

May 7, 2024

Good Day,

As you may have seen in recent media reports, the EPA has finalized their rules on appropriate PFAS levels in drinking water. There are still a few steps before the regulation is fully adopted at the State level, but as adopted by the EPA Pine Brook Water's current monitoring results would be in compliance with the new regulations based on PFAS running annual averages (RAA).

We have been doing voluntary quarterly sampling since Quarter 2 of 2023 and prior to that it was annually back to 2018 (apart from 2021 which we did not sample).

The adopted regulation uses a Maximum Contaminant Level (MCL) of 4 for PFOS and PFOA and an MCL of 10 for PFHxS, GenX Chemicals, and PFNA.

In addition, a Hazard Index approach is used for combinations of PFHxS, PFNA, GenX Chemicals, and PFBS. This approach uses a formula to determine a unitless Hazard Index with an MCL of 1 unit.

$$\text{Hazard Index} = \left(\frac{[\text{GenX}_{\text{water}}]}{[10 \text{ ppt}]} \right) + \left(\frac{[\text{PFBS}_{\text{water}}]}{[2000 \text{ ppt}]} \right) + \left(\frac{[\text{PFNA}_{\text{water}}]}{[10 \text{ ppt}]} \right) + \left(\frac{[\text{PFHxS}_{\text{water}}]}{[10 \text{ ppt}]} \right)$$

Pine Brook Water has had two individual PFOA results over the adopted level of 4 parts per trillion - (4.3 ppt in 2022 and 4.5 ppt in Q3 of 2023). Our current running annual average levels, for regulatory purposes, is less than half of the adopted regulatory level:

- PFOS RAA: 0 ppt
- PFOA RAA: 1.125 ppt
- Hazard Index RAA: 0.02 units

Some media outlets have reported Pine Brook Water as exceeding the adopted limit but that is based on single results, not the quarterly sampling and running annual averages that the EPA regulation uses to determine compliance.

We are still very concerned about any amount of PFAS in our served water and are looking for cost-effective ways to reduce that level even further in the future.

We are continuing our quarterly sampling program and working with the Colorado Division of Public Health and Environment (CDPHE) on how to proceed.

I'm happy to share our full sampling results if you're interested and answer any other questions you may have.

Folks are encouraged to visit <https://cdphe.colorado.gov/pfas-health> to learn more.

April 13, 2023

Subject: Important information about PFAS and your drinking water

Dear Customer,

The Pine Brook Water District (District) is committed to providing safe drinking water to our customers. As part of this commitment, we have been voluntarily testing your drinking water for a group of man-made chemicals of growing concern known as PFAS (per- and polyfluoroalkyl substances) since 2018. That initial testing indicated a result of 3.9 parts per trillion (ppt) for perfluorooctane sulfonic acid (PFOS) and 2.7 ppt for perfluorooctanoic acid (PFOA) which was well below the then Environmental Protection Agency (EPA) health advisory level of 70 ppt combined. For context, 1 part per trillion is equivalent to 1 drop in 20 Olympic sized swimming pools or 40 drops in our entire reservoir.

The EPA has now significantly lowered its health advisory level for PFAS and has drafted proposed regulations regarding these chemicals in drinking water. Thousands of water providers across the United States are detecting PFAS chemicals in drinking water sources at concentrations above the lower health advisory levels.

What are PFAS?

PFAS are a group of over 5,000 man-made chemicals that have been used in industry and consumer products since the 1940s. There are thousands of PFAS chemicals in products including ski wax, nonstick cookware, water-repellent clothing, stain-resistant textiles, cosmetics, and firefighting foams.

These compounds are widespread and do not break down over time, and therefore can get into our water, soil, air, and food during production and use. Concerns over human health impacts began to surface in the early 2000s, and although manufacturing of some of these compounds have been phased out, their resistance to degradation allows them to persist in the environment and build up in the human body. People can be exposed to PFAS through product use or environmental exposure, including contaminated source water that enters the drinking water supply.

Potential health affects

PFOA and PFOS can impact the immune system, increase cholesterol, decrease infant birth weight, cause changes in liver function and increase the risk of kidney and testicular cancer. It is also associated with preeclampsia and high blood pressure during pregnancy and can affect thyroid hormones.

Children ages 0-5 years, and people who are pregnant, planning to become pregnant, or breastfeeding are more susceptible to health impacts from these chemicals. Visit <https://cdphe.colorado.gov/pfas-health> for more information.

