

Per- and Polyfluoroalkyl Substances (PFAS)

PFAS in the Environment

Per- and polyfluoroalkyl substances (PFAS) have many industrial and commercial applications due to their ability to repel oil and water, reduce friction, and their resistance to high temperatures. Non-stick coatings, textile applications and firefighting foams represent some of the most common uses of PFAS. With their widespread use since the manufacturing of these chemicals began in the 1940s, PFAS can be detected in human and mammalian serum all over the world.

Select manufacturing processes and the use of PFAS containing products has resulted in their presence in the environment and bioaccumulation in living organisms. The health effects of Perfluorooctyl Sulfonate (PFOS) and Perfluorooctanoic Acid (PFOA) have been widely studied and are associated with several adverse health effects such as hormone disruption and cancer.

PFAS can be released into the environment from sources such as industrial and manufacturing plants, the use of firefighting foams, landfills, wastewater treatment plants, and consumer products such as water-resistant fabrics, carpets, and non-stick cookware. These chemicals can migrate into soil, groundwater, surface water, drinking water, and wastewater potentially placing Arizona communities at risk for PFAS exposure.

Key Industries Supported with PFAS Analysis Include:

- Government Agencies
- Airports
- Energy, Oil, & Gas
- Wastewater Infrastructure
- Manufacturers
- Firefighters & First Responders

Why AGAT Stands Out in PFAS Testing



- Locally Tested in Arizona by EPA 533, EPA 537.1, and EPA 1633



- Leading Turnaround Times: 7 to 10 business days



- Team of Technical Experts

Analytical Method

AGAT's PFAS testing protocols align with established guidelines by the US Environmental Protection Agency (EPA) to promote consistency and reliability in our analytical services. AGAT Laboratories offers PFAS analysis complying with the Arizona Department of Health (ADHS) approved versions of EPA 533, EPA 537.1 for drinking water and EPA 1633 for other matrices, covering all compounds in those methods.

Licensing

AGAT Laboratories is licensed by the Arizona Department of Health Services for PFAS analysis in drinking water, wastewater and soil samples.

Field Sampling

Given the ubiquitous nature of PFAS, the material and procedure normally used for environmental sampling may cause cross-contamination when collecting samples. It is important to plan ahead for sample collection activities to ensure the potential for cross contamination is minimized.

Sampling Supplies

- Request all containers, equipment rinse water from the laboratory.
- It is recommended to request a field blank, a trip blank, an equipment blank, and enough containers for duplicate samples for your field program.
- High-density polyethylene (HDPE) sampling bottles and jars with Teflon-free lids must be used.
- PFAS free water is available through AGAT.
- Do not use chemical or gel ice packs.
- Pack samples on wet ice when transporting.
- Avoid packaged food in sampling area.

Sampling Considerations

- Avoid clothing treated with water-resistant, waterproof and/or stain-treated clothing. (i.e. Gore-Tex, Tyvek). Waterproof clothing made with polyurethane, polyvinyl chloride (PVC), rubber or neoprene is recommended.
- Polypropylene (PP), silicone, stainless steel, nylon, cotton materials and equipment parts can be used during sampling.
- Samples should not be in contact with glass or low-density polyethylene (LDPE).
- Clothing with natural fibers is preferred.
- Clothing should be well laundered, not new, and free of laundry soaps and fabric softeners. (Water rinse is recommended before dryer.)
- Waterproof notebooks and pads should not be used when sampling and gel pens are recommended.
- Powderless nitrile gloves should be worn at all stages of sampling and changed frequently.
- Avoid any cosmetics, moisturizers, fragrances, and creams. Sunscreens and insect repellent must be applied outside of the sampling area, when necessary, preferably at least half an hour before sampling. Hands must be washed well after application of sunscreens and insect repellents.

Please note that this is not an exhaustive list of all sampling guidelines, but focuses on key areas of consideration. For more information, please contact your designated AGAT representative or info@agatlabs.com