

**Date:** March 17, 2015

**To:** The Honorable Claire Ayer, *Chair*  
Senate Committee on Health and Welfare  
Vermont State House  
Montpelier, VT 05633

**CC:** Sen. Virginia "Ginny" Lyons, *Vice Chair*  
Sen. Anthony Pollina  
Sen. Dick McCormack  
Sen. Brian Collamore, *Clerk*

**From:** Cara Bondi, Seventh Generation, Inc.

**RE:** Vermont Act 188: An act relating to the regulation of toxic substances

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Dear Senator Ayer:

On behalf of Seventh Generation, I thank the Committee for this opportunity to testify in support of Act 188, an act relating to the regulation of toxic substances.

Seventh Generation is the nation's leading brand of household and personal care products designed to help protect human health and the environment. Established in 1988, the Burlington, Vermont based company employs over 130 people, and remains an independent, privately held company distributing products to natural food retailers, supermarkets, mass merchants, and online retailers across the United States and Canada.

Among the products manufactured and sold by Seventh Generation are hand washes, laundry detergents, dish detergents, baby diapers, baby wipes, and feminine hygiene products.

Act 188 exemplifies Vermont's commitment to protecting the health of its residents, particularly the health of its most vulnerable population, children. By authorizing the state to regulate children's exposures to hazardous chemicals, not only is the future of Vermont's public health meaningfully impacted, the estimated annual cost to Vermonters of \$150 million in medical expenses to treat childhood disease related to toxic chemical exposure is reduced.<sup>1</sup>

However, the requirements in Sec. 12 18 V. S. A. § 1776 regarding the state's ability to regulate a chemical, from a scientific perspective, are essentially impossible to meet. Therefore, Seventh Generation supports revision of the Act in order to create an actionable standard for regulators.

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Seventh Generation supports the elimination of the language in Sec. 12 18 V.S.A § 1776 as the degree and frequency of exposure to a hazardous chemical in a singular children's product does not adequately measure the risk posed to Vermont's children by the presence of the chemical in children's products as a general matter. The cumulative exposure to chemicals of high concern across a range of

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<sup>1</sup> Trasande L and Liu Y. Reducing the staggering costs of environmental disease in children, estimated at \$76.7 billion in 2008. *Health Affairs*, May 20011, 10.1377.

products, at various concentrations, for various durations, and the cumulative toxicity of those exposures must be considered when assessing the risk to children, as the cumulative toxicity resulting from these exposures is what truly determines the chemical's potential for harm.

In addition, requiring the state to prove causality between a discrete chemical exposure and a specific health outcome in an individual is not possible given the complexity of human physiology and the current capabilities of medical research. This standard assumes that the diseases at issue are a.) not multi-factorial and b.) the medical establishment has determined definitive causality based on one route, duration, or concentration of exposure. In most cases, one or both of these assumptions is untrue.

Finally, requiring an unachievable burden of proof for regulation will result in unnecessary and preventable exposures of children to these chemicals, thereby increasing the burden of pediatric and adult disease related to toxic chemical exposure during childhood. It is well established that children have distinct vulnerabilities to chemical exposures when compared to adults, and those vulnerabilities contribute to the causation and exacerbation of diseases like asthma, cancer, birth defects, and neurobehavioral dysfunction occurring both during childhood and adulthood.<sup>2</sup>

In summary, revisions to the language in Sec. 12 18 V.S.A § 1776 will allow the state to create chemical regulation based on the results of valid and reliable scientific evidence rather than absolute proof of harm, allowing the state to effectively reduce exposure of Vermont's children to toxic chemicals, their effects in the development of pediatric and adult diseases, thereby improving the health of Vermonters as a whole.

Respectfully Submitted,

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Research & Development Manager, Seventh Generation

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<sup>2</sup> Landrigan PJ, Garg A. Chronic effects of toxic environmental exposures on children's health. *Clinical Toxicology*. 2007;8:253-262.