PFAS Sampling for Homeowners

Sampling your drinking water for per- and polyfluoroalkyl substances (PFAS) can be challenging due to the prevalence of PFAS in consumer products. Many materials normally used in field and laboratory operations contain PFAS and cannot be used in sampling for PFAS: e.g., tubing, sample containers, and sampling tools. In addition, many consumer goods, such as water-resistant jackets or fast-food wrappers may contain PFAS and can contaminate samples. To ensure a quality, representative sample, make sure your sample area is free of any PFAS-containing material.

The cost of PFAS analysis typically ranges between $250 and $500, depending on the laboratory. The DEP will reimburse the cost of this testing only if sampling was conducted in general accordance with the DEP's sampling guidance, a Maine-accredited and DEP-approved laboratory was used, you provide the laboratory results to the DEP for review, the levels of PFAS exceed the state's interim standard per Resolve 2021, Chapter 82, and the source of PFAS can be tied to a DEP-licensed sludge or septage land application site or other remediation-type site as verified by the DEP.

When you contact a laboratory, ask for "Method 537.1, modified with isotope dilution." The compound list should include the list of 28 PFAS compounds and around 20 isotopes. Laboratory reports should include all quality control information including isotope recoveries, method blank results, laboratory control spike results and results of matrix spike/matrix spike duplicate samples and laboratory duplicate results, if performed. If you qualify and wish to seek reimbursement, ask the laboratory for an electronic deliverable data (EDD) in DEP's latest format.

General Sampling Information

Samples collected from active drinking water sources should be collected during normal operating conditions. Follow the instructions you received from the laboratory, and use only laboratory provided sample containers.

Each sample kit typically includes two bottles. The kit may include bottles for a field blank or duplicate sample.

Field Blank: This is a bottle of PFAS free water that is to be poured into the second empty container. This confirms that your sampling methods are not cross contaminating the water samples.

Duplicate Sample: The laboratory may send a second set of bottles for you to collect a second sample. This is used as confirmation that the laboratory's analyses are accurate.

Where can I find more information?

List of laboratories accredited by Maine to analyze for PFAS in drinking water

Questions on PFAS sampling and reading your lab report or contact Molly King molly.king@maine.gov (207) 458-8839.

Even if your results are under Maine's interim drinking water standard, please consider providing the DEP with your laboratory report along with an electronic deliverable data (EDD) in DEP's latest format.

- ✓ DEP will check the laboratory information and data to make sure you have received quality data.
- ✓ DEP will be able to use good data to help us understand more about PFAS impacts to groundwater in Maine.

Sampling Steps:

1. Once you've carefully read the directions from that came with your laboratory kit, start running cold water for five minutes at a high flow rate to flush out stagnant water and bring fresh water from the well. This can be done at a sink, a shower or bathtub, or at an outside spigot.
2. Pick the location of your sample. It is often preferred to sample from your pressure tank tap; however, an outside spigot also works well. Sampling from a kitchen or bathroom tap is okay as a last resort.
    a. From your pressure tank: If you have the space, turn on the spigot located on the front of your tank. Use a bucket or large bowl to collect water. Allow this to run for a minute or two before sampling.
    b. From an outside spigot: Take off any hose fittings so you can collect the sample directly from the spigot. Turn the water on and let it run for a minute or two before sampling.
    c. From a bathroom or kitchen sink: Before sampling, remove faucet aerator and turn on cold water at the sample location. Let the water run for a minute or two before sampling.
3. Reduce flow of water from the sample location to about 1/3 of the maximum flow. This will help avoid splashing when filling your bottles.
4. Wearing nitrile gloves, open the sample bottle. Hold the cap in one hand and fill the sample bottle with the other hand.
    a. Do not place the cap on any surface and avoid all contact with the inside of the sample bottle and cap.
    b. Avoid contact with any Teflon® tape or pipe thread paste on pipe fittings or sampling tap threads on the water supply discharge pipe.
5. Fill the sample bottle to the neck of the bottle or a fill line if marked on the sample bottle. Do not overfill.
    a. Some laboratories use a preservative in the sample bottle. It may be a white powder or a tablet. If your bottles contain a preservative, take care not to overfill or spill the preservative.
6. When the bottle is full, carefully cap the bottle without touching the inside of the cap.
7. Agitate the sample by hand (turn the bottle upside-down and right-side up approximately 5 times) until any preservative is dissolved. Do not re-open bottle from this point forward.
8. Make sure each bottle is labeled with the time, the date, and the address where the sample was collected. Once labeled, place each bottle in a sealed ZipLoc® bag and if the lab says to do so, place the bottles in a cooler.
    a. The cooler should only have PFAS samples in it. (No other sample types allowed.)
    b. Use ice to keep the sample cool. Do not use blue ice packs or any other chemical-containing cool-pack.
    c. Samples should be kept at 40°F. Sample temperatures must not exceed 50°F during first 48 hours after collection. Use enough ice so that the samples remain sufficiently cold until they are received by the laboratory. Adequate ice is especially important when collecting samples during hot weather or using overnight sample shipment.
    d. The hold time for PFAS samples is 14 days. Try to get samples sent to the laboratory quickly.
9. Fill out the Chain of Custody or laboratory forms, including the address of the sample location, the sampling date and time, and the name and signature of the sampler.