



**Testimony of VPIRG Executive Director Paul Burns  
in Support of S.295, Imposing Restrictions on the Manufacture, Sale and  
Distribution of Products Containing PFAS Toxins  
March 12, 2020**

**Introduction**

For the record my name is Paul Burns, and I'm the executive director of the Vermont Public Interest Group (VPIRG). VPIRG is Vermont's largest consumer and environmental advocacy organization with approximately 50,000 members and supporters across the state. Thank you for the invitation to testify this morning on S.295.

I believe the members of this committee are familiar with VPIRG's long history of engagement on policy proposals related to toxic chemicals and the risk they can pose to human health and the environment. It is because of the very real threat posed by PFAS chemicals and the other toxins addressed in the legislation that VPIRG strongly supports S.295.

I recognize that the deadline for action is very near, and that you'd heard testimony from a number of other witnesses on this bill already. Therefore, I'm going to summarize my written testimony and highlight a few key points.

**Background PFAS:**

PFAS, or poly- and perfluoroalkyl substances, are manufactured chemicals used in products such as food packaging, stain-resistant carpets, nonstick cookware, outdoor gear, and firefighting foams. They are extremely persistent in the environment (hence the "forever chemicals" name), and many build up, or bioaccumulate, in people and animals over time. They have also become notorious as drinking water contaminants over the past several years.

Exposure to PFAS is linked to a number of serious health concerns: cancers, thyroid hormone disruption and disease, liver and kidney toxicity, reproductive and developmental toxicity, and harm to the immune system. Nearly every U.S. resident has PFAS in their body, with studies finding PFAS in blood, breast milk, umbilical cord blood, amniotic fluid, placenta, and other tissues.

As with PFAS, the health impacts of phthalates and bisphenols are well-documented and extensively evidenced, which is why the Vermont General Assembly has acted to restrict them in previous sessions, and why their uses are restricted across the world. For example, the EU bans four types of phthalates from food packaging, and Maine's food packaging bill bans phthalates. To be clear, the State is absolutely within its legal rights to enact all the provisions in this bill. Vermont has passed similar laws in the past to restrict the use of toxic flame retardant chemicals, lead, mercury, phthalates, and BPA from consumer products.

As you will recall, the discovery of PFOA, a type of PFAS chemical, in private wells in Bennington County and elsewhere in Vermont served as a wake-up call. In 2017, the state tested 570 private drinking water wells in Bennington; 276 had elevated levels of PFOA. These contaminated water wells surrounded the former ChemFab plant, which manufactured Teflon coating for over 30 years and released PFOA into the air. A community health questionnaire distributed throughout affected communities around Bennington and two New York towns found that 272 of 443 respondents had experienced testicular cancer, kidney cancer, and thyroid disease.

In recognition of the threat posed by PFAS, this body passed Act 21 last year, which provides a framework to identify PFAS contamination and creates drinking and surface water rules. It also requires testing of public water systems throughout the state. As important and valuable as this work is, it addresses PFAS downstream—post contamination. This is absolutely necessary in a world where contamination of persistent, toxic, “forever chemicals” exists, but as you’ve heard from others, it’s time now to look upstream – to prevent human exposure and the contamination of our drinking water before it happens. To do this, we must restrict the use of these toxins in products.

S.295 bans some of the most problematic uses of PFAS in products, including rugs & carpets, firefighting foam, and food packaging. I will briefly discuss why each product is essential in this bill.

#### **Firefighting foam**

Class B firefighting foam is widely used in the U.S. to fight gas fires. PFAS are added to firefighting foam for surfactant quality, and are mandated to be used at all airports governed by the FAA. A major use of the foam is training exercises. PFAS from foam are dispersed into the environment primarily through inhalation or absorption.

Use of firefighting foam accounts for about a third of total global PFAS pollution. But it’s important to note that the fluorine-free foam market is well-established, cost competitive, and supported by firefighters.

I want to be careful not to minimize the health threat posed by PFAS to our firefighters or reduce human harm to a simple cost figure on a spreadsheet. These are very real threats with serious consequences. But it is also important to note that PFAS-containing foam is actually far more expensive than safer alternatives when you factor in the cost of cleaning up environmental contamination, and the cost to firefighters’ health. Consider for instance, that firefighters have a 14 percent higher chance of dying from cancer than the general population.

