

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

### Gloves

Wash hands prior to putting on nitrile 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. Collect 2 x 250ml HDPE preserved with Trizma (a preservative that looks like salt) for each sample. 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.
- b) The Field Blank is collected using the four 250mL containers shipped from the lab. Pour the preserved water from the full containers into the empty containers when you collect the authentic sample. Label the sample as FRB (Field Reagent Blank) and discard the original containers 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 should be collected 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.
- f) At least one sample in a sample collection group of 20 or fewer samples must include 3 bottles allowing for a Lab Fortified Matrix Spike (LFMS) for each extraction batch.

### 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-f) Same as for Drinking Water samples

### 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/materials 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 HPDE containers.

### Preservation and Storage:

Store the samples refrigerated until ready to ship to the laboratory. The cooler should be lined with the large 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 contain PFAS!! Seal the large plastic bag. Place the completed Chain-of-Custody forms in the Zip-Lock bag and tape to the lid of the cooler or place on top of the samples. Tissue samples must be shipped frozen. Ensure sufficient ice is added to keep the tissue samples frozen during transit.

### Holding Times:

Drinking Water samples must be extracted within 14 days of collection and analyzed within 28 days after extraction. GEL applies the same holding time to all other waters received for PFAS analysis. 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**  
**Phone: (843) 556-8171**