to chemicals of high concern and priority chemicals do not apply to:
  - chemicals in used children's products;
  - priority chemicals used in the manufacturing process, but that are not present in the final product;
  - priority chemicals used in agricultural production;
  - motor vehicles or watercraft;
  - priority chemicals generated solely as combustion by-products or that are present in combustible fuels;
  - retailers;
  - pharmaceutical products or biologics;
  - a medical device as defined in 21 U.S.C. § 321(h);
  - food and food or beverage packaging, except a container containing baby food or infant formula;
  - consumer electronics products and electronic components; or
  - outdoor sport equipment, including snowmobiles; all-terrain vehicles, personal watercraft; watercraft; and off-highway motorcycles.

**6. *Oregon***

i. Oregon Toxic Free Kids Act § 3— List of Chemicals of High Concern to Children

- Oregon Toxic Free Kids Act adopted in 2015.
- The Oregon Health Authority (OHA) shall establish and maintain a list of high priority chemicals of concern for children's health when used in children's products.
- OHA shall include on the list chemicals that are listed on the Washington State Department of Ecology's Reporting List of Chemicals of High Concern to Children.
- OHA shall post the list of high priority chemicals on its website.
- For each high priority chemical on the list, the authority shall post:
  - information regarding the known health impacts of exposure to the chemical; and
  - data collected that is searchable and accessible to the public.
- OHA shall review and revise the list of high priority chemicals every three years.

- OHA may not add more than five chemicals to the list of high priority chemicals during each three-year revision period;
- OHA shall consider adding or removing a chemical from the list of high priority chemicals if the chemical is added to or removed from Washington's List of Chemicals of High Concern to Children or a list maintained by another state or federal agency; and
- OHA may remove a chemical from the list of high priority chemicals if the authority determines that the chemical is no longer being used in children's products.

ii. Oregon Toxic Free Kids Act § 4—Disclosure of High Priority Chemicals

- A manufacturer of a children's product sold or offered for sale in Oregon that contains a chemical included on the List of High Priority Chemicals of High Concern to Children in an amount at or above a de minimis level shall provide a biennial notice to OHA.
  - "De minimis level" means:
    - For an intentionally added chemical, the practical quantification limit; or
    - For a chemical that is a contaminant, a concentration of 100 parts per million.
- The notice shall contain:
  - the name and Chemical Abstracts Service Registry Number of the chemical;
  - the product category of the children's product that contains the chemical;
  - a description of the function of the chemical in the children's product;
  - the amount of the chemical used in each unit of the children's product reported as a range rather than an exact amount;
  - the name and address of the manufacturer, and the name, address, and telephone number of a contact person for the manufacturer; and
  - any information that the manufacturer deems relevant to appropriate product use.
- OHA may enter into reciprocal data sharing agreements with other states in which manufacturers of children's products are required to disclose information related to high priority chemicals of concern for children's health used in children's products.
  - The authority must use the GS1 Global Product Classification system to identify and specify product categories subject to the data sharing agreements.
- In lieu of notice to OHA, OHA may require that the notice be submitted to the Interstate Chemicals Clearinghouse.
- OHA shall grant an exemption to a manufacturer of children's products that applies for an exemption from the notice requirements if:

- ➢ the high priority chemical of concern for children's health used in children's products is present in the children's product only as a contaminant;
- ➢ the manufacturer conducts a manufacturing control program for the contaminant; and
- ➢ the manufacturing control program meets OHA's minimum standards for a manufacturing control program.

- A trade association may provide required notices on behalf of its member manufacturers under the provisions of this section.

iii. Oregon Toxic Free Kids Act § 5—Removal or Substitution of Chemicals

- If certain children's products contain a chemical of high concern, the manufacturer of the product will be required to remove the chemical from the product, substitute a safer chemical, or seek a waiver.
- Removal or substitution is required if the chemical is present in a children's product that is:
  - ➢ mouthable;
  - ➢ a children's cosmetic; or
  - ➢ made for, marketed for use by, or marketed to children under three years of age.
- Products that contain a high priority chemical of concern are exempt from removal or substitution if the chemical is present in the product at levels that are at or below allowable levels established by the federal Consumer Product Safety Improvement Act
- OHA shall adopt additional exemptions by rule.
- If a manufacturer is complying with a consumer product safety standard under federal law, OHA cannot require the manufacturer to comply with Oregon law, unless, by rule, OHA designates a lower maximum allowable level for a high priority chemical of concern for children's health as necessary to protect human health and welfare.

iv. Oregon Toxic Free Kids Act § 6—Notification of Substitution or Removal

- When a manufacturer of children's products sold or offered for sale in Oregon removes a high priority chemical of concern from a children's product sold or offered for sale and substitutes another chemical, the manufacturer shall submit a hazard assessment to OHA.
  - ➢ The hazard assessment shall explain how the children's product, and any substitute chemical the children's product contains, is inherently less hazardous than before the substitution was made.
- When a manufacturer of children's products removes a high priority chemical of concern from a children's product and does not substitute another chemical, the

manufacturer shall notify OHA that the manufacturer is no longer using the chemical or a substitute chemical.

v. Oregon Toxic Free Kids Act § 7—Waiver

- OHA shall grant a waiver to a manufacturer that applies for a waiver if:
  - An alternatives assessment demonstrates that removal of the high priority chemical used in children's products is not financially or technically feasible; or
  - A quantitative exposure assessment demonstrated that the high priority chemical of concern for children's health used in children's products is not reasonably anticipated to result in exposure based upon an analysis of leachability and bioavailability of the high priority chemical of concern for children's health used in children's products.

vi. Oregon Toxic Free Kids Act § 8—Small Manufacturer Exemption

- Manufacturers of children's products with annual worldwide gross sales of less than $5 million, as reported on the most recent tax return filed by the manufacturer are exempt from the requirements of the Act.

vii. Oregon Toxic Free Kids Act § 9—Testing; Fees

- OHA may conduct testing of children's products sold or offered for sale in this state in order to determine compliance with requirements of the Act.
- OHA may establish by rule a schedule of fees for manufacturers of children's products that are based on the costs to the authority for administering the Act.

viii. Oregon Toxic Free Kids Act § 11—Civil Penalties

- OHA may impose civil penalties on a manufacturer for a violation of the Act.
- A civil penalty may not exceed $5,000.00 for the first violation. A civil penalty may not exceed $10,000.00 for the second and each subsequent violation.

