CLEAN WATER ACTION

March 21, 2024

To: House Committee on Environment and Natural Resources

Re: **H7356 – Comprehensive PFAS Ban Act of 2024**
Position: **SUPPORT**

Dear Chairperson Bennett and Honorable Members of the Committee,

Clean Water Action and our 20,000 Rhode Island members, strongly support H7356. Per- and polyfluoroalkyl substances, known as PFAS, have been contaminating our bodies and our environment for decades. Many states around the country are now working hard to eliminate these chemicals due to the health risks associated with exposure to PFAS. These chemicals do not belong in our bodies and they do not belong in our household products or firefighting foam.

This bill requires manufacturers of products with intentionally added PFAS to report the presence of those substances in those products to the Department of Environmental Management (DEM) beginning in 2028. This bill also prohibits the sale of residential carpets or rugs, and fabric treatments, cosmetics, cookware, juvenile products, outdoor apparel, artificial turf, menstrual products and firefighting foam that contain intentionally added PFAS, starting in 2027.

PFAS are a class of chemicals in need of immediate action based on their threat to human health and widespread and costly pollution in our environment. Research at the CDC links PFAS to a variety of health concerns including decreased fertility, liver damage, pre-eclampsia, and increased risk of thyroid disease and asthma.[1] Despite industry claims, the newer generation of PFAS chemicals should not be considered safe. Studies by the National Institute of Environmental Health revealed that seven current-use PFAS induced similar toxicity as their phased-out counterparts.[2]

PFAS are also known as "forever chemicals" because they have the strongest covalent bonds in organic chemistry. Due to the strength of this bond, PFAS are virtually indestructible and last a long time in the environment. We hope that the committee will agree that preventing PFAS pollution should be a top priority for the legislature.

[1] Agency for Toxic Substances and Disease Registry, Centers for Disease Control and Prevention, Toxicological Profile for Perfluoroalkyls, May 2021.
[2] "Per-and Polyfluoroalkyl Substances (PFAS), National Toxicology Program, National Institute of Environmental Health, last updated 8-03-2021, https://ntp.niehs.nih.gov/whatwestudy/topics/pfas/index.html.

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Disposal of Products Containing PFAS will Invariably Contaminate our Land and Water

Where does all the PFAS come from? The short answer is us. It comes from all the consumer products that we use that contain PFAS. When we wash the clothing treated with PFAS stain treatments, some goes down the drain. When we use floor waxes with PFAS, some ends up in the bucket going down the drain. When we send PFAS containing waste to the landfill, the PFAS will eventually enter the leachate from the landfill.[3] This leachate is usually sent to local sewage treatment plants, allowing the PFAS to again enter waterways or the sludge.

Given the near indestructability of PFAS, the only way we are going to keep them out of our environment, out of our drinking water, and out of food is if we stop it at its source: that is, we eliminate use of this class of chemicals from consumer products and firefighting foam, and all other uses that are not currently unavoidable.[4] We cannot rely on efforts to protect ourselves by "shopping our way out of the problem," that is trying to avoid it by identifying and only purchasing PFAS-free products for our own families. Even if we studiously avoid food packaged in PFAS wrappers, there is no guarantee I won't be exposed in other ways, such as via drinking water contaminated from the disposal of other PFAS.

This Bill Allows Truly Critical Uses to Continue

While most uses of PFAS can be readily replaced with safer substitutes, we recognize there are some critical uses where there is not currently an alternative for the use of PFAS. Undoubtedly industry representatives will highlight to you the use of PFAS in medical devices and in advanced electronics like batteries and solar panels. It's important to remember that H7356 does not prohibit these uses. While it includes an *intent* to ban all uses PFAS by 2032, specific uses not explicitly covered by the covered products ban can continue. The goal is to move industry away from PFAS uses that, because of their indestructibility, will continue to burden us with disposal challenges, while still recognizing we will have to accept the disposal challenges where the PFAS is truly needed.

Other states and localities have taken actions to phase out PFAS in different categories and store shelves have not emptied and economies have not collapsed. In fact, the regulated community is increasingly seeing the writing on the wall and starting to act nationally. The following product categories of are of particular concern in Rhode Island:

Textiles, Carpets, Rugs, and Fabric Treatments:
A 2018 report found that half of carpets tested contained PFAS.[5] This is important both as a significant exposure to young children who crawl on them as well as a waste management challenge. A study published

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[3] Johnsie R. Lang, B. McKay Allred, Jennifer A. Field, James W. Levis, and Morton A. Barlaz. "National Estimate of Per- and Polyfluoroalkyl Substance (PFAS) Release to U.S. Municipal Landfill Leachate." Environmental Science & Technology 2017 51 (4), 2197-2205 DOI: 10.1021/acs.est.6b05005

[4] For more on what could be considered "essential" and non-essential uses of PFAS, and how food packaging uses are all nonessential see: Cousins, et al. "The concept of essential use for determining when uses of PFASs can be phased out." Environ. Sci.: Processes Impacts (2019)21, 1803-1815.

