

**GLOBALFOUNDRIES Testimony on S.103 - Regulation of Toxic Substances
& Hazardous Materials
Senate Committee on Health and Welfare
Ruma Kohli, Product Stewardship Program Manager
Global EHS & CSR
January 17th, 2018**

GlobalFoundries (GF) appreciates the opportunity to provide input on the House amendments to S.103.

GF is the largest for-profit employer in Vermont, and accounts for roughly 69% of all Vermont exports. The majority of the semiconductor chips manufactured in GF's 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.

Our location has a long history of environmental excellence; proactively evaluating the chemicals proposed for or used in our processes and products; reducing usage, 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. These practices and programs have resulted in our location receiving numerous environmental awards and recognition.

GF's product specification currently bans or restricts over 100 chemicals from our supply chain. As Product Stewardship Program Manager for GF, 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, served as a member of the State of Vermont Beyond Waste Advisory Group, served as an Act 154 Working Group member, whose recommendations are the basis of S.103. I was named by Governor Shumlin to the Act 188 Working Group and most recently have been named to the Citizen's Advisory Panel convened by the Interagency Committee on Chemical Management as authorized by Executive Order 13-17. Informed by our experience in this arena, and appreciative of the electronic device exemptions in the bill, we have several key concerns with the House amendment to S.103.

1) Removing weight of credible scientific evidence:

S.103 as currently written removes the requirement that the Department of Health consider the "weight of credible scientific evidence" and substitutes "independent, peer reviewed, scientific research" as the basis for adding a chemical to the Chemicals of Concern to Children list. Removing the requirement to use the weight of credible scientific evidence when regulating and restricting chemicals is a practice that is not consistent with other state and global chemical management regulations. Our concern is that the proposed change unilaterally gives the Department of Health discretion to add any chemicals they see fit based on any independent peer-reviewed study, regardless of the lack of scientific information. A

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recommendation to add chemicals should be made solely on the basis of a range of available scientific evidence and not on the basis of a single data point.

2) Working Group Authority/Role

Currently, under Act 188, a Working Group of various stakeholders appointed by Governor Shumlin in late 2016 has been assigned responsibility for providing recommendations associated with banning or restricting chemicals contained in Children's Products. This work is to be completed before the Commissioner of Health initiates rulemaking to regulate sale or distribution of products containing these chemicals of concern. Such decisions are to be based on several factors such as health impacts, environmental impacts, economic impacts, availability of alternates that are technically and economically feasible substitutes to the chemical proposed to be banned.

The Working Group was created from diverse areas of expertise intended to provide balance and a broader perspective in this important decision making process. The proposed S.103 amendments would remove this role of the Working Group and solely authorize the Health Commissioner to ban or restrict products on his or her own authority, by eliminating the requirement to obtain recommendations from the Working Group.

The Working Group has already met once in 2017, and is scheduled to meet again in January, 2018. Two chemicals have been reviewed to date for a proposed ban as per the Working Group's charter. In addition, the Working Group is currently evaluating proposed changes to the Act 188 rules as proposed by the Dept. of Health.

We believe that the changes proposed in S.103 place too much autonomy into the hands of the Health Commissioner. The current Working Group process should be allowed sufficient time to fulfill its responsibilities before any changes to its authority/role are made.

3) Removal of Risk-based approach for banning of chemicals

S.103 as currently written eliminates the need to use a risk based approach and the consideration of potential exposure to chemicals of high concern in products.

Toxicity determination must consider clear identification of the chemical, the minimum concentration of the chemical which may create risk, and the types of exposures to humans which can cause harm. Additionally the exposure should focus on the question of whether the chemical is in a form or substance that would allow absorption by a human at or above the threshold level. For example, if the chemical in question is completely encapsulated within an impervious substance and is inaccessible

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during normal and foreseeable use of the product, it does not present a risk (provided its disposal is managed appropriately). The proposed amendment ignores consideration of these criteria and seeks an absolute ban on any detectable amount of the substances in all products. Regulation should be focused on actual risks rather than perceived risks.

4) Unnecessary overlap with the Governor's Executive Order 13-17

The Governor's Executive Order directed the formation of an Interagency Committee on Chemical Management which will convene a Citizen Advisory Panel and work to make recommendation by or before July 1, 2018 on:

- A centralized chemical reporting system
- Improvements to recordkeeping/reporting requirements
- Improvements to Toxics Use Reduction Act (TURA)

The Committee shall issue a report and make recommendations to the Governor on any regulatory or legislative actions to reduce risks to Vermonters from unsafe chemicals on December 15, 2018 and biennially thereafter. The Biennial report shall contain:

- A summary of chemical use in Vermont
- Identified risks to human health/environment from chemical use in Vermont
- Changes to federal statute/rules
- Proposed VT Legislative/regulatory actions to reduce risks

Sections 1 and 2 of S.103 are redundant with the Governor's Executive Order 13-17. Since the Executive Order was released subsequent to the House version of the bill that we are currently reviewing, it would seem logical to remove these sections.

Lastly, we would like to note that Act 188 was developed and enacted following extensive discussion, debate, deliberation and compromise by legislators, regulators, non-governmental organizations (NGOs) and business interests. Act 188 should be allowed to work as intended, and should be fully implemented before significant changes are made to the law. It is premature to substantially change the law before it has even had an opportunity to provide the desired results.

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We appreciate your consideration of our views. Please contact me at 1-802-769-4269 or ruma.kohli@globalfoundries.com if I can be of any further assistance.