**7. *Vermont***

i. 18 V.S.A. § 1771—State Policy

- Declares it is the policy of the State:
  - to protect public health and the environment by reducing exposure of its citizens and vulnerable populations, such as children, to toxic chemicals, particularly when safer alternatives exist; and

- that the State attempt, when possible, to regulate toxic chemicals in a manner that is consistent with regulation of toxic chemicals in other states.

ii. 18 V.S.A. § 1773—List of Chemicals of High Concern to Children

- Lists 66 chemicals that are deemed of high concern to children.
- The Commissioner of Health shall review the list of chemicals to determine if chemicals should be added or subtracted.

iii. 18 V.S.A. § 1774—Chemicals of High Concern to Children Working Group

- Establishes a Chemicals of High Concern to Children Working Group within the Department of Health (DOH) to provide DOH with advice and recommendations regarding implementation of the requirements for chemicals of high concern to children.
- The Working Group consists of nine members:
  - the Commissioner of Health;
  - the Commissioner of Environmental Conservation;
  - the State toxicologist;
  - representatives of a public interest group with experience advocating for the regulation of toxic substances;
  - representatives of business that uses chemicals in manufacturing or that uses chemicals used in a children's product manufactured in the State;
  - a scientist with expertise regarding the toxicity of chemicals;
  - a representative of the children's products industry with expertise in existing state and national policies impacting children's products.
- The Governor appoints the non-ex officio members. The Governor may also appoint an additional three adjunct members. The adjunct members shall have particular expertise with the chemicals before the group.
- The Working Group shall:
  - upon request of the Commissioner of Health review proposed chemicals for addition to the list of chemicals of high concern to children; and
  - recommend to the Commissioner whether rules should be adopted to regulate the sale or distribution of a children's product containing a chemical of high concern to children.

iv. 18 V.S.A. § 1775—Disclosure of Information on Chemicals of High Concern

- Under 18 V.S.A. § 1775, beginning on July 1, 2016, and biennially thereafter, a manufacturer of a children's product containing a chemical of high concern to children shall notify DOH of the presence of the chemical in the product.
  - A trade association may provide the required notice for a manufacturer.
- Notice is not required if a chemical of high concern to children in a children's product is:
  - an intentionally added chemical that does not exceed a de minimis threshold, known as the practical quantification level; or
  - the chemical is present in a product as a contaminant at a concentration of less than 100 ppm.
- DOH shall specify the format of notice. The notice shall include:
  - the name of the chemical;
  - the chemical registry number;
  - a description of the children's product containing the chemical, including, as required by DOH rule, the: 1) Global Product Classification product brick description, which is an identifiable category of products; and 2) the brand name of the product model;
  - the amount of the chemical by weight in the product;
  - contact information for the manufacturer;
  - any information the manufacturer deems relevant; and
  - any other information required by DOH.
- DOH may enter reciprocal data sharing agreements with states that collect similar data.
- DOH may waive reporting requirements if:
  - the manufacturer submitted data to a state with which DOH has a data sharing agreement; or
  - the manufacturer submitted information to an independent third party and the information is publicly available through the DOH website.
- A manufacturer is exempt from the notice requirements for any chemical of high concern to children that is present in a children's product only as a contaminant if, during manufacture of the children's product, the manufacturer was implementing a manufacturing control program and exercised due diligence to minimize the presence of the contaminant in the children's product.
- DOH shall post on the DOH website the information submitted in a manufacturer's notice. The website must include the following notice:

"The reports on this website are based on data provided to the Department. The presence of a chemical in a children's product does not necessarily mean that the product is harmful to human health or that there is any violation of existing safety standards or laws. The reporting triggers are not health-based values."

- A manufacturer can notify DOH at any time that its product no longer contains a chemical of high concern to children or is no longer sold in the State.
  - Upon verification of the notice, DOH shall promptly remove the product from the website.
- A manufacturer shall pay a fee of $2,000.00 to DOH per chemical of high concern to children for which notice is provided.
  - The fees are deposited in a special fund created in 18 V.S.A. § 1777 to pay program costs.

v. 18 V.S.A. § 1776—Rulemaking; Additional Chemicals of Concern

- DOH shall adopt rules as necessary for the purposes of implementing, administering, or enforcing the requirements of this chapter.
- DOH may by rule add additional chemicals to the list of chemicals of high concern to children, provided that the Commissioner of Health, on the basis of the weight of credible, scientific evidence, has determined that a chemical proposed for addition to the list meets both of the following criteria:
  1. The Commissioner of Health has determined that an authoritative governmental entity or accredited research university has demonstrated that the chemical:
     A. harms the normal development of a fetus or child or causes other developmental toxicity;
     B. causes cancer, genetic damage, or reproductive harm;
     C. disrupts the endocrine system;
     D. damages the nervous system, immune system, or organs or causes other systemic toxicity; or
     E. is a persistent bioaccumulative toxic.
  2. The chemical has been found through:
     A. biomonitoring to be present in human blood, umbilical cord blood, breast milk, urine, or other bodily tissues or fluids;
     B. sampling and analysis to be present in household dust, indoor air, drinking water, or elsewhere in the home environment; or
     C. monitoring to be present in fish, wildlife, or the natural environment.
- DOH may by rule remove a chemical from the list of chemicals of high concern to children if the Commissioner determines that the chemical no longer meets both of the criteria of subdivisions 1776(b)(1) and (2).

