



**IBM Testimony on S.239 - Regulation of Toxic Substances
House Committee on Fish, Wildlife & Water Resources
Ruma Kohli, Product Stewardship Program Manager
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Thank you for the opportunity to testify regarding S.239, a bill proposing the restriction of chemicals in consumer products.

IBM is the largest for-profit employer in Vermont, and accounts for 69% of all Vermont exports.¹ The majority of the semiconductor chips manufactured in IBM Microelectronics' Essex Junction facility are incorporated into consumer products such as cell phones, tablets, televisions, routers, and GPS devices, sold here in Vermont and around the globe by our valued clients..

IBM has a long history of proactively evaluating the chemicals proposed for or used in our processes and products; identifying potential substitutes that may have less impact on the environment, health and safety; and eliminating, restricting and/or prohibiting the use of substances for which a more preferable alternative is available that is capable of meeting quality and safety requirements of our processes and products. Our record of voluntary material restrictions and prohibitions stretches back over three decades, and is evidence of our commitment to and expertise in safe and responsible chemical use that is protective of human health and the environment.² IBM's product specification currently bans or restricts over 100 chemicals from our supply chain. As Product Stewardship Program Manager for IBM's Microelectronics Division, I ensure that our products meet worldwide chemical content regulations. I also served for several years as a member and as Chair of the Vermont Advisory Committee on Mercury Pollution. **Informed by our experience in this arena, and appreciative of the electronic device exemption in the bill, we have several key concerns with S.239:**

- 1) Except for some limited product exemptions, the bill proposes a regulatory structure triggered solely by the hazard of a chemical, regardless of the risk (or lack of risk) of exposure and regardless of the level of the chemical content.
- 2) The bill fails to focus on classes of products that present the greatest potential for chemical release or exposure to sensitive subpopulations. The scope exceeds that of any existing regulatory program of this type in other states. Please see the attachment for a summary of other states' programs.
- 3) The bill is not harmonized with existing global chemical management regulations and requirements, multiplying compliance costs. Moreover, there is no defined threshold level for chemicals of concern.
- 4) The resources required to implement the program have not been defined.
- 5) The fee structure proposed is likely to create a significant financial burden to business.

¹ Based on 2012, the most recent statewide data available.

² For more information on IBM's record of environmental leadership and product stewardship, please see www.ibm.com/environment.

Lack of a Risk Based Approach

S.239 seeks to regulate any detectable presence of a listed chemical over a vast universe of consumer products, irrespective of the potential for exposure to harmful concentrations. Such an approach is wasteful and imposes regulatory burden where there may be little risk, and therefore scant prospect for actual health or environmental benefit. A product should not be subject to regulation in the absence of a credible exposure pathway. The exposure assessment should address whether the chemical is present in a form that would allow absorption by a human at a level of concern. For example, if the chemical in question is completely encapsulated in an impervious substance and is inaccessible during normal and foreseeable use of the product, it is not a risk factor (provided disposal is managed appropriately). Regulation should be focused on actual risks rather than perceived risks.

Harmonization with Existing Global Chemical Management Regulations & Requirements

The overall environment for the regulation of chemicals throughout the world has been one of significant activity in both the U.S. and globally. Regulations continue to identify chemicals for which regulatory restrictions are being tightened in different states. In addition, the U.S. House and Senate are actively engaged in Toxic Substances Control Act (TSCA) reform along with the EPA and other stakeholders.

It is important for Vermont to clearly understand what these other laws and regulations require before legislating in this area. Otherwise, there is a strong likelihood that Vermont's requirements will conflict with the requirements of these other laws, create confusion for those tasked with compliance and enforcement, and unnecessarily restrict the provision of environmentally safe goods into Vermont.

Harmonizing proposed new Vermont chemical restrictions with other chemical regulatory programs is a more efficient way to implement chemical restrictions and avoids placing Vermont at a competitive disadvantage in the global marketplace.

Harmonizing legislation with other states should include product scopes. The Vermont proposal is for all consumer products, while Washington State, for example, is a considerably smaller subset defined as children's products. Other important aspects of harmonization:

1) Threshold Levels for Chemicals of High Concern

The compliance level for the chemicals of concern should be consistent with other regulations, such as the European Union's REACH regulations that specify a threshold of 1000 ppm or 0.1% that applies as a weight percent of the final article. Any inconsistency is potentially problematic for any Vermont manufacturer that exports. Many manufacturers of products design, manufacture, market and distribute on a global basis and do not separate products for sale in specific jurisdictions. Inconsistencies across jurisdictions represent a serious concern for compliance, market access and global flow of commerce. Vermont should recognize and not conflict with

current regulatory requirements which are globally implemented and based on extensive review by chemical authorities.

