What are PFAS?
PFAS stands for “Per- and poly-fluoroalkyl substances.” This is a large group 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 chemicals found?
Virtually everyone is exposed to PFAS, and some PFAS chemicals have known toxic effects on human health. PFAS can be found in drinking water, food, indoor dust, many consumer products, and in the workplace. While some PFAS chemicals are no longer used in consumer products, many consumer products may still contain PFAS, including:

- Food wrappers, pizza boxes
- Microwave popcorn bags
- Baking papers
- Nonstick cookware
- Pet food bags
- Water & stain resistant fabrics, leather
- Stain resistant carpets and upholstery
- Cleaning products
- Paints, varnishes and sealants
- Firefighting foam
- Cosmetics
- Metal plating with corrosion prevention
- Wire manufacturing with coating & insulation
- Industrial plastics, resins and molds
- Firefighting foam

What are the health impacts from exposure to PFAS? Some of these PFAS chemicals, if found in drinking water, could pose potential health risks even at very low contamination levels. Health risks from low level exposure to PFAS chemicals from sources other than drinking water are less known. Some PFAS chemicals have been linked to health problems in people including babies and young children. Refer to Vermont Department of Health PFAS in Drinking Water Fact Sheet for information related to potential health-related impacts from PFAS exposure.

Why are PFAS chemicals a concern? These chemicals are also very stable and persistent, meaning that past contamination will remain in the environment for a long time and will not breakdown. Some of these substances can also build up in people and in the environment. They are also water soluble and highly mobile, making groundwater vulnerable for contamination.

What’s the state’s plan to test for PFAS? For the next six months and as required by law (Act 21), statewide drinking water testing for PFAS chemicals will occur at public community water systems, schools and other water systems that serve the same 25 people more than 6 months per year. ANR will also continue to conduct a statewide investigation of potential sources of PFAS contamination, targeting sites with known or suspected intensive use of products that have been known to contain PFAS chemicals, including: certain industrial facilities, carwashes, landfills, wastewater treatment facilities and areas that have used firefighting foam.

What happens if PFAS chemicals are found in public drinking water? If PFAS is detected below the state limits of 20 ppt, the system operator will continue to monitor the water supply. If PFAS is detected and confirmed to be above state limits, the system operator will post “do not drink” (DND) orders and find a solution to reduce contamination.
What steps can I take to limit exposure if PFAS chemicals are found above state standards? During the do not drink order, you can limit the risk of exposure by following water suppliers’ guidance. Also refer to the Vermont Department of Health PFAS in Drinking Water Fact Sheet for information on how to reduce your risk to PFAS contamination if found in levels that exceed state standards.

If PFAS is found in public drinking water above state standards, can I use the water for bathing, washing clothes and cleaning? Water above the drinking water standards can be used for ways that don’t involve ingesting water, such as bathing, showering, washing clothes and cleaning.

I have a private well. Should I need to get my water tested? Recently passed state law, Act 21, requires testing of public water supply systems and nontransient/noncommunity systems. It does not apply to private well owners. Note that not everyone needs to test their private well water for PFAS contamination. If you are near a contaminated site or have concerns about your well, please refer to the factsheet on water testing for well owners.

What is Vermont’s standard for PFAS? Vermont’s health advisory level for the combination of five PFAS (PFOA, PFOS, PFHxS (perfluorohexane sulfonic acid), PFHpA (perfluoroheptanoic acid) and PFNA (perfluorononanoic acid)) is 20 ppt (parts per trillion). That means that the sum of the five PFAS levels should not exceed 20 ppt in your drinking water. The state also has emergency drinking water standards, referred to as “maximum contaminant limits (MCL), based on the state health advisory level. States use studies, models and federal guidance in setting MCLs, and set limits that are intended to be protective of human health including the health of the most vulnerable segments of the population to impacts from exposure to PFAS contamination -- pregnant women and young children.

Why does Vermont have such stringent Health Advisories and MCLs? The state’s drinking water standards, referred to Maximum Contaminant Limits or MCL, for five PFAS chemicals is an emergency standard and based on the Vermont Department of Health’s published health advisories. States use studies, models and federal guidance in setting MCLs, and focus on setting limits that are protective of human health including the health of the most vulnerable segments of the population to impacts from exposure to PFAS contamination -- pregnant women and young children.

Who’ll pay for the required testing of public water systems? Currently, water suppliers will have to pay for testing. Their budgets do not currently include sampling costs and remediation requirements under meet Act 21. The state is looking into ways to help public water suppliers, schools, and other water source systems comply. The state is trying to find additional funding sources to aid in the remediation if there are confirmed cases of detection above state standards.

What opportunities for assistance are available to public water systems to help them comply? The state is looking into funding and financing options to support water suppliers, should detections above state standards are confirmed. ANR will also continue to investigate potentially affected areas for sources of contamination.

What does Act 21 require? The schedule for implementing the PFAS control law, Act 21 (S.49), is the following: (1) First Six Months (2019): (a) ANR implements Statewide Sampling Plan; (b) Public water systems and Nontransient/noncommunity systems test for PFAS; (c) ANR continues to conduct statewide investigation of potential sources of PFAS contamination; (2) First Year (2020): (a) ANR reports on managing chemical contaminants from landfill leachate (the liquid that drains from landfills); (b) ANR finalizes state drinking water standard (MCL); (c) ANR develops plan to adopt PFAS surface water quality standards; (3) Second Year (2021): (a) ANR completes the formal process that considers regulating PFAS chemicals as a class or subclass (in recognition that there are 4,700 PFAS chemicals); (4) Fourth Year (2023): ANR complete process to establish PFAS surface water standards.