- DOH, upon the recommendation of the Chemicals of High Concern to Children Working Group, may adopt a rule to regulate the sale or distribution of a children's product containing a chemical of high concern to children upon a determination that:
  A. children will be exposed to a chemical of high concern to children in the children's product; and
  B. there is a probability that, due to the degree of exposure or frequency of exposure of a child to a chemical of high concern to children in a children's product, exposure could cause or contribute to one or more of the adverse health impacts listed under subdivision 1776(b)(1).
- In determining whether children will be exposed to a chemical of high concern in a children's product, DOH shall review available, credible information regarding:
  - the market presence of the children's product in the State;
  - the type or occurrence of exposures to the relevant chemical of high concern to children in the children's product;
  - the household and workplace presence of the children's product; or
  - the potential and frequency of exposure of children to the chemical of high concern to children in the children's product.
- A DOH rule may:
  - prohibit the children's product containing the chemical of high concern to children from sale, offer for sale, or distribution in the State; or
  - require that the children's product containing the chemical of high concern to children be labeled prior to sale, offer for sale, or distribution in the State.
- DOH shall adopt reasonable time frames for manufacturers, distributors, and retailers to comply with the requirements of the rules.
  - No prohibition on sale or manufacture of a children's product in the State shall take effect sooner than two years after the adoption of a rule adopted under this section unless the Commissioner determines that an earlier effective date is required to protect human health and the new effective date is established by rule.
- DOH may, by rule, exempt from regulation a children's product containing a chemical of high concern to children if the manufacturer of the children's product is implementing a comprehensive chemical management strategy designed to eliminate harmful substances or chemicals from the manufacturing process.

v. <u>18 V.S.A. § 1779—Chemicals of High Concern to Children Fund</u>

- A violation of the requirements of 18 V.S.A. chapter 38A relating to Chemicals of High Concern to Children shall be a violation of the Consumer Protection Act.
- The maximum penalty for a violation of the Consumer Protection Act is a civil penalty of not more than $10,000.00 per violation.

- The Attorney General shall have the same rights and authorities for enforcement under the Consumer Protection Act to enforce the requirements of 18 V.S.A. chapter 38A.
- There is no private right of action.

**8. *Washington***

i. RCW § 70.240.030—Identification of High Priority Chemicals

- By January 1, 2019, the Washington Department of Ecology (WDOE) shall identify by rule high priority chemicals that are of high concern for children.
- A high priority chemical is a chemical 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:
  - harm the normal development of a fetus or child or cause other developmental toxicity;
  - cause cancer, genetic damage, or reproductive harm;
  - disrupt the endocrine system;
  - damage the nervous system, immune system, or organs or cause other systemic toxicity;
  - be persistent, bioaccumulative, and toxic; or
  - be very persistent and very bioaccumulative.
- In developing the list, WDOE shall include chemicals that meet one of the following criteria:
  - the chemical is found through biomonitoring to be present in human umbilical cord blood, human breast milk, urine, or other bodily tissues or fluids;
  - the chemical has been found through sampling to be present in household dust, indoor air, drinking water, or elsewhere in the home environment; or
  - the chemical has been added to or is present in a consumer product used or present in the home.
- By January 1, 2009, WDOE shall identify children's products or product categories that may contain high priority chemicals.

ii. RCW § 70.240.040—Notice that a Children's Product Contains a High Priority Chemical

- Beginning six months after WDOE adopts by rule the list of chemicals of high priority, a manufacturer of a children's product or a trade association representing the manufacturer shall provide notice to the Department that the manufacturer's product contains a high priority chemical.

  - A manufacturer shall include any person or entity that produces a children's product and any domestic distributor of a children's product. Only one person—the manufacturer or the distributor—is required to provide notice depending on a priority hierarchy for reporting.

- Under WDOE rule WAC 173-334-080, notice needs to be provided if a chemical of high concern:
  - is intentionally added to a product above the PQL[2]; or
  - is present in the product as a contaminant above 100 ppm.
- The notice shall include:
  - the name of the chemical and its abstract registry number;
  - the product or product category in which the chemical is located;[3]
  - the product component in which the chemical occurs;
  - a description of the function of the chemical in the product;
  - the total amount of the chemical by weight in the product;
  - contact information for the manufacturer; and
  - any other information the manufacturer deems relevant.[4]
- Notice is due according to a set schedule in WDOE Rule WAC 173-334-110.
- The schedule is based on the size of the manufacturer and the category in which the product is located.
- The range of reporting is between 12 months from adoption of the list by rule for large manufacturers with products with high exposure to 84 months from adoption of the rule for "tiny" manufacturers with products of low/no exposure.
  - The first category of manufacturers was required to submit initial notice in August 2012.
  - The last category of manufacturers will be required to submit initial notice in August 2019.
- The product categories are based on the level of potential exposure of a chemical to a child.
  - Tier 1: products intended to be put in a child's mouth or applied to a child's body or any mouthable children's product for a child under three years of age.

[2] Practical quantification limit (PQL)" means the lowest concentration that can be reliably measured within specified limits of precision, accuracy, representativeness, completeness, and comparability during routine laboratory operating conditions. This value is based on scientifically defensible, standard analytical methods. The value for a given chemical could be different depending on the matrix and the analytical method used.

[3] "Product category" means the "brick" level of the GS1 Global Product Classification (GPC) standard, which identifies products that serve a common purpose, are of a similar form and material, and share the same set of category attributes.

[4] See also WAC § 173-334-080.

- Tier 2: products intended to be in contact with a child's skin for more than one hour—e.g., clothing.
- Tier 3: products intended for short periods of direct contact to a child's skin.
- Tier 4: products, through reasonable use or misuse, will not allow for exposure of the chemical to a child.

- A trade organization can provide notice for member manufacturers.
- Confidential business information submitted by a manufacturer is not public.
- All, nonconfidential business information shall be available to the public.

iii. RCW § 70.240.050—Notice to Sellers; Civil Penalty

- A manufacturer of products that are restricted under this chapter shall notify persons that sell the manufacturer's products about the act no less than 90 days prior to the effective date.
- A manufacturer that produces, sells, or distributes a product prohibited from manufacture, sale, or distribution in the state under the act shall recall the product and reimburse the retailer or any other purchaser for the product.
- A manufacturer of children's products in violation of the act is subject to a civil penalty not to exceed $5,000.00 for each violation in the case of a first offense.
  - Manufacturers who are repeat violators are subject to a civil penalty not to exceed $10,000.00 for each repeat offense.

iv. RCW § 70.240.010—Definition of Children's Product

- "Children's product" means any of the following:
  1. toys;
  2. children's cosmetics;
  3. children's jewelry;
  4. a product designed or intended by the manufacturer to help a child with sucking or teething, to facilitate sleep, relaxation, or feeding, or to be worn as clothing by children; or
  5. child car seats.
- "Children's product" does not include the following:
  1. batteries;
  2. slings and catapults;
  3. sets of darts with metallic points;
  4. toy steam engines;

5. bicycles and tricycles;
6. video toys that can be connected to a video screen and are operated at a nominal voltage exceeding 24 volts;
7. chemistry sets;
8. consumer electronic products, including personal computers, audio and video equipment, calculators, wireless phones, game consoles, and hand-held devices incorporating a video screen, used to access interactive software and their associated peripherals;
9. interactive software, intended for leisure and entertainment, such as computer games, and their storage media, such as compact disks;
10. BB guns, pellet guns, and air rifles;
11. snow sporting equipment, including skis, poles, boots, snowboards, sleds, and bindings;
12. sporting equipment, including, bats, balls, gloves, sticks, pucks, and pads;
13. roller skates;
14. scooters;
15. model rockets;
16. athletic shoes with cleats or spikes;
17. pocket knives and multitools; and
18. food, drugs, dietary supplements, packaging, medical devices, or FDA regulated cosmetics.