What are the PFAS levels in my water?

Our most current testing for PFOA and PFOS show the following results:

Public Water System	PFAS Compound	Detected level (parts per trillion)	Interim health advisory level (parts per trillion)	Draft maximum contaminant level (parts per trillion)
Pine Brook Hills WD CO0107610	PFOA	4.2	0.004	4.0
	PFOS	3.1	0.02	4.0

What are the health advisory levels for PFAS and what do they mean?

The EPA established an initial health advisory level for PFOA and PFOS in 2016 at 70 parts per trillion (ppt). Although these compounds are still unregulated, on Jun. 15, 2022, the EPA lowered these health advisory levels for PFOA to 0.004 ppt and PFOS to 0.02 ppt. These levels for PFOA and PFOS are so low they are below current detection abilities of analytical equipment, which can currently accurately measure PFAS compounds at approximately 2 ppt.

The EPA sets health advisory levels to the minimum concentration of a compound that may present health risks over a lifetime of exposure. These health advisories are established based on human studies in populations exposed to PFAS and are set to protect all people, including sensitive populations and life stages (such as infants), from negative health impacts as a result of lifetime exposure to PFAS in drinking water. A health advisory is intended to raise awareness, provide guidance, and foster local and state response before the EPA develops a regulation.

What actions should I consider?

Per the CDPHE, people do not need to stop drinking their water as current health advisories are based on a lifetime of exposure. However, vulnerable populations may choose to reduce their exposure and you may visit CDPHE's website at <https://cdphe.colorado.gov/pfas-water> for more information.

Vulnerable populations and others who would like to reduce their exposure from drinking water can use water treated by an [in-home water treatment filter](#) that is certified to lower the levels of PFAS or by using bottled water that has been treated with reverse osmosis for drinking, cooking, and preparing baby formula. Use tap water for bathing, showering, brushing teeth, washing hands, watering yards, washing dishes, cleaning, and laundry.

Using bottled water is an individual choice, but there are important concerns with bottled water. CDPHE cannot verify that all bottled water is below PFAS interim health advisories. Reverse osmosis is a treatment that removes PFAS. The CDPHE recommends people who use bottled water choose a brand that has been treated with reverse osmosis and includes this language on the bottle. Additionally, bottled water creates solid waste and other environmental concerns.

Boiling, freezing, or letting water stand does not reduce PFAS levels.

Future PFAS regulation

EPA is proposing to regulate PFOA and PFOS in drinking water at 4.0 ppt along with four other PFAS. When setting regulatory limits, EPA considers health information, the ability to measure and treat to remove a contaminant, as well as the costs and benefits. The District is working directly with CDPHE to fully understand and evaluate EPA's draft PFAS Rule and how this may affect the path forward. EPA anticipates finalizing the rule by the end of 2023.

What is the district doing to address PFAS?

Public health and providing high quality drinking water is our top priority. The district's drinking water has, and continues, to meet all federal and state Primary Drinking Water Standards. We are partnering with CDPHE to continue to assess PFAS levels in our source and treated drinking water through additional testing and evaluation, maximizing our water usage from Fourmile to reduce the levels in the reservoir, researching emerging treatment methods to reduce PFAS levels, and investigating ways to reduce PFAS in our source water. As we learn more, we will continue to update our customers with our ongoing PFAS monitoring data and response to this issue on our website.

How can you help?

Testing of our raw water in Fourmile Canyon contained only 0.48 ppt of PFOS and non-detectable levels of PFOA. Reservoir water samples were similar to our finished water. What this seems to indicate is that our primary source of contamination may be from discharges from the septic systems from houses in the watershed above the reservoir in Pine Brook. This makes its way into the ground water and eventually down to the reservoir. Preventing PFAS containing materials from entering your septic systems could make a real impact on our future treatment needs. Shop smart – look for products labeled as PFAS free. Avoid products advertised as water, grease, or stain-resistant.

For additional information regarding PFAS in drinking water and health information, visit <http://cdphe.colorado.gov/pfas-health> or <http://www.epa.gov/pfas>. Contact the District with any questions or concerns at 303-443-5394 or contact@pinebrookwater.com

Please share this information with other people who drink this water, especially those who may not have received this notice directly. You can do this by posting this notice in public places or by distributing copies by hand.