### What are PFAS?

PFAS stands for per- and poly-fluoroalkyl substances which are a group of thousands of human-made chemicals that have been used in industry and in many consumer products since the 1950s because they are resistant to heat, water, oil, grease, and stains.

### Where are PFAS found?

PFAS have been found in many places, including drinking water, soil, biosolids, food, indoor dust, and consumer and industrial products.

Consumer and industrial products that may contain PFAS, include:

- Food packaging
- Nonstick cookware
- Ski wax
- Cosmetics and personal care products
- In-home fabrics/textiles, carpets, and
  Certain paper and textile rugs
- Clothing and shoes
- After-market waterproofing/stain resistance sprays/treatments

- Cleaning products
- Paints, varnishes, and sealants
- Certain firefighting foams
- Metal plating with corrosion prevention
- manufacturing
- Industrial plastics, resins, and molds
- Wire manufacturing with coating and insulation

### Why are PFAS a concern?

Virtually everyone is exposed to PFAS and PFAS is known to cause risks to human health. In addition to their health effects, PFAS have several characteristics that make them a concern for the environment:

- PFAS are introduced into the environment in a variety of ways including releases into the air and water as waste from certain industries and through the regular use and disposal of PFAS-containing products.
- PFAS are very stable and persistent, meaning that once they are released into the environment, they do not breakdown and can build up in the environment, wildlife, and humans.

PFAS are water soluble and highly mobile, meaning they can travel in water far from where they are released into the environment making many drinking water sources, including groundwater, vulnerable for contamination.



### What are the health impacts from exposure to PFAS?

Exposure to PFAS may result in a wide range of negative health outcomes. For more information on PFAS and health effects, please visit <u>the Vermont Department of Health's (VDH) website</u>.

#### What are the standards for PFAS in drinking water?

Currently, Vermont's drinking water standard for PFAS is 20 parts per trillion (ppt) for the cumulative sum of five types of PFAS. That means the sum of the five regulated PFAS should not exceed 20 ppt in your drinking water. The five types of PFAS that are currently regulated in Vermont are:

- 1. PFOA (Perfluorooctanoic acid)
- 2. **PFOS** (Perfluorooctane sulfonic acid)
- 3. **PFHxS** (Perfluorohexane sulfonic acid)
- 4. **PFHpA** (Perfluoroheptanoic acid)
- 5. **PFNA** (Perfluorononanoic acid)

On March 14, 2023, the federal Environmental Protection Agency (EPA) announced proposed National Primary Drinking Water Regulation MCLs for PFOA and PFOS of 4 ppt in public drinking water. The EPA also proposed a grouped MCL for the sum of four other PFAS: PFBS, PFNA, PFHxS, and GenX. This proposed regulation is anticipated to be final by the end of 2023. The Vermont Health Department will work with the Vermont Department of Environmental Conservation to evaluate the new federal proposals and determine how they will impact Vermont's current standards and approach to regulating PFAS in drinking water.

More information about EPA's proposed National Primary Drinking Water Regulation

More information about Vermont public drinking water systems and their individual PFAS test results

## Who is responsible to pay for the required testing of public water systems?

The public water systems are responsible for paying for the required testing. The plan for continued testing is laid out in the <u>Vermont Water Supply Rule</u> under which public drinking water systems sample for PFAS at a frequency based on the system's historic sampling results, either quarterly, annually, or once every three years.



## What opportunities for assistance are available to public water systems to help them comply?

There are two new EPA funding programs resulting from the Federal Bipartisan Infrastructure Law (BIL) that are administered by Vermont DEC to address emerging contaminants in public water systems with a focus on PFAS. These funding sources are a combination of 100% forgivable loans and grants that are available to pay for costs associated with the remediation of a PFAS contaminated public water system.

There are certain costs, such as on-going operation and maintenance expenses or the costs associated with bulk or bottled water related to the immediate response to contamination that are not eligible for funding under these federal programs. There is limited state funding available for bulk and bottled water and the state is looking at ways to increase funding to support water suppliers with the initial emergency response.

# What happens if PFAS chemicals are found in public drinking water?

For systems that detect and confirm levels **at or above** the 20 ppt PFAS MCL, DEC works with each of the water systems to implement a Do Not Drink notice, develop interim solutions, and create long-term solutions to permanently address PFAS contamination.