- Child means an individual under 12 years of age.
- Only children's products sold or offered for sale in Washington are subject to the act.

## B. TOXIC USE REDUCTION PROGRAMS

### 1. ***Maine***

- 38 M.R.S.A. chapter 27, §§ 2321-2330—Priority Toxic Chemical Use Reduction
- It is the policy of Maine to continually and expeditiously as practicable reduce the use of toxic chemicals (particularly priority toxic chemicals) by commercial and industrial facilities through comprehensive environmental management practices, the use of safer products, and the use of reasonable available alternative materials.
- Maine Department of Health and Human Services shall develop by rule a list of 10 priority toxic chemicals.
- See priority chemical program discussed in section A of this memo for more details.

**2. *Massachusetts***

- M.G.L.A. 21I, §§ 1-16—Toxics Use Reduction Act (TURA)
- TURA was enacted in 1989 but updated in 2006.
- TURA committed Massachusetts to reducing the generation of toxic waste by 50 percent statewide (this was accomplished by 1998).
- TURA also established toxics use reduction (TUR) as the preferred means for achieving compliance with federal and state environmental, public health, and work safety laws and regulations.
- Each company considered a Large Quantity Toxics User is required to file an annual toxics use report for every listed chemical it manufactures, processes, or otherwise uses above applicable thresholds.
- Companies subject to TURA are required to pay annual toxics fees.
- A large quantity toxic users is a manufacturer that:
  - produces 25,000 pounds of hazardous waste a year at a facility;
  - produces 1,000 pounds of higher hazardous substance a year at a facility;
  - uses 10,000 pounds each year of a toxic substance at a facility; or
  - uses 1,000 pounds of a higher hazard substance at a facility.
- Large quantity toxic users report annually to the state regarding each toxic substance used or hazardous substances manufactured.
- Large quantity toxic users shall complete a toxics use reduction plan for each facility for which they are required to file a report.
- The plan shall include:
  - a statement of facility-wide management policy regarding toxics use reduction;
  - a comprehensive economic and technical evaluation of appropriate technologies, procedures, and training programs for achieving toxics use reduction;
  - an analysis of current and projected toxics use;
  - identification of technologies or processes to be used to reduce toxics use;
  - a schedule for implementation of toxics use reduction technologies or procedures.
- Each toxics use reduction plan must be certified by a state-approved toxics use reduction planner.
  - Statute specifies the necessary qualification for toxics use reduction planners.
- The state may establish performance standards for toxics use reduction plans, based on priority user segment or on a segment-wide basis.
- Violation of the toxics use reduction requirement is subject to a civil penalty not to exceed $25,000.00 per day of violation.

**3.** ***New Jersey***

- 13 N.J.S.A. ch. 1D, §§ 32-42—Pollution Prevention Act.
- Requires any priority industrial facility to develop a pollution prevention plan.
  - A priority industrial facility is an industrial facility with a Standard Industrial Classification that is required to report toxic chemical releases under the federal Emergency Planning and Community Right to Know Act (EPCRA), 42 U.S.C. § 11023.
- The pollution prevention plan has two parts:

  1) a detailed inventory and analysis of the hazardous substances used and produced at the facility; and

  2) a strategy for reducing the use of hazardous substance and the generation of hazardous waste at the facility.
- The inventory must identify all hazardous substances used by name and amount, the amount of all hazardous substances that are released into the air or discharged into water or any other waste stream; a financial analysis of the cost of production and a financial analysis of reducing the amount of hazardous substances use.
- The strategy for reduction of hazardous substances must include a five-year numeric goal for reducing the use of each hazardous substance; a description of each targeted production process; a feasibility analysis for reduction; and a schedule for implementing on-site recycling.
- Violations of the Pollution Prevention Act are subject to administrative and civil penalties, including a civil penalty of not more than $15,000.00 a day for each violation.

**4.** ***Oregon***

- 36 O.R.S. ch. 465, §§ 465.003-465.037—Reduction of Use of Toxic Substances
- Declares that it is the policy of Oregon to encourage reduction in the use of toxic substances and to reduce the generation of hazardous waste.
- The Oregon Department of Environmental Quality (DEQ) shall provide technical assistance to toxics users and generators of less than 2.2 pounds of acute hazardous waste (known as conditionally exempt generators).
- DEQ shall give priority to assisting toxics users and conditionally exempt generators in completing a toxics use reduction and hazardous waste reduction plan.
- Within 120 days of notification from DEQ, a toxics user must complete a toxics use reduction and hazardous waste reduction plain.
- The plan shall include:
  - a policy for reducing use of toxics and generation of hazardous waste;

- technologies, procedures, and personnel programs necessary to reduce toxics use;
- identification of opportunities to reduce or eliminate toxics use and hazardous waste generation;
- employee training programs.

- As part of each plan, toxics users who are large users or large generators of hazardous waste shall evaluate technical and economically practicable opportunities to reduce toxics use and hazardous waste generation.
- Plans must be kept current and reflect changes in toxics use or production.
- Toxics users must notify DEQ of plan implementation, and DEQ has the right to review the plan and implementation.
- Failure to develop, implement, or revise a plan is subject to civil penalties of not more than $500.00 per day.