In addition to not being harmonized, the Practical Quantification Limits (PQLs) used as threshold levels in S.239 are decidedly impractical. As analytical testing methods and detection limits improve over time, the PQL for a specific chemical also can change over time, resulting in uncertainty for industry in terms of compliance. Furthermore, the matrix of a product or component of the product can affect markedly the PQL for any given chemical. Therefore, a PQL established for one product may not be applicable to another product.

2) Definition of “Chemical”

It is important to align the S.239 definition of "chemical" in Section 1772³ with that of "chemical substance" by the US Federal government (40 CFR 720.3 - Definitions)⁴ for interstate commerce purposes. Any differences in these definitions could lead to different regulatory implications across jurisdictions. Therefore it is important to keep these definitions consistent.

3) Scope of Regulation:

The scope of this regulation is too broad, targeting hundreds of consumer products. This is far too large to effectively manage and would represent a significant barrier to business selling consumer products into the state. Nearly 80% of regulations proposed in this area limit their scope to children’s products, which may have the more significant risk to exposure to certain chemicals.

Resources and Funding

The annual cost to implement S.239, the number of employees required, and the additional funding needed have yet to be determined. Section 3 would require this information to be submitted to the legislature in 2015. Yet Section 1775(e) imposes a fee on manufacturers for

³ S.239 - (1) “Chemical” means a substance with a distinct molecular composition or a group of structurally related substances and includes the breakdown products of the substance or substances that form through decomposition, degradation, or metabolism.

⁴ 40 CFR 720.3 - (e) Chemical substance means any organic or inorganic substance of a particular molecular identity, including any combination of such substances occurring in whole or in part as a result of a chemical reaction or occurring in nature, and any chemical element or uncombined radical, except that “chemical substance” does not include:

- (1) Any mixture.
- (2) Any pesticide when manufactured, processed, or distributed in commerce for use as a pesticide.
- (3) Tobacco or any tobacco product.
- (4) Any source material, special nuclear material, or byproduct material.
- (5) Any pistol, firearm, revolver, shells, or cartridges.
- (6) Any food, food additive, drug, cosmetic, or device, when manufactured, processed, or distributed in commerce for use as a food, food additive, drug, cosmetic, or device.

each disclosure of a chemical of concern present in a product. IBM is not aware of a similar fee structure within other state laws. When combined with the lack of an effective de minimis level, and the broad product scope of the bill, it seems likely that a significant amount of revenue would be inequitably generated by this bill from products that pose little to no health or environmental risk.

The program outlined by S.239 is extremely ambitious in its scope, but many questions remain regarding how it will be implemented, how the intended benefits will be realized, and how much it will cost. We urge the Committee to vigorously pursue answers to these questions before advancing this bill.

Thank you for your consideration. For additional information or questions, please contact:

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Summary of State Chemical Requirements

This table summarizes current chemical management requirements at the U.S. state level. State requirements can be roughly grouped into several categories, as follows.

- **Prioritization and Concern Lists.**
 - Several states have enacted or are considering legislation that mandates government activities to prioritize chemicals and/or products according to their hazards or risks, and to create a list of chemicals and/or products of concern. The requirements vary, and in some cases authorize restrictions up to and including bans.
 - **Most of these initiatives have focused on children’s products.**
- **Disclosure and Reporting**
 - Some states have enacted or are considering ingredient disclosure laws, which require listing chemicals of concern on product labels or other forms of disclosure. There are also state requirements to report on the use of chemicals of concern in products and other chemical-related information.
- **Alternatives Assessment**
 - A relatively recent approach in state policy is to encourage or require assessment of whether a chemical can be replaced with an alternative that is less toxic or otherwise environmentally preferable.
- **Fees**
 - Only a couple of states have passed legislation that have fees and none other than Vermont have fees required when declaring a listed chemical in their product. This requirement is likely to have a significant impact on businesses who will evaluate the business model to determine if a product will be marketed in Vermont.

Summary:

The attached documentation illustrates that the scope of the Vermont chemical legislation far exceeds other states chemical legislation. Specifically:

- **6 of 7 regulate for children’s products only**
- **1 is for disclosure of Priority Products**

Additionally there are several pending state legislative bills introduced since 2010. 9 out of 13 of the pending legislation’s scope is for children’s products.