[5] Changing Markets Foundation. "Testing Carpet for Toxics." December 2018. Available at: https://www.no-burn.org/wpcontent/uploads/FINAL-Testing-Carpet-for-Toxics.pdf

in 2021 correlated the presence of PFAS in childcare center carpets with PFAS in dust. They further modeled children's exposure to that dust and found levels similar to those of drinking water contaminated to the EPA advisory level.[6] Researchers have found PFAS in leachate from construction and demolition landfills to be significantly higher than from general municipal landfills[7], which the study's author believes is due to PFAS in carpeting.[8] Manufacturers and retailers have responded. The nation's largest home improvement retailers, Lowes and Home Depot, both stopped selling carpets and rugs with PFAS and Lowes committed to ensuring that aftermarket fabric treatments is sells are also PFAS-free. At least four very large international carpet manufacturers have also stated they no longer produce carpet with PFAS. Other states are also taking action, with California, Colorado, Maine, Maryland, Minnesota, New York, Vermont and Washington all having passed laws to restrict the use of PFAS in carpets, rugs and/or fabric treatments.

Outdoor Apparel:
PFAS are used in many different kinds of clothing. While the most well-known applications are in outdoor gear, PFAS have been used in daily wear clothing as well as in uniforms. Often, clothes that are labeled as antimicrobial or anti-odor may contain PFAS. Fortunately, several leading companies including Levi's, H&M and Zara have committed to removing PFAS from their clothing. In addition, several outdoor apparel brands including Columbia, Marmot and Gore have also made commitments to go PFAS-free, though some of those commitments only relate to certain PFAS. These efforts must be backed by legislative action in order to move the entire market to truly safer clothing.

Cosmetics:
A recent study found that many cosmetic products contain PFAS, but confounding advocates is the fact that PFAS did not appear on the label of most of the products studied.[9] The products that most often contained PFAS were lipsticks, mascara and foundation. A closer look at the products containing PFAS showed that 88% did not list PFAS on their ingredient label. It is unclear if the PFAS detected were intentionally added but missing from the product label because manufacturers chose not to disclose them or if background contamination is responsible for the PFAS detected in the products studied, finding their way into the cosmetics from air, water, machinery, packaging or other sources. The law governing beauty and personal care products has not been updated in over 80 years, despite a growing and vocal movement that has been demanding change. Under current federal regulations, companies can use virtually any raw material to formulate a cosmetic product without Food and Drug Administration (FDA) pre-market safety testing or review. Additionally, the FDA cannot issue a mandatory recall of cosmetic products, even if a product has generated thousands of complaints from consumers and direct harm from use of the product has been established. California, Colorado, Maryland, Minnesota, Oregon and Washington have all passed laws to restrict the use of PFAS in personal care products, and many more states are currently considering similar proposals.

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[6] Wu Y, Romanak K, Bruton T, Blum A, Venier M. "Per- and polyfluoroalkyl substances in paired dust and carpets from childcare centers." Chemosphere. 2020 Jul;251:126771. https://doi.org/10.1016/j.chemosphere.2020.126771
[7] Solo-Gabriele, Helena M. et al. "Waste type, incineration, and aeration are associated with per- and polyfluoroalkyl levels in landfill leachates." Waste Management. 2020:107. https://doi.org/10.1016/j.wasman.2020.03.034
[8] Sorg, Lisa. "Your discarded carpet is poisoning the Earth with PFAS." NC Policy Watch. April 4, 2020. http://www.ncpolicywatch.com/2020/04/16/your-discarded-carpet-is-poisoning-the-earth-with-pfas/
[9] Whitehead, Heather D., Venier, Marta et al . "Fluorinated Compounds in North American Cosmetics." Environmental Science Technology Letter. 2021,8,7 538-544. https://doi.org/10.1021/acs.estlett.1c00240

Cookware:
One of the larger markets for PFAS is nonstick cookware coatings. A 2020 study which tested 24 types of coated cookware found most of the tested nonstick cooking pans and some baking pans are coated with PFAS.[10] Waste created by the PFAS manufacturing process has contaminated communities in Rhode Island and across the country. Last year, Minnesota became the first state to regulate PFAS in cookware.

Juvenile Products:
Much attention has been given to PFAS in firefighting foam, carpets and food packaging but PFAS are also used in bibs, nursing pillows and other products intended for children. There is also data showing that PFAS are especially harmful for children including new information on PFAS being linked to endocrine disruption[11] and interference with vaccines[12]. California, Colorado, Minnesota and Oregon have passed laws that restrict PFAS in juvenile products.