**5.** ***Vermont***

- 10 V.S.A. ch. 159, §§ 6623-6632—Toxic Use Reduction and Hazardous Waste Reduction
- The goal and purpose of statute is the elimination or reduction of the use of hazardous, particularly toxic, materials wherever possible.
- ANR shall establish a technical and research assistance program to assist hazardous waste generators and large users of toxic substances in identifying and applying toxics use reduction methods and hazardous waste reduction methods.
- ANR is required to establish a program for toxics use and hazardous waste reduction.
- Statute requires the following manufacturers to adopt a toxics use and hazardous waste reduction plan:
  - Generators of 2,600 or more pounds of hazardous waste a year;
  - Generators of 26.5 or more pounds of acutely hazardous waste per year; and
  - Large users of toxic substances;
    - A large user is a SIC coded facility with 10 or more full-time employees that: (A) manufactures, processes, or otherwise uses more than 10,000 lbs. of a toxic substance per year; or (B) Manufactures, processes, or otherwise uses more than 1,000 lbs. but less than 10,000 lbs. of a toxic substance per year if that substance accounts for more than 10% of the total of toxic substances used at the facility during the year.
- A toxics use and hazardous waste reduction plan shall be updated every three years.
- Each plan shall:

- Determine any toxics use reduction and hazardous waste reduction methods that may be implemented to reduce the use of toxics substances and hazardous waste generated without shifting risks from one part of a process or environmental medium to another.
- Include a plan to document and implement toxics use reduction and hazardous waste reduction.

- The plan shall also include a rationale for the technically and economically feasible toxics use reduction and hazardous waste reduction that will be taken by the generator or large user with respect to each toxic substances used.
- The plan shall establish specific performance goals for the reduction of toxic substances and hazardous waste.
- On or after 1992, ANR shall select by SIC Code at least two categories of generators with potential for toxics use reduction and hazardous waste reduction. ANR shall examine the plans of the generators and large users and determine whether they comply with plan requirements.

## C. BISPHENOL A (BPA)

### 1. ***California***

California Health & Safety Code §§ 108940-41 ban BPA in bottles and sippy cups, and requires replacement with the least toxic alternative.

### 2. ***Connecticut***

21a C.G.S.A. §§ 12b-12c bans BPA in reusable food and beverage containers and infant formula or baby food containers.

21a C.G.S.A. § 12e bans BPA in thermal receipt paper.

### 3. ***Delaware***

6 Del.C. § 2509 prohibits the sale of bottles or cups containing BPA if those containers are designed for use by children under four years of age.

### 4. ***Illinois***

410 ILCS 44/10 prohibits the sale of children's food or beverage containers that contain BPA. Children's food or beverage containers means "an empty bottle or cup to be filled with food or liquid that is designed or intended by a manufacturer to be used by a child" less than three years of age. The ban applies to manufacturers and wholesalers beginning January 1, 2013 and to retailers January 1, 2014.

**5. *Maine***

38 M.R.S.A. § 1691; 06-096 Maine Code of Rules Ch. 882—Maine Board of Environmental Protection designates BPA as a priority chemical, requires makers of BPA-containing formula and baby food containers, and children's toys and products to report on usage, and plan for its replacement. Bans BPA from reusable food and beverage containers, and formula and baby food packaging.

**6. *Maryland***

Md. Code, Health - General, § 24-304 prohibits the manufacture, sale, or distribution of children's bottles or cups that contain BPA after January 1, 2012. The law requires manufacturers to replace BPA in these products with the least toxic alternative and prohibits them from replacing BPA with certain carcinogens or reproductive toxicants.

Statute was later amended to prohibit the manufacture, sale, and distribution of containers of infant formula containing more than 0.5 parts per billion of BPA. The amended law also prohibits the state from purchasing infant formula in containers made with BPA. These restrictions take effect on July 1, 2014.

**7. *Massachusetts***

105 CMR 650.220 designates children's reusable food or beverage containers containing bisphenol-A banned hazardous substances. The ban covers those containers that are manufactured on or after January 7, 2011, or sold at retail on or after July 1, 2011.

**8. *Minnesota***

Minn. Stat. § 325F.173 prohibits the sale of children's products that contain BPA beginning in January 1, 2010 for manufacturers and wholesalers and January 1, 2011 for retailers. Children's product means an empty bottle or cup to be filled with food or liquid that is designed or intended for use by a child (person under three years of age).

Minn. Stat. § 325F.174 prohibits the sale of infant formula, baby food, or toddler food stored in a container that contains intentionally added BPA beginning on August 1, 2014 for manufacturers and wholesalers and August 1, 2015 for retailers.

Minn. Stat. § 325F.175 prohibits a manufacturer from replacing BPA with a chemical known to have been identified as being known or suspected with a high degree of probability to be harmful.

**9. *Nevada***

Nev. Rev. Stat. §§ 597.985, .990 prohibits the manufacture, sale, or distribution of any bottle or cup which contains intentionally added BPA if designed or intended to be filled with any liquid or food intended for consumption by a child less than four years of age. Additionally, prohibits the manufacture, sale, or distribution of baby food or infant formula stored in a container which

contains intentionally added BPA. Nevada uses very similar definitions to Minnesota, except that the age of the child extends to four years of age.

### 10. ***New York***

N.Y. Env. Cons. L. § 37-0501 prohibits the sale of pacifiers, baby bottles, sippy cups, and other unfilled beverage containers for use by children under three years of age that contain BPA after December 1, 2010. The law also allows products to be labeled as BPA-free.

### 11. ***Vermont***

18 V.S.A. § 1512 prohibits the manufacture, sale, or distribution of reusable food or beverage containers such as baby bottles, spill-proof cups, sports bottles, and thermoses that contain BPA after July 1, 2012. The law also bans baby food and infant formula stored in BPA-containing plastic containers or jars after July 1, 2012, and in BPA-containing jars after July 1, 2014. The law requires manufacturers to replace BPA in these products with the least toxic alternative and prohibits them from replacing BPA with certain carcinogens or reproductive toxicants.

### 12. ***Washington***

RCWA 70.280.010 to 70.280.060 prohibits the manufacture, sale, or distribution of empty bottles, cups, or other food or beverage containers that contain BPA after July 1, 2011. Metal cans are exempted from this ban. The law also prohibits the manufacture, sale, or distribution of empty sports bottles of 64 ounces or less that contain BPA after July 1, 2012. A provision of the law requires manufacturers to recall prohibited products and reimburse the retailer or any other purchaser for the product.

### 13. ***Wisconsin***

W.S.A. 100.335 prohibits the manufacture or sale at wholesale and retail of empty baby bottles and spill-proof cups for use by children three years of age or younger that contain BPA after June 15, 2010. Manufacturers of these products also must conspicuously label each product as not containing BPA.

