

Per- and Poly-fluoroalkyl substances (PFAS) Sample Collection and Shipment

Gloves

Wash hands prior to putting gloves on nitrile gloves. Do not use latex gloves. Wear gloves when handling any of the items in the cooler, while filling containers and sealing the sample bottles. Change gloves between sampling points to prevent cross-contamination.

Chain-of-Custody

Complete the paperwork with the sample information listed on the containers (ID, Date, Time, Collector)

Drinking Water—collect at every sample site, each time samples are collected

- a) Collect the samples first at each sample site. EPA 537.1 requires 2 x 250ml HDPE preserved with Trizma (a preservative that looks like salt). EPA 533 requires 2x 250ml HDPE preserved with ammonium acetate. Fill sample bottles to almost full. Do not touch the inside of the cap or around the edge of the bottle. Do not put cap on any surface while sampling. Cap the containers tightly, do not use tape to seal. Each sampling site should have one location selected to send extra containers to be used as a field duplicate or a MS/MSD.
- b) The Field Reagent Blank (FRB) is collected using the two 250mL containers shipped from the lab. Pour the preserved water from the full container into the empty container at the same location as the authentic sample collection. Label the sample as “FRB” and discard the original container that held lab water. The FRB data is to determine if any method analytes or other interferences are present in the field environment. If an FRB is not submitted for analysis, and the authentic samples have detects, the results may be challenged or considered suspect.
- c) Equipment Blanks are recommended when sampling equipment touches the sample.
- d) Use permanent marker to record Sample Site, Date, and Time collected
- e) Place sample containers in ziplock bags, separate from other containers when collection is complete.

Groundwater and Wastewater

- a) GEL requires 2 x 250ml HDPE containers PLUS 5mls in a screening vial. The screening vial is necessary if PFAS concentration is unknown to help protect our instruments.
- b-e) as for Drinking Water samples
- f) Samples from the state of Wisconsin require a sample duplicate per sampling site.

Solids including soils, vegetation, food products, other consumer products

- a) 10g of solid material is required collected in an HDPE container. A second container for percent moisture should be sent for soils that are to be reported on a dry weight basis. All other solids are reported ‘as received’ unless there is client direction to report differently.
- b) Tissue samples must be shipped frozen in HDPE containers.

AFFF

5mL is required, shipped in HDPE containers.

Preservation and Storage:

Store the samples refrigerated until ready to ship to the laboratory. The cooler should be lined with the large, clear plastic bag provided by the laboratory with the containers. Tightly capped sample containers are placed into the bag, and ice. Ship samples and QC on ice to ensure the temperature does not exceed 6°C. (If liquid samples are received within 48hrs of collection, $\leq 10^{\circ}\text{C}$ is required) DO NOT USE BLUE ICE as it may have PFAS!! Seal the large plastic bag. Place the completed Chain-of-Custody forms in a Zip-Lock bag and place on top of the samples or tape to inside lid of the cooler. Tissue samples must be shipped frozen. Either add enough ice to keep the tissue samples frozen during transit. GEL does not recommend the use of dry ice.

Holding Times:

All water samples including Drinking Water samples must be extracted within 14 days of collection and analyzed within 28 days after extraction. Solid samples must be extracted and analyzed within 28 days. GEL assigns a holding time of 6 months to AFFF.

Deliver direct or ship via FedEx or UPS to the attention of your project manager or Sample Receiving at:

GEL Laboratories, LLC
2040 Savage Road
Charleston, SC 29407
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