Firefighting Foam:
PFAS are found in firefighting foam used by the military, airports and fire departments to extinguish fires caused by flammable liquids and in training exercises. The use of this foam has been linked to significant soil, groundwater and drinking water contamination across the country. The US Defense Department has estimated that it will cost more than $3 billion to clean up just the military sites where the foam was used. Twelve states in the U.S. have laws restricting PFAS in firefighting foam, including our neighbors in Connecticut (2021.)

Disclosure and Regulation:
Banning PFAS in individual product categories is valuable and can make significant inroads in curbing PFAS exposures and pollution. However, given widespread use and the lack of transparency about where PFAS is used and in what products, we are likely just scratching the surface of the problem. A study released in 2020 shows that our understanding of where PFAS is used is limited and that it is far more widespread than previously thought.[13] In order to properly tackle the PFAS problem, we must know where it is being used, ban its unnecessary use by a date certain and give states the authority to ban its use in all products.

When PFAS containing products are used and disposed of, PFAS can migrate out of these products into the environment, including groundwater, and sewage sludge. As a result of the widespread use of PFAS, more and more communities are being forced to address PFAS contamination in their drinking water sources. The difficulty and expense in treating the contamination is a burden on communities and water systems. We know that more and more Americans are drinking water containing PFAS. In an attempt to recover some of

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[10] Healthy Stuff Lab, Ecology Center, "What's Cooking? PFAS and Other Chemical Hazards in Nonstick Cooking and Baking Pans,"2020.
[11] Kar, Supratik; Sepulveda Maria S. et al. "Endocrine-disrupting activity of per-and polyfluoroalkyl substances: Exploring combined approaches of ligand and structure based modeling" Chemosphere Volume 184, October 2017, pgs 514-523.
[12] Grandjean, Philippe; Heilmann, Carsten et al. "Serum Vaccine Antibody Concentrations in Adolescents Exposed to Perfluorinated Compounds" Environmental Health Perspectives Volume 125, No. 7, Jul 26, 2017 https://doi.org/10.1289/EHP275
[13] Gluge, Juliane; Scheringer, Martin et al. "An overview of the uses of PFAS." Environmental Science: Processes and Impacts. Issue 12, 2020. https://pubs.rsc.org/en/content/articlelanding/2020/em/d0em00291g

the massive costs of PFAS clean up, thirteen states have sued, or begun proceedings to sue, the manufacturers of PFAS chemicals for contaminating water supplies and other natural resources.

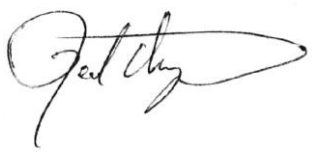
The reality is that alternatives to the use of PFAS are plentiful and widely available, as demonstrated by the major manufacturers and retailers taking action to eliminate these toxic chemicals. While we applaud these voluntary actions, ultimately, where you shop should not and cannot determine the toxics you are exposed to. We must implement public policy to make these requirements universal.

One commonality all these products share is they can be made without PFAS. A wide array of PFAS-free products is currently available. All of the categories - textiles, cosmetics, cookware, outdoor apparel, juvenile products and firefighting foam - have many PFAS-free alternatives on the market.

While this market movement is welcome, states across the country are taking action to permanently close the door on the non-essential use of PFAS in products. We are asking the state of Rhode Island to heed the call of EPA Administrator Michael Regan when he stated "Every level of government – from local, to state, to Tribal, to federal will need to exercise increased and sustained leadership to truly make progress on PFAS."

Clean Water Action urges this committee to pass this important piece of legislation.

Sincerely,



Jed Thorp
Rhode Island State Director, Clean Water Action

State Action on PFAS
States Take Lead on Restricting PFAS Chemicals

Updated December 2023

Per- and polyfluoroalkyl substances (PFAS) are negatively impacting public health. States are proactively adopting upstream measures to address the ongoing PFAS crisis. With contamination reaching alarming levels and the cleanup costs running into billions, urgent action is needed.

Class-based PFAS phase-outs in key sectors with implementation years

	All Products	Apparel	Carpets / Rugs	Cleaning Products	Cookware	Dental Floss	Fabric Treatments	Firefighting Foam	Food Packaging	Juvenile Products	Menstrual Products	Oil & Gas Products	Personal Care Products	Pesticides	Ski Wax	Sludge (biosolids)	Textile Articles
California		★ 2025	2021**				2022**	2022	2023	2023			2025				★ 2025
Colorado			2024				2024	2024	2024	2024		★ 2024	★ 2025				2025
Connecticut								2021	2023								
Hawaii								2024	2024								
Illinois								2025									
Maine	2030		2023				2023	2022	2022					★ 2030		★ 2022	
Maryland			2024					2024	2024				2025*				
Minnesota	2032		2025	2025	★ 2025	★ 2025	2025	2024	2024	2025	★ 2025		2025		2025		2025
New Hampshire								2020									
New York		2025	2024					2020	2022								
Oregon									2025	2023**			2027				
Rhode Island									2024								
Vermont			★ 2023				★ 2023	2023	2023						2023		
Washington	★ 2023**		2023				2023	★ 2020	★ 2022				2025				2023
Totals	**3**	**2**	**8**	**1**	**1**	**1**	**6**	**12**	**12**	**4**	**1**	**1**	**6**	**1**	**2**	**1**	**4**

