

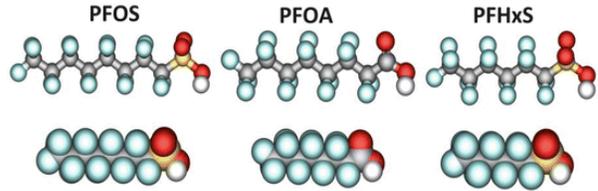


PFAS Information for Connecticut Municipalities

Updated March 2024

What are PFAS?

“PFAS” stands for Per- and Polyfluoroalkyl Substances, a group of manmade chemicals that have been used in industry and consumer products since the 1940s. Due to their unique chemistry, PFAS have the ability to repel water, oil and grease as well as the ability to resist breaking down, even under high heat conditions.



Examples of PFAS chemicals. *This Photo by Unknown Author is licensed*

PFAS can have negative health impacts on humans and animals, including increased risk of some cancers, reduced immune system response, and negative developmental and reproductive effects. As a result, Connecticut is working hard to protect public health and the environment by limiting new releases of PFAS to the environment and cleaning up existing PFAS contamination.

Where are PFAS Found?

Human health studies have shown that most people in the United States have had some exposure to PFAS. PFAS are found in a variety of **household consumer products** as well as used in many **manufacturing and industrial operations**. In addition, although PFAS-containing foam is now banned (with limited exceptions) in Connecticut, **firefighting activities** were historically a significant source of PFAS release to the environment. Once released into the environment, PFAS can move easily between air, water and soil, potentially contaminating nearby water supplies and food sources.

 <p>Drinking Water An important potential source of PFAS exposure.</p>	 <p>Waste Sites Soil and water at or near landfills, disposal sites, and hazardous waste sites.</p>	 <p>Fire Extinguishing Foam Used in training and emergency response events at airports and firefighting training facilities.</p>	 <p>Facilities Chrome plating, electronics, and certain textile and paper manufacturers that produce or use PFAS.</p>
 <p>Consumer Products Stain- or water-repellent, or non-stick products, paints, sealants, and some personal care products.</p>	 <p>Food Packaging Grease-resistant paper, microwave popcorn bags, pizza boxes, and candy wrappers.</p>	 <p>Biosolids Fertilizer from wastewater treatment plants used on agricultural lands can affect ground and surface water.</p>	 <p>Food Fish caught from water contaminated by PFAS and dairy products from livestock exposed to PFAS.</p>

Courtesy U.S. EPA. <https://www.epa.gov/system/files/documents/2023-10/final-virtual-pfas-explainer-508.pdf>

How Do PFAS Enter the Environment?

PFAS enter the environment as a result of human activity, often unintentionally. For example, we now know that the release of PFAS-containing firefighting foams during past training activities or emergency responses can result in PFAS contamination in soil and water decades after release. Similarly, industrial activities that generate or utilize PFAS in the processes may release PFAS through standard air emissions and wastewater discharges. Unfortunately, PFAS do not naturally break down and traditional waste management systems were not specifically designed to destroy PFAS. Therefore, once PFAS enter the environment, it is very difficult to recapture and permanently destroy them. **Preventing new releases of PFAS to the environment and cleaning up existing PFAS contamination are therefore critical to protecting public health and the environment.**

What Can Connecticut Municipalities Do?

1. Prevent Further Releases of PFAS to the Environment



Use of PFAS-containing firefighting foam is against the law.

✓ **Immediately stop using Class B firefighting foam containing PFAS.**

Using PFAS-containing firefighting foam, also known as 'AFFF', including in fixed fire suppression systems, is against Connecticut law (PA 21-191/CGS 22a-903a). Any release of PFAS-containing firefighting foam is subject to enforcement action at the discretion of CT DEEP. Any remaining stocks of AFFF should be properly disposed of as soon as possible.

