

Date: May 03, 2021

To: The Honorable Sen. Stacy Brenner, *Chair*
Committee on Environment and Natural Resources
Cross Building, Room 216
100 State House Station
Augusta, ME 04333

The Honorable Rep. Ralph Tucker,
Chair

cc: Sen. Richard Bennett
Sen. Anne Carney

Rep. Art Bell
Rep. Lydia Blume
Rep. Victoria Doudera
Rep. Lori Gramlich
Rep. Jeffery Hanley
Rep. Chris Johansen
Rep. Beth O'Connor
Rep. Will Tuell
Rep. Stanley Zeigler

From: Martin Wolf
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Burlington, VT 05401

RE: Testimony in support of LD.1503 and LD 1505 Acts to stop pollution from perfluoroalkyl and polyfluoroalkyl substances in products and firefighting foam

SUMMARY

On behalf of Seventh Generation, thank you for this opportunity to testify *in support* of LD.1503 and LD.1505 Acts to stop pollution from perfluoroalkyl and polyfluoroalkyl substances in products and firefighting foam. In presenting this testimony I will bring to the Committee's attention four facts about PFAS:

- *PFAS cause harm*
- *PFAS have spread throughout our environment*
- *PFAS persist in the environment and their harm cannot be undone*

- *Cost-effective replacements for PFAS are available in major product categories considered by this legislation*

Therefore there is no credible reason to sell or offer for sale in the State of Maine products that contain PFAS.

SEVENTH GENERATION

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, our Burlington, Vermont based company employs over 160 people, distributing products to natural food retailers, supermarkets, mass merchants, and online retailers across the United States and more than 20 other countries.

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

In presenting this testimony, I come before you as a senior employee of one of New England's successful, socially responsible businesses, as a chemist, which science I have studied and practiced most of my adult life, as a father whose eldest son attended Maine Maritime Academy and who lives in the State of Maine, and as a citizen who values the health of Maine's people, Maine's natural beauty, and the delicate balance we strive to achieve between maintaining that health, that beauty, and Maine's economic vitality.

BACKGROUND

Perfluoroalkyl and polyfluoroalkyl substances (PFAS) are substances widely used to manufacture non-stick, grease and stain-resistant coatings in a variety of industrial and consumer products, including food packaging, non-stick cookware, carpets and upholstery, ski wax, floor wax, outdoor gear, dental floss and firefighting foams.¹

PFAS have spread throughout our environment

PFAS are found in the blood of more than 98% of Americans² and contaminate the drinking water sources for more than 16 million Americans, including large numbers of those living in Maine.³ PFAS released to the environment have been shown to travel around the globe⁴ and bioaccumulate and biomagnify.⁵ They are found virtually

everywhere in water, air and terrestrial environments, including locations far from points of release. They are present in indoor dust, air, food and wildlife; and have also been found in the milk and serum of breastfeeding women.⁶

PFAS persist in the environment

In 2009, PFAS were listed as persistent organic pollutants under the Stockholm Convention due to their ubiquitous, persistent, bioaccumulative, and toxic nature.^{7,8} Because they spread rapidly and persist in the environment, once they are released they are virtually impossible to remove. PFAS are the proverbial genie that, once released from their bottle, can never be returned.

PFAS cause harm

Health effects from PFAS exposure include hormone disruption,⁹ immune system effects,¹⁰ high cholesterol, thyroid disease, hypertension,¹¹ lowered sex and growth hormones in children,¹² and altered mammary gland development.¹³

PFAS are literally the genie that cannot be put back in the bottle. Once they enter the environment they will cause harm for hundreds, perhaps thousands, of years.

REGARDING LD1503.

PFAS are used in a variety of consumer and industrial products. Economic alternatives to PFAS are available for most of these products as discussed in the following sections.

RUGS, CARPETS, AND AFTERMARKET STAIN AND WATER RESISTANT TREATMENTS

The risks to human health and the environment of using PFAS were established in the Background section of this document. The wisdom of banning PFAS in rugs, carpeting, and aftermarket stain and water resistant treatments is, therefore, clear.