## D. CADMIUM, MERCURY, OR LEAD IN CHILDREN'S TOYS AND JEWELRY

### 1. ***California***

Cal. Health & Safety Code §§ 108550-108585 bans the sale of toys contaminated with any toxic substance, including lead, mercury, and cadmium.

**2. *Connecticut***

21a C.G.S.A. § 12d prohibits the manufacture, sale, or distribution of any children's jewelry containing cadmium at more than 0.0075 percent by weight beginning on July 1, 2016.

**3. *Maine***

22 M.R.S.A. § 1316 prohibits the manufacture, sale, or distribution of a "lead-containing children's product" with limited exceptions beginning on July 1, 2009.

06–096 C.M.R. ch. 884 – The Maine Department of Environmental Protection has designated cadmium as a priority chemical and requires manufacturers and distributers of children's products containing intentionally added cadmium to report certain information to the state, including a description of the product. Authorized by 38 M.R.S.A. §§ 1691–1699-B.

**4. *Maryland***

Md. Code, Envir. §§ 6– 130–1303 prohibits the manufacture, sale, import, or distribution, including through a sales catalogue or the Internet, of a children's product that is a lead-containing product.

Md. Code, Envir. §§ 6– 1401–1404 prohibits the manufacture, sale, or distribution of children's jewelry with cadmium at more than 0.0075 percent by weight beginning on July 1, 2012. This prohibition does not apply to toys regulated by the Federal Government Product Safety Improvement Act of 2008.

**5. *Minnesota***

Minn. Stat. § 325E.389 regulates and prohibits certain items containing lead, including children's jewelry, under a chemical material prioritization scheme.

Minn. Stat. § 325E.3891 prohibits the sale of children's jewelry containing cadmium at levels exceeding 75 parts per million, unless superseded by federal statute.

**6. *New York***

N.Y. Envtl. Conserv. L. § 27–2107 prohibits the sale or distribution of any mercury-added novelty consumer product beginning in 2005 and requires manufacturers to inform retailers about the ban and proper methods to dispose of remaining inventory. Mercury-assessed novelty consumer product means any device or material into which elemental mercury or mercury compounds are intentionally added during such device's or material's formulation or manufacture, and in which the continued presence of mercury is required to provide a specific characteristic, appearance, or quality, or to perform a specific function, intended mainly for personal or household enjoyment or adornment.

### 7. ***Vermont***

9 V.S.A. § chapter 63, subchapter 1C regulates lead in consumer products. Included in this subchapter are prohibitions on the sale of any children's product any component of which contains lead.

## E. PHTHALATES

### 1. ***California***

Cal. Health & Safety Code §§ 108935–108939 bans phthalates from toys and children's products, and requires replacement with least toxic alternative.

### 2. ***Vermont***

18 V.S.A. § 1511 prohibits the manufacture, sale, or distribution of any toy or child care article intended for use by a child under three years of age if it contains phthalates in concentrations exceeding 0.1 percent. Also prohibits their use in products intended for use by a child under three years of age if it can be placed in the child's mouth. The statute specifies that manufacturers shall use the least toxic alternative and may not use alternatives identified as certain carcinogens or reproductive toxicants.

## F. COSMETICS

### 1. ***California***

Cal. Pub. Res. Code §§ 42360–42366 prohibits the sale or offer of any personal care products containing plastic microbeads that are used to exfoliate or cleanse in a rinse-off product beginning on January 1, 2020. Exempts personal care products containing plastic microbeads in an amount less than one part per million by weight.

Cal. Health & Safety Code §§ 111791–111793.5 requires manufacturers of cosmetic products to disclose a list of products that are sold in the state and contain chemicals that are identified as causing cancer or reproductive toxicity, among other information, and makes this available to the public. Authorizes the investigation of cosmetics containing carcinogens or toxics.

### 2. ***Connecticut***

Conn. Public Acts No. 15–5, Sec. 50 (2015) enacted a phased-in implementation program to ban the manufacture and sale of personal care products and over-the-counter drugs that contain microbeads beginning December 2017 with a total ban on December 31, 2019.

### 3. ***Maine***

38 M.R.S.A. § 419-D (2015) enacts the same phase-in timeline as that enacted in Connecticut (Maine actually passed legislation before Connecticut). Includes similar definition of microbeads as a solid plastic particle measuring less than five millimeters in size and used to exfoliate or cleanse in a product intended to be rinsed off.

### 4. ***Minnesota***

Minn. Stat. § 145.945 prohibits the retail sale of any cleaning product that contains triclosan and is used by consumers for sanitizing or hand or body cleaning beginning on January 1, 2017. This prohibition does not apply to products with specific FDA approval for consumer use.

## G. FLAME RETARDANTS

### 1. ***California***

Cal. Health & Safety Code §§ 108920–108923 prohibits the manufacture, process, or distribution in commerce of a product, or a flame-retarded part of a product, containing more than one-tenth of one percent of pentaBDE or octaBDE beginning on June 1, 2006. Exempts limited scientific research purposes.

Cal. Bus. & Prof. Code § 19094 requires a manufacturer of covered products (any flexible polyurethane foam or upholstered or reupholstered furniture required to meet the test requirements set forth in technical Bulletin 117-2013) to indicate whether or not the product contains added flame retardant chemicals by including the following statement on the label:

"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 standards and determined that the fire safety requirements of 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."

### 2. ***Maine***

38 M.R.S.A. § 1609 regulates flame retardant materials in the following manner:

- The sale or distribution of products containing more than 0.1% of the penta or octa mixtures of polybrominated diphenyl ethers (PBDE) beginning in 2006.
- The manufacture, sale, or distribution of mattresses or upholstered furniture intended for indoor use that contains the deca mixture of PBDE beginning in 2008.
- The manufacture, sale, or distribution of a television or computer that has a plastic housing containing more than 0.1% of the deca mixture beginning in 2010.

- Regulates shipping pallets containing the deca mixture.
- Requires manufacturers to notify persons that sell the manufacturer's product of the requirements of the section. Additionally, requires the Department of Environmental Protection to provide assistance to retailers in identifying products in their inventory.
- Includes a state policy to replace the deca mixture with a safer alternative as soon as practicable but prohibits the use of certain chemical alternatives as determined by the commissioner.

