

INFORMATION ABOUT PFAS TESTING IN YOUR DRINKING WATER

Berea Municipal Utilities
KY0760030

Berea Municipal Utilities is committed to providing our customers with complete and accurate information on per- and polyfluoroalkyl substances – known as PFAS –. The information provided here is intended to explain some of the background information needed to understand the details of specific PFAS monitoring recently conducted in our drinking water system.

WHAT ARE PFAS?

Per- and polyfluoroalkyl substances, also called “PFAS,” are a group of manufactured chemicals that have been used in industry and consumer products since the 1940s. PFAS have characteristics that make them useful in a variety of products, including nonstick cookware, waterproof clothing, stain-resistant carpets and fabrics, and firefighting foam, as well as in certain manufacturing processes. There are thousands of different PFAS. The domestic production or use of some PFAS (like PFOA and PFOS) has been largely phased out but others continue to be used.

PFAS tend to break down extremely slowly in the environment and can build up in people, animals, and the environment over time. PFAS have been found in water, air, and soil across the nation and around the globe. Because of this, PFAS can end up in the water sources that communities rely on for drinking water. Scientific studies show links between certain levels of PFAS exposure over time and harmful health effects in humans and animals.

Additional information on PFAS from the United States Environmental Protection Agency (EPA) can be found at <https://www.epa.gov/pfas>.

WHAT IS THE FIFTH UNREGULATED CONTAMINANT MONITORING RULE (UCMR 5)?

The Safe Drinking Water Act requires that once every five years EPA issue a list of unregulated contaminants to be monitored by public water systems. The Fifth Unregulated Contaminant Monitoring Rule (UCMR 5) was published on December 27, 2021. UCMR 5 requires sample collection for 30 chemical contaminants between 2023 and 2025 using analytical methods developed by EPA and consensus organizations. This action provides EPA and other interested parties with scientifically valid data on the national occurrence of these contaminants in drinking water. Consistent with EPA’s PFAS Strategic Roadmap, UCMR 5 will provide new data that is critically needed to improve EPA’s understanding of the frequency that 29 PFAS (and lithium) are found in the nation’s drinking water systems and at what levels. This data will ensure science-based decision-making and help prioritize protection of disadvantaged communities.

More information on the UCMR 5 can be found at <https://www.epa.gov/system/files/documents/2022-02/ucmr5-factsheet.pdf>.

Berea Municipal Utilities started testing our drinking water for UCMR 5 on 03/14/2023. EPA requires that we notify you within 12 months of the availability of this data and include it in our Consumer Confidence Report that is issued annually; however, we believe it is important to share it with you now.

The results for PFAS that have an EPA Drinking Water Health Advisory Level and/or proposed National Primary Drinking Water Regulation (NPDWR) Maximum Contaminant Level (MCL) are provided in the table below. To request a copy of the full laboratory report, please contact Josh Gabbard, BMU Assistant General Manager, at 859-986-4391.

EPA is posting and updating preliminary UCMR 5 results at <https://www.epa.gov/dwucmr/occurrence-data-unregulated-contaminant-monitoring-rule#5>.

PFAS	MRL ¹ (ppt)	EPA Health Advisory Level (ppt) ²	Proposed NPDWR MCL	Sample Results (ppt)	Hazard Index Calculation
perfluorooctanoic acid (PFOA)	4	0.004 (interim)	4.0 ppt	<MRL	0
perfluorooctanesulfonic acid (PFOS)	4	0.02 (interim)	4.0 ppt	<MRL	0
hexafluoropropylene oxide dimer acid (HFPO-DA) (GenX chemicals)	5	10 (final)	1.0 Hazard Index ³ (unitless)	<MRL	0
perfluorobutanesulfonic acid (PFBS)	3	2,000 (final)		<MRL	
perfluorohexane sulfonic acid (PFHxS)	3			<MRL	
perfluorononanoic acid (PFNA)	4			<MRL	

¹ MRL - Minimum Reporting Level, lowest concentration that can reliably be measured.

² ppt - parts per trillion (ppt)

³ Hazard Index - A tool to evaluate the potential increased health risk from mixtures of PFAS that may be found together in contaminated water.

WHAT IS KNOWN ABOUT PFAS IN MY DRINKING WATER?

Additionally, the Kentucky Energy and Environment Cabinet (EEC) collected PFAS samples at Berea Municipal Utilities on 01/24/2024. The results for PFAS that have an EPA Drinking Water Health Advisory Level and/or proposed National Primary Drinking Water Regulation (NPDWR) Maximum Contaminant Level (MCL) are favorable, with each drinking water sample parameter resulting in <MRL (minimum reporting level). To request a copy of the full laboratory report, please contact Josh Gabbard, BMU Assistant General Manager, at 859-986-4391.

WHAT IS BEING DONE ABOUT PFAS IN DRINKING WATER?

On June 15, 2022, EPA issued interim updated drinking water health advisories for PFOA and PFOS. At the same time, EPA also issued final health advisories for PFBS and GenX chemicals. EPA health advisories are non-enforceable and non-regulatory.

More information on EPA's health advisory levels is available at

<https://www.epa.gov/sdwa/questions-and-answers-drinking-water-health-advisories-pfoa-pfos-genx-chemicals-and-pfbs>.

On March 14, 2023, EPA proposed a new drinking water regulation to establish legally enforceable limits for six PFAS known to occur in drinking water. The six PFAS are PFOA, PFOS, GenX chemicals, PFBS, PFHxS, and PFNA. No action is required for drinking water systems until EPA finalizes the rule, which is expected in 2024.

The favorable results of recent PFAS sampling at Berea Municipal Utilities indicate the pristine composition of local source water at our reservoirs and a sound water treatment process and operation. Based on recent PFAS sampling results, Berea Municipal Utilities anticipates that the treatment process will remain the same. However, we will continue to monitor and report for PFAS in accordance with EPA guidelines. Furthermore, we will continue to notify customers of PFAS sampling, regulation, and treatment developments.

WHAT EPA IS PROPOSING AND WHAT DO WATER SYSTEMS HAVE TO DO?

Specifically, EPA is proposing:

- **An enforceable limit for PFOA and PFOS.** EPA is proposing to regulate PFOA and PFOS at a level they can be reliably measured, which is 4.0 parts per trillion (ppt).
- **An enforceable limit on a combination of GenX chemicals, PFBS, PFHxS, and PFNA.** The proposed rule also would place limits on any mixture containing one or more of GenX chemicals, PFBS, PFHxS, and/or PFNA. For these PFAS, water systems would use an approach called a hazard index. This approach protects communities from the additive effects of multiple PFAS when they occur together.
- **Monitoring.** EPA is proposing requirements for monitoring for the six PFAS that build upon EPA's long established monitoring framework.
- **Public notification.** Public water systems would be required to notify the public if monitoring detects these PFAS at levels that exceed the proposed limits.
- **Treatment.** Public water systems would be required to take actions to reduce the levels of these PFAS in drinking water if they exceed the proposed limits. This could include removing these chemicals through various types of treatment or switching to an alternative water supply that meets the standard.

More information on EPA's proposed PFAS drinking water regulation is available at

<https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas>.

WHAT IS A PART PER TRILLION?

A part per trillion describes the amount of something, in this case PFAS, in water or soil. Here is an idea of what that means:

parts per million (ppm)

3 drops



added to a 42-gallon barrel

parts per billion (ppb)

1 drop



added to a large tanker truck

parts per trillion (ppt)

10 drops



added to the Rose Bowl