

What are PFAS?

PFAS refer to per- and polyfluoroalkyl substances, a class of human-made chemicals used in firefighting, stain resistance, water repellents, and many other commercial and industrial applications since the 1940s. Thousands of PFAS compounds are known to exist. Some are widespread in the environment, at least at low concentrations. Some PFAS, known as perfluoroalkyl acids (PFAAs), are persistent in the environment; other PFAS, known as precursors, may degrade to these persistent PFAS in the environment.

PFAS have been the recent focus of scientists, health organizations, and environmental protection agencies worldwide. Many of these groups have issued health-protective drinking water concentration criteria for selected PFAS. The U.S. Environmental Protection Agency (EPA) has links to individual state information on its website: https://www.epa.gov/pfas/us-state-resources-about-pfas.

If you own a drinking water well, you should be aware of the potential for PFAS in groundwater. However, detection of PFAS does not necessarily lead to adverse health effects, and there are things you can do to protect your water supply from PFAS.

How do I test my well for PFAS?

As a private well owner, you want to know your water is safe for your family.

NGWA has guidance documents and resources available to help you learn more: www.ngwa.org/pfas

Testing for PFAS is one of many reasons to sample your water. Due to the potential presence of PFAS in consumer products and materials that may be used for sampling, and the very low concentrations at which PFAS are analyzed, the possibility of contaminating samples during sample collection is a concern.

Although test kits are available, the most reliable PFAS sampling option is to obtain the services of a qualified professional to collect the sample. Your county or town health departments may have information on PFAS sampling and locating a laboratory that is certified to test water for PFAS.

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What do my PFAS test results mean?

You've got your PFAS test results back from the lab; now what do they mean? PFAS are measured in "ng/L". These are nanograms per liter, a very small number. Sometimes ng/L are called parts per trillion or ppt.

Your PFAS test report will also have numbers that are used to explain the smallest amounts that the lab can measure: detection limit (DL), limit of detection (LOD), or limit of quantification (LOQ). "Labeled standards" or "surrogates" will also be reported. These PFAS are added so the lab instruments have something to compare your water to; they are not your water well test results. The EPA has established legally enforceable drinking water standards (known as maximum contaminant levels or MCLs) for two PFAS compounds (PFOA and PFOS). The PFAS that are regulated and their MCLs are subject to change. For current information on PFAS MCLs, refer to www.epa.gov/sdwa/and-polyfluoroalkylsubstances-pfas

Exposure to PFAS-impacted water can occur by ingestion, inhalation, and dermal exposure. At this point in time, ingestion is considered the most significant route among these three.

How can I remove PFAS from my water?

There are simple, proven technologies for removing PFAS from your home's water supply. You can choose a solution for treating all the water entering your home (point-of-entry treatment, POET), or simply treating drinking and cooking water (point-of-use treatment, POUT).

Water treatment technologies have been around for years, and include activated carbon, anion exchange resins, and reverse osmosis membranes. You may already have a treatment system in place for other water conditioning that can address PFAS with a different maintenance schedule.

Water treatment systems come in all shapes and sizes, but the most important part of your decision is looking for third-party product certification. That certification provides a level of confidence that your purchase will provide the water quality protection you're looking for.

Third-party product certifiers will test to NSF/ANSI 53 or NSF/ANSI 58 for PFAS, PFOA, and PFOS reduction. Look for those classes of certification on the products you're researching.

Always rely on certified water treatment professionals for application, installation, and maintenance of your treatment system. This is an affordable level of protection required to assure your treatment system works flawlessly.

Your treatment system will need regular maintenance, so remember to ask your service provider for details.

Where can I get more information?

More PFAS information is available on your state and county websites, as well as from EPA and NGWA, at www.epa.gov/pfas and www.ngwa.org/pfas

As a private well owner, you are managing your own water, and groundwater is an inherently safe water supply that is under your control.