Prioritization and Concern Lists, Disclosure, and Alternatives Assessment

Requirement	Summary	Citation and Link
California Safer Consumer Product Regulations	The regulations establish a list of COCs, and specify a process for DTSC to identify additional COCs. The regulations require DTSC to evaluate and prioritize product/COC combinations to develop a list of “Priority Products” for which manufacturers must conduct alternatives analyses. DTSC may impose restrictions on the use of COCs, including restrictions on amounts, uses, product forms, and others. Responsible entities (manufacturers, importers, and retailers) are required to notify DTSC of their Priority Products .	Division 4.5, Title 22, CCR Chapter 55 http://www.dtsc.ca.gov/SCPRegulations.cfm
Connecticut Act Concerning Child Product Safety	Requires the Commissioners of Public Health and Environmental Protection to compile a list of toxic substances and the recommended maximum amount of such toxic substances that may exist in children's products . Requires the Commissioner of Consumer Protection to compile a list of safer alternatives.	HB 5650, 2008 Gen. Assemb., Feb. Sess. (Conn. 2008) http://www.cga.ct.gov/2008/sum/2008SUM00106-R02HB-05650-Sum.htm
Connecticut State Child Protection Act	Permits the Commissioner of Consumer Protection to declare any substance or mixture of substances that meet the statutory requirements to be hazardous substances, and to promulgate regulations establishing safety requirements, safety standards, banned hazardous substances, labeling requirements, and testing procedures for articles intended for use by children . If the Commissioner of Consumer Products finds that labeling is inadequate to protect the public health and safety or the article presents an imminent danger to the public health and safety, he may by regulation declare such article to be a banned hazardous substance and require its removal from commerce.	Conn. Gen. Stat. §§ 21a-335-21a-376 (2008) http://www.cga.ct.gov/asp/menu/statutes.asp
Maine Act to Protect Children's Health and the Environment from Toxic Chemicals in Toys and Children's Products	Under the Toxic Chemicals in Children's Products law 2008, the Department of Environmental Protection is required to develop and publish a list of no more than 70 chemicals of high concern, and then designate chemicals of high concern that meet specified criteria as	Me. Rev. Stat. Ann. tit. 38, §§ 1691-1699-B (2008); Maine Revised Statutes: Title 38, Chapter 16-D:

	<p>priority chemicals. (So far BPA and nonylphenol and nonylphenol ethoxylates have been designated as priority chemicals.) The manufacturer or distributor of a children's product for sale in Maine that contains a priority chemical in an amount greater than the de minimis level is required to submit information on use of the chemical. The Department of Environmental Protection may require manufacturers to require alternatives assessments, and has done so for BPA.</p> <p>The Maine Board of Environmental Protection may adopt rules prohibiting the manufacture, sale, or distribution of one or more children's products containing a priority chemical in an amount greater than the de minimis level if 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.</p>	<p>Toxic Chemicals in Children's Products http://www.mainelegislature.org/legis/statutes/38/title38chapter16-Dsec0.html</p>
<p>Minnesota Toxic Free Kids Act</p>	<p>The 2009 Toxic Free Kids Act requires the Minnesota Department of Health (MDH) to create a list of Chemicals of High Concern and a list of Priority Chemicals. The initial list of high-concern chemicals was similar to that of Maine and contained over 1,700 chemicals. The state has identified nine Priority Chemicals (cadmium, lead, formaldehyde, BPA, three phthalates, and two flame retardants).</p>	<p>Minn. Stat. §§ 116.9401-116.9407 http://www.health.state.mn.us/divs/eh/hazardous/topics/toxfreekids/</p>
<p>Oregon Toxics Reduction Strategy</p>	<p>Oregon's November 2012 Toxics Reduction Strategy includes a "Toxics Focus List." The Oregon Department of Environmental Quality will work with retailers and others in the supply chain to reduce Focus List chemicals in common consumer products, and will consider information disclosure measures.</p>	<p>http://www.deq.state.or.us/toxics/</p>
<p>Washington Children's Safe Products Act</p>	<p>The law requires the Department of Ecology to develop the Reporting List of Chemicals of High Concern to Children. The current list contains over 60 chemicals including formaldehyde, BPA, specific phthalates, specific parabens, ethylene glycol, toluene, specific metals, and others.</p>	<p>2008 Wash. Sess. Laws 288; RCW 70.240.030; WAC 173-334-130 http://www.ecy.wa.gov/programs/swfa/cspa/</p>

	<p>Manufacturers of children's products are required to report their uses of chemicals of high concern. Annual notice is required with specific information to be provided for each chemical on the CHCC list that is an intentionally added chemical present in a product component at any concentration above the practical quantification limit.</p>	
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