PFAS-free rugs, carpets, and aftermarket stain and water resistant treatments are available

PFAS-treated rugs and carpets release dust and fibers containing PFAS which then contaminate a home's air. Children crawling on carpets transfer PFAS from the rug or carpet to their hands and then to their mouths. Children are particularly susceptible to the toxic effects of PFAS.

As more rugs and carpets are recycled, keeping persistent, bioaccumulating, toxic substances out of newly manufactured products becomes increasingly important. Restricting the use of PFAS today will prevent the contamination of future generations with these substances.

Sale of rugs and carpets treated with PFAS is already restricted at progressive retailers that offer “PFAS-free” alternatives with dirt-repelling properties. The availability of such treatments has been documented by the Danish Environmental Protection Agency as summarized in Alternatives To Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS) In Textiles, which is attached to this testimony.

Therefore there is no credible reason to sell or offer for sale in the State of Maine rugs, carpets, or aftermarket stain and water resistant treatments that contain PFAS.

FOOD PACKAGING

The risks to human health and the environment of using PFAS were established in the Background section of this document. The wisdom of banning PFAS in food contact packaging is, therefore, clear.

PFAS-free food service ware are available

Alternatives to PFAS-treated food packaging ware are available and are often less expensive. Paperboard coated with clays, waxes, polyethylene, or polylactic acid are available. Many are compostable or recyclable. New York State procurement guidelines currently restrict purchase of food service ware treated with PFAS, and New York State Legislature passed legislation (S.8817 and A.4739-C) that bans PFAS in food packaging sold or distributed in the state effective in 2023.-A report prepared by the Northwest Green Chemistry Council identifying alternatives to PFAS-coated food service ware is attached to this testimony.

Therefore there is no credible reason to sell or offer for sale in the State of Maine food service ware that contain PFAS.

SKI WAX

The risks to human health and the environment of using PFAS were established in the Background section of this document. Ski wax use contributes to environmental contamination by PFAS.¹⁴ The wisdom of banning PFAS ski wax is, therefore, clear.

PFAS-free ski waxes are available

Hydrocarbon ski waxes that are PFAS-free have been available for decades. They have been used by generations of Maine skiers to satisfactory effect.

Therefore there is no credible reason to sell or offer for sale in the State of Maine ski waxes that contain PFAS.

REGARDING LD1505. FIREFIGHTING AGENTS AND EQUIPMENT

The risks to human health and the environment of using PFAS were established in the Background section of this document. The wisdom of banning PFAS in firefighting agents and equipment is, therefore, clear.

PFAS-free Class B firefighting foams are available

In April 2019 the Interstate Chemical Clearinghouse (IC2) reported that New Zealand, the Australian states of South Australia and Queensland, the U.S. Federal Aviation Administration (FAA) and the State of Washington have, or will soon, ban fluorinated firefighting foams.¹⁵ Over 90 fluorine-free water additives from 22 manufacturers were identified and tabulated with relevant data including performance specifications and disclosed ingredients in the product.¹⁶ A report from the Washington State Department of Ecology, lists over 90 PFAS-free Class B firefighting foams that have been certified for use. The report is attached to this testimony.

Therefore there is no credible reason to sell or offer for sale Class B firefighting foams that contain PFAS in the State of Maine, unless required by Federal law.

In Conclusion

Seventh Generation and other responsible businesses already exclude thousands of chemicals of concern, including PFAS, from their formulation pallets. We will not use, and there is no need for us to use, substances that are known or likely to cause cancer, to express reproductive toxicity, or to be persistent, bioaccumulating, and toxic.

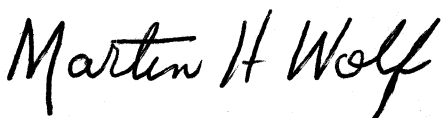
By prohibiting the use of PFAS in firefighting foam, food packaging, rugs, carpets, and aftermarket treatments, ski waxes, and other products, Maine would protect public health and the environment and reduce exposure of its citizens and

vulnerable populations such as children, to toxic chemicals, particularly when safer alternatives exist.