✓ **Purchase PFAS-free firefighting foam for municipal uses.**

In general, [fluorine-free foams \("F3"\) that have been certified by GreenScreen® for Safer Chemicals](#) or the Department of Defense (DOD) are acceptable for use in Connecticut. Municipalities may purchase replacement F3 from any vendor. Municipal fire departments can also purchase National Foam Universal F3 Green firefighting foam through Dept. of Administrative Services (DAS) contract #21PSX0028AB. Before refilling apparatus with F3, be sure to properly decontaminate the apparatus, in order to minimize PFAS contamination of the new foam. Guidance for [Draining and Rinsing AFFF from Municipal Onboard Systems](#) is available.



Releases of PFAS-containing foam and releases of PFAS-free foam from apparatus that previously held AFFF must be reported to DEEP Emergency Dispatch at 860-424-3338.

✓ **Use PFAS-free cleaning products in municipal buildings.**

The Connecticut Green Cleaning program has approved use of [Green Seal](#) and [UL EcoLogo](#) certified cleaning products, many of which do not contain intentionally-added PFAS. Additional products can be found through the [GreenScreen Certification products list](#) and the [U.S. EPA's Safer Choice Program](#).

✓ **Purchase PFAS-free food service ware for use in schools.**

Food service ware includes items such as containers, bowls, plates, trays, cups, lids, napkins, and take out containers. Purchase [BPI Certified products](#), which have been reviewed by an independent third-party in order to verify that they do not contain a variety of chemicals, including PFAS.

2. Identify Potential PFAS Contamination Sources

Utilize available town records and local knowledge to develop an inventory of municipal properties where PFAS contamination may be present in soil or groundwater as a result of historic or current activities.

- ✓ **Identify locations where AFFF may have been deployed.**

Airports, current and former firehouses, training areas, buildings with foam-based fire suppression systems, and crash sites are locations where PFAS-containing foam may have been accidentally or intentionally released.



- ✓ **Identify locations where septage, sludge and/or biosolids-based fertilizers were land applied.**

Fertilizers produced from wastewater solids (i.e., 'biosolids') may contain PFAS. In other states, areas where biosolids have been repeatedly applied to soil as a nutrient amendment are characterized by elevated PFAS levels in the soil and/or groundwater.



- ✓ **Identify current and former waste disposal locations.**

Active and closed landfills as well as unofficial historical dumping locations may be local sources of PFAS contamination to groundwater.



- ✓ **Identify locations of current or former manufacturing and/or industrial activity associated with PFAS use.**

Numerous industrial operations have been identified as potential PFAS generators or users including chemical manufacturing, cleaning product manufacturing, paint and coating manufacturing, plastics and resins manufacturing, metal machinery manufacturing, metal coating (including electroplating), electronics manufacturing, textile and leather producers, paper mills and paper product production, printing operations, carpet and upholstery cleaning, and drycleaning operations.

3. Test Drinking Water Near Potential PFAS Sources

Contaminated drinking water can be a significant source of PFAS exposure. Therefore, municipalities are encouraged to test town water supplies (and potentially private wells) located near potential PFAS sources (e.g., airports, landfills, firefighting training areas, and industrial PFAS users).



Sampling for PFAS requires special procedures to prevent accidental cross-contamination of the sample. Municipalities should consider hiring a trained professional to conduct sample collection and assist with data interpretation.

- ✓ **Contract with an experienced environmental consultant to collect drinking water samples for PFAS analysis.**

Several firms are available to municipalities at DAS contract rates; refer to contract #18PSX0153 for details. Request a copy of the firm's standard operating procedures (SOP) for sample collection for future reference if needed.

✓ **Utilize a CT DPH Certified laboratory for PFAS analysis.**

CT DPH maintains a list of [laboratories that are State-certified to conduct analysis of PFAS](#) in drinking water (i.e., potable water) samples. Laboratory analytical services may be available at DAS contract rates; refer to contract #19PSX0095 for details. Laboratories will provide sample collection containers and detailed instructions. Analytical costs vary by laboratory; contact the laboratory in advance to request a cost estimate. Note that quality control samples, including field blanks and duplicates, typically cost the same as standard sample. Expect at least 2-3 weeks from submission to receive the results.