Safer alternatives also perform well compared to PFAS-containing foam. Washington, New Hampshire, Colorado, and New York have all banned the PFAS-containing foam. Thirteen states have introduced similar policies. We would suggest striking the exemptions for terminals, oil refineries and chemical plants. There are cost-effective alternatives, and many states and the federal government are moving in this direction, we see no reason to keep the exemption.

I do want to address a concern that I believe was raised by Senator Cummings. The language in the bill restricts the actions of the manufacturer of the firefighting foam, not the firefighters or local

departments. Local firefighting departments will not be required to cease the use of their firefighting foam and equipment, they will just be unable to purchase foam containing PFAS in the future, and will be made aware when equipment contains PFAS. Fortunately, the alternatives are of a comparable price.

### **Food Packaging**

S. 295 bans PFAS, in addition to toxic phthalates and bisphenols, from our food packaging. Paper products used to make food packaging are often treated with PFAS for water and grease resistance. In testing, deli-sandwich wrappers, french-fry boxes, popcorn bags, bakery bags, and to-go containers have all been found to contain PFAS. When PFAS are used in food packaging, they can migrate to our food. For a typical adult, dietary exposure is likely to be the single largest exposure pathway of PFAS. That's why Maine and Washington, and the grocers Trader Joes and Whole Foods, have banned PFAS in food packaging.

Manufacturers have successfully produced price-competitive alternatives. Elena Mihaly from CLF attached to her testimony the Center for Environmental Health's "A Purchaser's Guide to Safer Foodware," which includes a lot of that information. Not only do alternatives exist, but a lot of food packaging is **not made with PFAS** to begin with. A study published by NGO and government scientists found that 60 percent of paper food packaging tested did not test positive for PFAS.

It's not just PFAS that manufacturers are turning away from. I know there have been concerns raised about moving away from the use of BPA for instance. In response, I wanted to bring to your attention an article from Packaging Digest from two years ago. It found that even at that time, "at least 90% of cans no longer use BPA" and instead use acrylic and polyester. So, the market is moving away from toxic bisphenols to safer, cost-comparable alternatives. And this is the kind of successful, health-protective market change you see when laws pass like what VT has already done on BPA previously, and what we're pushing for in this bill.

On this topic, I would like to address the recent changes to the bill that allow, but do not require, the Department to go through a regulatory process to ban PFAS from food packaging.

In testimony from industry representatives yesterday, you heard that the FDA has "carefully reviewed available science on short chain PFAS compounds and hasn't identified any safety concerns" and on this basis, FDA regulated food packaging should be exempt from state regulations. In fact, two studies released just this week by the FDA show previously underestimated levels of harm from a short-chain PFAS called 6:2 FTOH, **which is the PFAS chemical that is used in most of the plastic coatings on food packaging.**

These new studies also found that industry claims about the safety of PFAS ignored publicly available information that indicated their products were toxic, and that 9 of 11 of FDA's approvals of PFAS chemicals from 2008-2017 were based on 6:2 FTOH. It is clear that the approval of the FDA does not prove the safety of a chemical or product.

Importantly, the flaws in the industry arguments were also proven by a year-long investigation by Environmental Health News, which found that the FDA had ignored or hidden findings from

independent scientists studying BPA, and instead relied on industry studies of the chemical. It's worth noting that BPA is lucrative for the industry and will, by 2022, be a \$22.5 billion dollar market. While the FDA has minimized the risks of BPA in the amounts it is used, thousands of peer-reviewed studies from academics suggest otherwise. Absorbing or ingesting the ubiquitous chemical may harm people at doses 20,000 times lower than what the agency says is safe, comparable to levels at which most of us are exposed.

Separately, an article was recently published by a group of internationally-recognized scientists in the peer-reviewed journal, Environmental Health. They assessed what chemicals have been found to transfer from food packaging, and the research on human exposure to food packaging chemicals. Some of their findings, based on established scientific data and facts are as follows:

1. Several thousands of chemicals are intentionally added to make food packaging
2. Toxicity and exposure information is available only for a few of the intentionally used chemicals
3. Known hazardous chemicals are authorized for use in food contact
4. Humans are exposed daily to these chemicals migrating from food packaging into food

If we allow food packaging with these chemicals to go through the bureaucratic process of rulemaking rather than banning it outright with this legislation, it will be years before we see toxic packaging removed from the market, when Vermonters are already being exposed daily. To be clear, PFAS in food packaging are **not** used for safety purposes, and alternatives **absolutely exist**. If this amended language is intended for cases where alternative products may not yet be readily available, it should not apply to PFAS.