The State of Maine has already seen the devastating effects PFAS can have on its dairy industry. The longer these substances are allowed in products, the greater their presence in the environment and the greater the harm they will cause. How much more harm must be done before action is taken?

Thank you for your attention to, and consideration of, these comments.

Respectfully submitted,



Martin Wolf
Director, Sustainability & Authenticity
Seventh Generation, Inc.

¹ California Environmental Protection Agency, Department of Toxic Substances Control (Cal/EPA DTSC), Safer Consumer Products Program, *Product – Chemical Profile for Perfluoroalkyl and Polyfluoroalkyl Substances (PFASs) in Carpets and Rugs*, February 2018

² Calafat et al. 2007. *Polyfluoroalkyl Chemicals in the U.S. Population: Data from the National Health and Nutrition Examination Survey (NHANES) 2003–2004 and Comparisons with NHANES 1999–2000*. *Environ Health Perspect.* Nov; 115(11): 1596–1602.

³ Hu et al. *Detection of Poly- and Perfluoroalkyl Substances (PFASs) in U.S. Drinking Water Linked to Industrial Sites, Military Fire Training Areas, and Wastewater Treatment Plants*; *Environ. Sci. Technol. Lett.* 2016, 3, 344–350; DOI: 10.1021/acs.estlett.6b00260

⁴ Giesy and Kannan, 2001, *Global Distribution of Perfluorooctane Sulfonate in Wildlife* *Environ. Sci. Technol.* 35(7):1339-1342

⁵ Conder et al., *Are PFCA's bioaccumulative? A critical review and comparison with regulatory criteria and persistent lipophilic compounds*. 2008, *Environ. Sci. Technol.* 42 (4): 995-1003

⁶ Cal/EPA DTSC 2018, *Ibid.*

⁷ Blum A, Balan SA, Scheringer M, Trier X, Goldenman G, Cousins IT, et al. (May 2015). "[The Madrid Statement on Poly- and Perfluoroalkyl Substances \(PFASs\)](#)". *Environmental Health Perspectives*. **123** (5): A107-11. doi:10.1289/ehp.1509934. PMC 4421777. PMID 25932614.

⁸ "[Stockholm Convention Clearing](#)". chm.pops.int. Secretariat of the Stockholm Convention. Retrieved 26 October 2016

⁹ Henry ND et al. 2013. *Comparison of in vitro cytotoxicity, estrogenicity and anti-estrogenicity of triclosan, perfluorooctane sulfonate and perfluorooctanoic acid.* *J Appl Toxicol.* Apr;33(4):265-72.

¹⁰ Grandjean et al. 2017. *Serum Vaccine Antibody Concentrations in Adolescents Exposed to Perfluorinated Compounds*. *Environ Health Perspect.* Jul 26;125(7):077018.

¹¹ www.c8sciencepanel.org

¹² Lopez-Espinosa MJ, Mondal D, Armstrong BG, Eskenazi B, Fletcher T. 2016. Perfluoroalkyl Substances, Sex Hormones, and Insulin-like Growth Factor-1 at 6-9 Years of Age: A Cross-Sectional Analysis within the C8 Health Project. Environ Health Perspect. 124(8): 1269-1275.

¹³ White SS, et al. Gestational and Chronic Low-dose PFOA Exposures and Mammary Gland Growth and Differentiation in Three Generations of CD-1 Mice. Environ Health Perspect. 2011 Aug;119(8):1070-6. DOI: 10.1289/ehp.1002741

¹⁴ Carlson, GL and Tupper, S. Ski wax use contributes to environmental contamination by per- and polyfluoroalkyl substances, Chemosphere 261 (2020) 128078.

¹⁵ New York State Pollution Prevention Institute, Rochester Institute of Technology, April 2019, "Per- and Polyfluorinated Substances in Firefighting Foam"

¹⁶ New York State Pollution Prevention Institute, Ibid.