Request analysis using EPA Method 533 in order to evaluate all 10 PFAS for which DPH has established a drinking water action level.

✓ **Compare sample results to the CT DPH Drinking Water Action Levels for PFAS.**

The Connecticut Department of Public Health has established Drinking Water Action Levels (DWALs) for ten PFAS compounds. DWALs may be established for additional PFAS compounds and these actions levels may be adjusted in the future as new information becomes available.

Connecticut PFAS Drinking Water Action Levels		
Abbreviation	Full Chemical Name	DWAL (ppt or ng/L*)
6:2 Cl-PFESA	6:2 chloropolyfluoroether sulfonic acid	2
8:2 Cl-PFESA	8:2 chloropolyfluoroether sulfonic acid	5
HFPO-DA (“Gen X”)	Hexafluoropropylene oxide dimer acid	19
PFBA	Perfluorobutanoic acid	1,800
PFBS	Perfluorobutane sulfonic acid	760
PFHxA	Perfluorohexanoic acid	240
PFHxS	Perfluorohexane sulfonic acid	49
PFNA	Perfluorononanoic acid	12
PFOA	Perfluorooctanoic acid	16
PFOS	Perfluorooctane sulfonic acid	10



If PFAS are detected above a DWAL, send a copy of the results to your local health department and DEEP.PFAS@ct.gov. Upon receipt, staff will provide further guidance.

4. Respond to PFAS Contamination in Drinking Water

If PFAS contamination is discovered in a town-owned drinking water source:

- ✓ **Consider providing an alternative drinking water source such as bottled water.**
If PFAS are detected above DWALs in a town-owned drinking water well, it is recommended that the town provide an alternate water source such as bottled water. The state DAS contract (#18PSX0325AA) for bottled water delivery is available for municipal use.
- ✓ **Consult with a water treatment professional to identify PFAS removal options.**
Effective treatment options for reducing PFAS in well water include the use of primarily two treatment technologies: granular activated carbon (GAC) and point of use reverse osmosis (RO). Treatment effectiveness depends on correct system sizing and proper maintenance. Consultation with a professional is recommended. The state DAS contract for potable water treatment installation and maintenance (Contract #22PSX0029) is available for municipal use.



Contact the DEEP Remediation Division for guidance prior to conducting a PFAS investigation: DEEP.PFAS@ct.gov or 860-424-3061.

State Contracts Available for Municipal Use

State DAS contracts are available for municipal use. Enter the contract number in the green search box at this link: [CTsource Contract Board](#).

Contract Name	Contract Number	Expiration Date	Purpose
Cooler Rental, Delivery of Bottled Water and Related Supplies	18PSX0325AA	May 2025	To provide bottled water until treatment can be installed
Environmental Investigation, Remediation and Project Management Services	18PSX0153	Feb. 2025	To obtain a consultant to support environmental investigation or cleanup.
Environmental Analytical Services	19PSX0095	Oct. 2025	State-negotiated analytical costs for PFAS sample analysis
List of Permitted Spill Cleanup Contractors	Current List	N/A	A list of spill-cleanup contractors in Connecticut.
National Foam Universal F3 Green Firefighting Foam	21PSX0028AB	Apr. 2025	Purchase of PFAS-free firefighting foam at the state-contracted rate
Public and Private Water Quality Management and Oversight	22PSX0029	Feb. 2026	Water sampling/testing; water system treatment installation, repair, maintenance, and decommissioning
Removal and Disposal of Hazardous Waste Streams	22PSX0030	Aug. 2025	PFAS-containing firefighting foam and decontamination rinsewater disposal.

DEEP PFAS Contact Information

Still have PFAS-related questions? We are here to help! Email DEEP.PFAS@ct.gov, call (860) 424-3061 or visit the DEEP PFAS Homepage: [Per- and Polyfluoroalkyl Substances \(ct.gov\)](https://per-and-polyfluoroalkylsubstances.ct.gov).