* not class-based; covers some PFAS substances but not all
** ongoing regulation
★ indicates the state was the first to adopt policy banning PFAS in that specified key sector

Notes on product categories

Carpets/Rugs:	Ban applies to new carpets and rugs but not to those in the resale market.
Cleaning products:	Products used for domestic, commercial, or institutional cleaning purposes.
Cookware:	Includes houseware items, not professional cookware.
Fabric Treatments:	Includes but not limited to stain resistance or water resistance.
Firefighting Foam:	Includes bans on the manufacture, sale, distribution, and/or use of firefighting foam containing PFAS chemicals.
Food Packaging:	Some bans include all food packaging (CT, MN, RI, VT), while other bans include only paper-based food packaging (CA, CO, HI, MD); the OR ban covers all foodware containers but not all packaging.
Juvenile Products:	Product designed for use by infants and children under 12 years of age; does not include electronic products.
Menstrual Products:	MN is the only law to name menstrual products in a ban, but other state laws banning PFAS in textiles also cover menstrual products.
Pesticides:	Includes substance or mixture of substances intended for preventing, destroying, repelling or mitigating any pests; use as a plant regulator, or as a spray adjuvant.
Ski Wax:	Includes ski and snowboard wax and tuning supplies.
Textile Articles:	CA and MN laws includes all textiles used in customarily and ordinarily used in households and businesses; CO's law covers most textile articles, and has a January 2027 implementation date for outdoor uses; WA policy covers indoor textile furnishings and upholstery. Apparel is considered a separate category and is not a “textile article.”

March 12, 2024

Scientists' Statement on Defining PFAS

The undersigned are scientists with expertise in per- and polyfluoroalkyl substances ("PFAS"). We study the use and health & environmental effects of PFAS, and support reducing the adverse impacts of PFAS, the "forever chemicals". Here, we address the necessity for government agencies and legislatures to adopt complete PFAS definitions grounded in science without political interference.

PFAS are used in consumer and industrial applications as surfactants and to impart oil, water, and stain resistance. There are thousands of PFAS chemicals and all well-studied PFAS show human health harms ranging from immune system dysfunction to increased risk of certain cancers.[1] All PFAS are distinguished by the presence of at least one fully fluorinated carbon atom. The carbon-fluorine bond is the strongest single bond in organic chemistry[2], giving all PFAS the shared trait of persistence, leading to their accumulation in our bodies and ecosystems. The health and environmental risks of PFAS coupled with their extreme environmental persistence[3] requires a class-based approach[4] and a definition that reflects that.

The following are science-based definitions:

- The "at least one fully fluorinated carbon" definition that has been used by 23 US states, the Department of Defense, and Congress.[5]
- The nearly identical 2021 OECD definition that was crafted by a panel of international PFAS experts, including those representing the chemical industry and US EPA.[6]

PFAS definitions that exclude polymers and gases are overlooking the most widely used PFAS. Claims that these PFAS are needed to fulfill climate and infrastructure goals are irrelevant to the definition of PFAS and are continuing to be refuted through the development of safer alternatives.

PFAS polymers can be thought of as plastics that contain carbon-fluorine bonds. They have been exempted in some PFAS regulations and definitions due to their lack of direct toxicity, but life-cycle effects must be considered to protect our health and our ecosystems.[7] The manufacturing, use, and disposal of PFAS polymers emits harmful fluorinated building blocks and PFAS greenhouse gases, with *80% of historical PFAS environmental contamination estimated to have originated from polymer production*.[8] PFAS polymers are also persistent, contributing to the ongoing microplastic crisis. Any PFAS definition grounded in science must include all PFAS polymers.

Fluorinated gases must also be included in the class of PFAS. Many persist in the environment or decay into trifluoroacetic acid (TFA), a PFAS that has been building up in the environment since the introduction of CFC replacements like hydrofluoroolefin (HFO) gases. We are concerned that TFA has been increasingly detected in people and drinking water worldwide.[9,10] The low global warming potential of some fluorinated gases does not justify their exclusion from the definition of PFAS.

Government agencies and legislatures should continue to define PFAS accurately using the above definitions, and if any exemptions are needed, e.g., for certain pharmaceuticals, then those can be given without changing the definition of PFAS.

Respectfully signed,

The views expressed are those of the signatories and do not represent their affiliated organizations.

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