We are years behind the states of Washington and Maine, where they have passed language similar to the amended version of this bill. Their Agencies are already doing analyses of whether safer alternatives are readily available, and creating a market for these products. The data is already coming out, we don't need to spend our DOH resources on duplicative studies while slowing down this essential step in protecting public health.

While we are in opposition to this amended portion of the bill and urge the committee to revert to the original language – especially for PFAS – the committee should at the very least replace “may” with “shall” on line 1, page 7.

### **Rugs and Carpets**

PFAS are often used to make rugs and carpets stain and water resistant. Carpets made with PFAS become “PFAS factories,” releasing the chemicals over time into our air and dust. Later, these textiles also release their toxins into landfills, and subsequently into leachate and waterways. Fortunately, there has been work done – such as that by the Danish Government, as Martin Wolf of Seventh Generation pointed out in his testimony – to identify non-PFAS alternatives for treating textiles.

Though Vermont would be the first state to enact this policy through the legislature, this policy is well-supported. Industry giants like Lowe's and Home Depot have already banned PFAS from rugs and carpeting that they sell. Additionally, the state of Washington is regulating PFAS in carpets and carpet

treatment through its Department of Ecology, and California identified PFAS in carpets and rugs as a priority product to address under the state's Safer Consumer Products Program.

Despite the market's movement away from textiles containing PFAS, it remains an issue in Vermont. Testing done by Casella at Vermont's only active landfill shows that textiles and carpets provided the highest mass flux of PFAS into the landfill compared to other types of waste disposed. Down the line, this becomes a concern for communities like Montpelier, which currently accepts leachate contaminated with PFAS into its wastewater treatment plant. To be clear, this facility is not designed to treat PFAS. It's crucial to remember that PFAS cause harm from exposure to the products themselves, and then cause further problems contaminating the environment.

### **Regulating PFAS as a class/ Adding PFAS to Act 188**

The problem with regulating chemicals in a one at a time "whack a mole" approach, is that these chemicals are often replaced with newer chemicals of similar composition, that are equally as dangerous but for which less research exists. This is called a "regrettable substitution" and it is a strategy often employed by manufacturers. Consider BPA for instance, which was banned in Vermont in 2010, and was replaced to a large degree by a similarly harmful chemical, BPS. In another example, DuPont faced backlash after releasing GenX, a replacement for PFOA that was equally toxic.

The rate at which PFAS chemicals are entering the marketplace is astounding. Until recently we were talking about 4,000 chemicals in the class. I recently learned that there are now thought to be more than 7,500. And even in Vermont, where we have been something of a leader on the issue because of the terrible contamination problem in Bennington and elsewhere, we still only address a handful of the chemicals.

The industry knows that to regulate each of these chemicals individually would be a far too long and onerous process, but they will argue against a class-based approach because there's "not enough data." Don't be fooled. You have all the data you need to protect public health.

**As early as 1963, a 3M technical manual classified PFAS as toxic. In 1970, DuPont found PFAS "highly toxic when inhaled," and in 1973 they found that there is no safe level of exposure to PFAS in food packaging. In 1989, a 3M study found elevated cancer rates among PFAS workers, and in 1992 a DuPont study found the same. In 1999, a 3M scientist described PFOS as "the most insidious pollutant since PCB."**

So why didn't the public know? These studies sat in 3M's private files for decades while they downplayed the health effects in other published work. Meanwhile, PFAS were accumulating in the environment and in people, and 3M was expanding to a \$120 billion net worth. There is plenty of scientific support for you to regulate the class of PFAS and get them out of our consumer products. Claims that Vermont would be the first state to take a step like this are incorrect; last year, Washington passed a law to allow its commissioner to add chemicals by class to the chemicals of high concern to children, and New York just passed legislation to do the same.

The Vermont DEC recently submitted comments to the EPA suggesting that EPA require extensive reporting of all PFAS, “not just those substances currently active in commerce.” Additionally, DEC recommended a reporting threshold “that is much lower than the level recently established by Congress,” and to add certain PFAS chemicals to the Toxics Release Inventory list as individual listings, and all other PFAS to the list as a “chemical category.”

We are not at all confident that the Trump administration’s EPA will respond favorably to the DEC’s recommendations. Therefore, it is up to the states to regulate these chemicals in order to protect Vermonters and our environment.

Thank you for the opportunity to testify in favor of S.295.