### 3. ***Maryland***

Md. Code, Health–Gen. § 24-306 prohibits the importation or sale of child care products that contain more than one-tenth of one percent of TCEP or TDCPP by mass intended for use by a child under three years of age. This does not apply to resale or distribution by a consumer for consumer use.

Md. Code, Envir. §§ 6– 1201–1205 prohibits the manufacture, process, sale, or distribution of the following:

- A new product or flame retardant part of a new product that contains more than one-tenth of one percent of penta or octa by mass beginning on October 1, 2008.
- Any product that contains more than one-tenth of one percent of deca by mass, phased in by December 31, 2013.
- Allows exemptions, including the following: vehicles, aircraft, replacement parts manufactured before 2011 (for deca) or 2008 (penta and octa), recycling of these products, and a retailer selling products in the retailer's possession.

### 4. ***Michigan***

Mich. Comp. Laws §§ 324.14721–324.14725 prohibits the manufacture, process, or distribution of a product or material that contains more than one-tenth of one percent of penta or octa BDE. This prohibition does not apply to recyclables or replacement parts from the original manufacturer.

### 5. ***Minnesota***

Minn. Stat. §§ 325E.385–.388 prohibits the manufacture, process, or distribution of a product or flame retardant part of a product containing more than one-tenth of one percent of penta or octa by mass beginning on January 1, 2008. Some products are exempt, including transportation vehicles and parts, medical devices, and telecommunications equipment. Retailers are allowed to exhaust product in their possession through sales. The Commissioner of Administration is required to make available for purchase to all state agencies equipment, supplies, and other products that do not contain polybrominated diphenyl ethers, unless exempted.

Minn. Stat. § 325F.071 beginning in 2018 prohibits any manufacturer or wholesaler from manufacturing, selling, or distributing a child's product or upholstered residential furniture containing in amounts greater than 1,000 parts per million the following chemicals:

- TDCPP, decabromodiphenyl ether, hexabromocyclododecane, and TCEP

Applies to retailers beginning in July 2019. Also prohibits the use of replacement chemicals identified as harmful.

### 6. ***New York***

N.Y. Envtl. Conserv. L. §§ 37–0701–0709 prohibits the sale of child care products intended for use by a child three years of age or younger containing TRIS beginning in 2013. This prohibition does not apply to resale or distribution by a consumer for consumer use. Child care products include baby products, toys, car seats, crib mattresses, and strollers. TRIS includes TCEP and TDCPP.

N.Y. Envtl. Conserv. L. §§ 37–0111 prohibits the manufacture, process, or distribution of a product, or flame-retardant part of a product, containing more than one-tenth of one percent of penta or octa brominated diphenyl ether.

### 7. ***Vermont***

9 V.S.A. chapter 80 prohibits the sale or distribution of a product that contains octa or penta BDE in a concentration greater than 0.1 percent by weight. This chapter phased in prohibitions on the sale of mattresses, upholstered furniture, television or computer housings, and plastic shipping pallets containing decaBDE in a concentration greater than 0.1 percent by weight. Additionally, this chapter prohibits the sale of any child's product or residential upholstered furniture that contains concentrations of TCEP or TDCPP (TRIS) that is greater than 0.1 percent by weight in any product component. This chapter also prohibits the replacement with a chemical classified as a certain carcinogen or reproductive toxicant.

## H. GREEN CLEANING

### 1. ***Connecticut***

Executive Order 14 (2006) directs all state agencies to procure and use, whenever practicable, supplies that have minimal potential impact to human health and environment. Additionally, when contracting for supplies for services, agencies shall require contracts or contractors to use products that minimize potential impacts to human health and the environment. Also, encourages those not subject to the Executive Order to do the same.

10 C.G.S.A. § 231g requires each local and regional board of education to implement a green cleaning program and requires them to provide a written statement about the program to the school staff and, when requested, to the parents and guardians of the children.

### 2. ***Maine***

Resolution requires the Department of Education to compile a list of safe alternatives to chemicals used in schools, distribute the list to all school administrative units, and make publicly available a list of school administrative units that commit to using safe alternatives.

### 3. ***Maryland***

Md. Code, Educ. § 5–112 requires county boards to procure green product cleaning supplies to the extent practicable and economically feasible and to draft written policies for procurement. Boards are required to notify the department every year if it is not practicable or economically feasible to procure green products.

### 4. ***Massachusetts***

Executive Order 515 declares that "it shall be the policy of the Executive Department of the Commonwealth of Massachusetts and its agencies to reduce their impact on the environment and enhance public health by procuring Environmentally Preferable Products and services (EPPs) whenever such products and services are readily available." Also established an EPP Purchasing Program administered by the Operational Services Division to promote the purchase of EPPs to state and local agencies.

### 5. ***New York***

N.Y. Educ. L. § 409-i requires the Commissioner of General Services, in consultation with others, to establish "guidelines and specification for environmentally sensitive cleaning and maintenance products for use in elementary and secondary school facilities." These guidelines must be disseminated with a sample list of products that meet the guidelines. Schools must then follow the guidelines in identifying and procuring products and must notify personnel of the guidelines, specifications, and sample list.

Executive Order 4 (2008) established an Interagency Committee on Sustainability and Green Procurement to review priority categories and commodities and develop green procurement lists and specification for use by state agencies and public authorities in the procurement of commodities, services, and technology. The focus is on the reduction or elimination of health and environmental risks. Additionally, the Executive Order requires each state agency to establish a Sustainability and Environmental Stewardship Program and requires agencies to rely on and use the procurement lists and specification issued by the Interagency Committee.

### 6. ***Vermont***

18 V.S.A. § chapter 39 requires distributors and manufacturers to sell or distribute environmentally preferable cleaning products to schools and to provide training to each school district it provides with cleaning products. Additionally, persons who contract with a school to provide cleaning services are required to use environmentally preferable cleaning products.

## I. CLEARINGHOUSE AND OTHER INSTITUTIONS

### 1. ***Connecticut***

22a C.G.S.A. § 902 authorizes the Commissioner of Energy and Environmental Protection to participate in an interstate clearinghouse to classify existing chemicals, organize and manage available data on chemicals, produce and inventory information on safer alternatives, and provide technical assistance to businesses and consumers.

22a C.G.S.A. § 903 establishes a Chemical Innovations Institute within The University of Connecticut Health Center. This institute is required to work with businesses, agencies, and other organizations as a resource for information about chemicals that are a concern to the public health and environment.