For systems that detect and confirm levels **below** the 20 ppt PFAS MCL, the system operator is required to continue monitoring the water supply at a frequency based on the system's historic sampling results, either quarterly, annually, or once every three years.

For systems that **do not detect** PFAS, the sampling frequency is directed by the <u>Vermont Water Supply Rule</u> and generally sampling frequency is reduced after a water system establishes a baseline of non-detect results.

For more information about public drinking water systems and their individual PFAS testing results visit ANR's <u>Drinking Water Search website</u>.

### I have a private well, should I get my water tested?

In Vermont, there is no requirement to test for PFAS in a private well or spring. The best way to know if you are being exposed to PFAS in your drinking water is to test. Residential well or spring users can obtain water sample bottles by contacting an accredited laboratory on the <u>PFAS Certified Laboratory list</u>.



Approximately 40% of Vermonters get their drinking water from a private residential well or spring. If you do not receive a water bill, you are likely on a private well or spring. Please contact the Vermont Department of Health's Drinking Water helpline at (802) 489-7339 if you have further questions.

# What happens if I test for PFAS and it is detected in my private well?

If PFAS is detected in your well, we will provide you with information about reducing your exposure and options available to help remove PFAS from your drinking water. Please contact the Vermont Department of Health's Drinking Water helpline at **(802) 489-7339** if you have further questions.

#### Will I face any legal liability if PFAS is found in my private well?

DEC will not hold a residential well user responsible for contamination that resulted from normal residential use of your home.

# What steps can I take to limit exposure if PFAS chemicals are found in my drinking water?

If your drinking water from a public water supplier tests above the state PFAS standards, you can limit the risk of exposure by following water suppliers' guidance. Private well owners should consult with the Vermont Department of Health for guidance.

For information on how to reduce your risk to PFAS contamination if levels found exceed state standards you can also refer to the Vermont Department of Health PFAS in <u>Drinking Water Fact Sheet</u>.

An additional resource is the <u>VT Bottled Water Non-Detect PFAS results</u> which is a list of bottled water that had no detectable levels of PFAS.

# If PFAS is found in my drinking water above state standards, can I use the water for bathing, washing clothes and cleaning?

Water that tests above the PFAS drinking water standards can be utilized for uses that don't involve ingesting water, such as bathing, showering, washing clothes and cleaning. Do not use contaminated water to water plants/crops meant for consumption as the plants may take up the PFAS and become contaminated themselves.



# What else is the State doing to address PFAS contamination in Vermont?

In 2019, Vermont released its first PFAS Roadmap that addresses contamination from existing PFAS and lays out the action steps to mitigate current and future exposures. The state is in the process of updating the 2021 PFAS Roadmap, which is expected to be available for public review and comment in the next several weeks. Since 2016, the State of Vermont has:

- Focused on reducing or eliminating PFAS in commercial products and industrial uses. In 2021, <u>Act 36</u> was adopted to restrict PFAS-containing products that present a high level of risk, including firefighting foam, food packaging, ski wax, carpets, rugs, and their aftermarket stain-resistant treatments. DEC is also working collaboratively with regional organizations to develop a common approach to limiting PFAS in consumer products, conducting a statewide investigation of metal finishers to identify and reduce PFAS sources, and identifying potential avenues to regulate other commercial and industrial sectors.
- Characterized the presence of PFAS contamination in Vermont by investigating private water supplies as part of ongoing litigation against manufacturers of PFAS, developed a phased project to investigate wastewater treatment discharges across the state, and plans to initiate a project focused on investigating PFAS in food wastes.
- Aimed to protect Vermonters from existing exposures to PFAS by requiring testing and remediation of public water systems, investigating and requiring remediation of sites contaminated by PFAS, evaluating surface waters and fish tissue to consider a fish consumption advisory and water quality standards for PFAS, and implementing regulatory controls over biosolids management and land applied septage.
- Initiated litigation against PFAS manufacturers 3M Company and DuPont-related entities. The lawsuit seeks remedies for harm to the Vermont environment and recovery for actions such as investigating and removing PFAS contamination in drinking water wells and other natural resources.

For more information on the State of Vermont's PFAS investigation and response visit the <u>Agency of Natural Resources' PFAS webpage</u>.

### **Questions?**

If you have any other questions do not hesitate to contact our PFAS helpline at **(802)** 693-0206 or through email at <u>ANR.DWPFASInfo@vermont.gov</u>.

