

New EPA Proposed PFAS National Primary Drinking Water Regulation

On March 14, 2023, EPA formally announced the long awaited proposed National Primary Drinking Water Regulation (NPDWR) for six PFAS including perfluorooctanoic acid (PFOA), perfluorooctane sulfonic acid (PFOS), perfluorononanoic acid (PFNA), hexafluoropropylene oxide dimer acid (HFPO-DA, commonly known as GenX Chemicals), perfluorohexane sulfonic acid (PFHxS), and perfluorobutane sulfonic acid (PFBS).

EPA intends to establish legally enforceable levels, called Maximum Contaminant Levels (MCLs), for six PFAS in drinking water. PFOA and PFOS as individual contaminants, and PFHxS, PFNA, PFBS, and HFPO-DA (commonly referred to as GenX Chemicals) as a PFAS mixture. EPA is also advancing health-based, non-enforceable Maximum Contaminant Level Goals (MCLGs) for these six PFAS.

Compound	Proposed MCLG	Proposed MCL (enforceable levels)
PFOA	Zero	4.0 parts per trillion (also expressed as ng/L)
PFOS	Zero	4.0 ppt
PFNA	1.0 (unitless) Hazard Index	1.0 (unitless) Hazard Index
PFHxS		
PFBS		
HFPO-DA (commonly referred to as GenX Chemicals)		

An MCL protects public health by setting a maximum level of a contaminant allowed in drinking water which can be delivered to users of a public water system. An MCLG is the maximum level of a contaminant in drinking water where there is no known or anticipated negative effect on an individual's health, allowing for a margin of safety.

When the new rule is finalized and implemented, it will require public water systems, like MSUB, to:

- Monitor for these PFAS
- Notify the public of the levels of these PFAS
- Reduce the levels of these PFAS in drinking water if they exceed the proposed standards.

What are PFAS?

Per- and poly-fluoroalkyl substances (PFAS) are a large and diverse group of chemicals used in many commercial applications due to their unique properties, such as resistance to high and low temperatures, resistance to degradation, and nonstick characteristics. Although PFAS have been manufactured and used broadly in commerce since the 1940s, concern over potential adverse effects on human health grew in the early 2000s with the detection of perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) in human blood. Since that time, hundreds of different PFAS have been found in water, soil, and air. Many PFAS are made up of long chains of carbon-fluorine bonds, such as PFOA and PFOS, are environmentally persistent, bioaccumulative, and remain in human bodies for a long time. Most uses of PFOA and PFOS were voluntarily phased out by U.S. manufacturers in the mid-2000s, although there are a limited number of ongoing uses, and these chemicals remain in the

environment due to their persistence and lack of degradation. In addition, some newer PFAS in use break down into PFOA and PFOS.

PFAS REGULATORY BACKGROUND

In March 2021, EPA published [Regulatory Determinations for Contaminants on the Fourth Contaminant Candidate List](#) which included a final determination to regulate PFOA and PFOS in drinking water. As a part of that final determination, EPA indicated it would also evaluate additional PFAS and consider regulatory actions to address groups of PFAS.

Thereafter, on June 15, 2022, EPA issued updated lifetime health advisories for four PFAS, including PFOA and PFOS. The updated health advisory lowered the levels for lifetime exposure to PFOS and PFOA in drinking water. The new advisory levels were well below what were previously nondetectable levels.

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What Levels are in MSUB water?

MSUB samples drinking water for PFAS on a quarterly basis as required by ADEM and the EPA and MSUB reports the results to ADEM. MSUB's most current test results for the PFAS chemicals referenced in the EPA health advisory and the new proposed NPDWR are as follows:

PFAS	2016 HA	2022 HA	PROPOSED MCL	PROPOSED MCLG	MSUB TEST RESULTS (FEB 23)
PFOA	70 ppt	.004 ppt	4.0 ppt	Zero	7.9 ppt
PFOS	70 ppt	.02 ppt	4.0 ppt	Zero	12.0 ppt
PFNA	n/a	n/a			non-detect
PHHxS	n/a	n/a			non-detect
PFBS	n/a	2000 ppt			4.3 ppt
HFPO-DA (GENX)	n/a	10 ppt			non-detect

What is MSUB doing about PFAS?

As required by ADEM, MSUB has been monitoring quarterly for PFAS, notifying the public of the levels of these PFAS and undertaking efforts to evaluate how best to reduce the levels of these PFAS in MSUB drinking water. MSUB's Management, Staff and Board of Directors are continuing to evaluate the EPA health advisory levels, the new proposed MCLs, on-going test results, and steps that will be required in order to come into compliance with these new MCLs.

In addition, on February 10, 2023, MSUB took legal action and filed suit in the Circuit Court of Colbert County Alabama against chemical manufacturers and others responsible for causing the PFAS contamination of the MSUB drinking water supply. Like other PFAS impacted water authorities in Alabama and other states, MSUB has filed suit in order to ensure that those responsible for causing the PFAS contamination bear the financial responsibility for MSUB's increased compliance testing costs and expenses, increased engineering costs and expenses, increased operational expenses and the expense of removing PFAS from the drinking water.

Note that these PFAS health advisories and new proposed MCLs are affecting not only MSUB, but Sheffield Utilities, Tuscumbia Utilities, Florence Utilities, Colbert County Water Department and other water system in Alabama and around the country. A full listing of systems in Alabama that have detections can be found on ADEM's website at the following address:

<https://adem.alabama.gov/programs/water/drinkingwater/files/AllPFASResults.pdf>

For additional information:

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

[https://www.epa.gov/system/files/documents/2023-03/Fact%20Sheet PFAS NPWDR Final 3.14.23.pdf](https://www.epa.gov/system/files/documents/2023-03/Fact%20Sheet%20PFAS%20NPWDR%20Final%203.14.23.pdf)

[https://www.epa.gov/system/files/documents/2023-03/Pre-Publication%20Federal%20Register%20Notice PFAS%20NPDWR NPRM Final 3.13.23.pdf](https://www.epa.gov/system/files/documents/2023-03/Pre-Publication%20Federal%20Register%20Notice%20PFAS%20NPDWR%20NPRM%20Final%203.13.23.pdf)

<https://adem.alabama.gov/programs/water/drinkingwater/pfasupdate.cnt>