### 2. ***Maine***

38 M.R.S.A. § 1698 authorizes the Department of Environmental Protection to participate in an interstate clearinghouse "to promote safer chemicals in consumer products in cooperation with other states and governmental entities." The Department is authorized to cooperate with a clearinghouse to classify existing chemicals, organize and manage available data on chemicals, produce information on safer alternatives, provide technical assistance to businesses and consumers, and undertake other activities in support of programs promoting safer chemicals.

### 3. ***North Carolina***

N.C. Sess. Law 2014–100, Section 14.27 authorizes the Department of Environment and Natural Resources to join the Interstate Chemicals Clearinghouse for the purpose of access to key data necessary to enhance safety in the use of toxic chemicals.

## J. FORMALDEHYDE

### 1. ***Minnesota***

Minn. Stat. §§ 325F.176 – .178 prohibits the sale of children's products that intentionally contain formaldehyde beginning in August 2014 for manufacturers and wholesalers and August 2015 for retailers. Additionally, manufacturers are prohibited from replacing these chemicals with other

chemicals known to have been identified on the basis of credible scientific evidence as being known or suspected to cause harm.

## K. MERCURY

### 1. ***New York***

N.Y. Envtl. Conserv. L. § 37–0113 prohibits the sale or use of wheel weights or other products used for balancing motor vehicle wheels if they contain more than 0.1 percent lead by weight.

N.Y. Envtl. Conserv. L. §§ 27–2101–2117 regulates mercury-added consumer products. This section requires labeling on all mercury-added consumer products, prohibits the knowing disposal of a mercury-added consumer products in solid waste, prohibits the sale or distribution of mercury-added novelty consumer products, mercury thermometers, elemental mercury, a mercury switch or relay, and mercury thermostats, and establishes an Advisory Committee on mercury pollution.

N.Y. Envtl. Conserv. L. §§ 27–2901–2909 regulates the collection of out-of-service mercury thermostats by requiring thermostat manufacturers to establish and maintain a collection program. The program must offer containers, establish a management system, and conduct education and outreach efforts for the collection and proper disposal of out-of-service mercury thermostats. Additionally, any person or contractor who replaces a mercury-containing thermostat or demolishes a building with mercury-containing thermostats must ensure the proper disposal of the thermostat.

N.Y. Envtl. Conserv. L. §§ 27–2301–2303 regulates vehicle dismantling facilities and requires vehicle dismantlers to remove mercury switches or other mercury-containing devices from an end-of-life vehicle before it is crushed.

### 2. ***North Carolina***

N.C. Gen. Stat. § 130A–310.53 requires the removal of accessible mercury switches from end-of-life vehicles before being destroyed.

N.C. Gen. Stat. § 115C–47 prohibits the future use, and encourages the removal and proper disposal of, bulk elemental mercury, chemical mercury, and bulk mercury compounds use as teaching aids.

### 3. ***Ohio***

Ohio Rev. Code Ann. §§ 3734.61–.65 prohibits a school from purchasing mercury-added measuring devices for classroom use, the sale or installation of a mercury-containing thermometer, and the sale of any mercury-added novelty.

**4. *Oregon***

Or. Rev. Stat. §§ 646A.564–.566 regulates the use of mercury in lamps and requires the Department of Administrative Services to make procurement decisions that favor lighting that contains mercury that meets the mercury content standards established.

Or. Rev. Stat. § 646.608 makes it an unlawful practice to manufacture or sell a mercury thermometer, sell a thermostat containing mercury without specific instructions, or sell a motor vehicle manufactured after 2006 that contains mercury light switches.

**5. *Rhode Island***

R.I. Gen. Laws §§ 23–24.9-1–24.9-21, collectively known as the "Mercury Reduction and Education Act," includes comprehensive mercury regulations, including:

- prohibitions on the sale of mercury-added novelty items;
- prohibitions on the use or purchase of bulk elemental or chemical mercury, or mercury compounds by schools;
- a phase out of the sale of mercury-added products;
- requiring manufacturers of mercury-added products and thermostat manufacturers to implement a collection program similar to that in N.Y. ;
- regulating the recycle or disposal of mercury as a hazardous waste; and
- requiring the Department of Administration to give priority and preference to the purchase of equipment, supplies, and other products that do not contain mercury-added compounds or components.

**6. *Vermont***

At 10 V.S.A. chapter 164, Vermont has a Comprehensive Mercury Management chapter that includes the following sections:

- § 7104. Prohibits the sale or distribution of mercury-added products unless the manufacturer gives prior notification in writing to the Agency of Natural Resources or the multistate clearinghouse described in §7103.
- § 7105. Prohibits the sale of mercury-added novelties beginning in 2006. Additionally, prohibits the following: mercury thermometers, mercury dairy manometers, elemental mercury, and mercury switches or relays.
- § 7106. Prohibits the sale of mercury-added products, unless both the product and its packaging are labeled in accordance with this section.
- § 7107. Prohibits the knowing disposal of mercury-added products in a solid waste landfill or combustor and regulates the disposal of mercury-added products.
- § 7109. Prohibits the use or purchase in primary or secondary nonvocational education programs of the following: elemental mercury, chemicals containing mercury or mercury compounds, or mercury-added measuring devices.

- § 7110. Regulates the use of mercury-added products used in dental procedures, requiring implementation of best-management practices and the use of amalgam separator systems.
- § 7111. Requires hospitals in Vermont to submit and update a mercury reduction plan.
- § 7112. Allows the Agency of Natural Resources, in consultation with other relevant state agencies, to implement a comprehensive public education, outreach, and assistance program.
- § 7116. Requires each thermostat manufacturer that offers for sale or has distributed mercury-containing thermostats in Vermont to submit and implement an approved plan describing a collection and financial incentive program for mercury thermostats.

10 V.S.A. chapter 164A relates to the collection and disposal of mercury-containing lamps. This chapter prohibits the sale or delivery of mercury-containing lamps unless the following are met:

- The manufacturer is implementing an approved collection plan under § 7154.
- The manufacturer pays the required fees under § 7158.
- The manufacturer is designated on the Agency of Natural Resources' website.
- The manufacturer has submitted an annual report required by § 7153.
- The manufacturer demonstrates that no alternative non-mercury energy efficient lamp is available.