

WARREN COUNTY WATER & SEWER DEPARTMENT

Warren County's Response to the US EPA's New Proposed PFAS National Primary Drinking Water Regulation

March 16, 2023

Warren County prides itself on providing quality water services to our customers in a cost-effective manner as we continue to meet all regulatory standards. On March 14, 2023, the U.S. Environmental Protection Agency (EPA) issued new proposed PFAS National Primary Drinking Water Regulations (NPDWR) to mitigate the risk of chemicals in drinking water. The six PFAS chemicals include 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). These chemicals are referred to as PFAS chemicals. The EPA expects that if fully implemented, the rule will prevent thousands of deaths and reduce tens of thousands of serious PFAS-attributable illnesses.

PFAS stands for perfluoralkyl and polyfluoralkyl substances. These are a group of manufactured chemicals that have been used in consumer products since the 1940's. They can be found in the manufacture of non-stick coatings, clothing, carpet, and food wrappers as well as in foam fire fighting agents. These compounds typically do not break down under normal environmental conditions, and as such have been called "forever chemicals". It is not uncommon for these chemicals to be found in microscopic traces in drinking water and in the bloodstream of people.

What is the EPA's PFAS National Primary Drinking Water Standard?

EPA began the process of setting a new PFAS National Drinking Water Standard in June 2022 by issuing Health Advisory Levels. In the past eight months EPA has engaged in multiple consultations and stakeholder engagement activities as a part of the development of the proposed NPDWR for PFAS.

The EPA has set the new PFAS NPDWR for two PFAS chemicals, PFOA and PFOS at 4 parts per trillion (ng/L), also known as the Maximum Contaminant Level (MCL). For perspective, 1 part per trillion is equal to 1 drop of water in 20 Olympic size swimming pools. The new regulation would require public water systems, like Warren County to monitor for PFAS, notify the public of the levels of these PFAS, and reduce the levels of these PFAS in drinking water if they exceed the proposed standards.

The EPA will hold a comment period for the proposed regulations which will also include a public hearing set for May 4, 2023. After this comment period, EPA anticipates issuing a final regulation by the end of 2023.

What are the levels in Warren County's drinking water?

Although the unregulated use of PFAS chemicals in consumer products has been ongoing for decades, public health concerns regarding the long-term exposure to the chemical has only reached national attention in the past few years. Under Ohio's statewide PFAS Action Plan for Drinking Water, the County's water at both treatment plants was first tested for six (6) PFAS compounds on December 15, 2020. The PFAS compounds were not detected at the County's Franklin Area Treatment Plant, however one (1) compound, perfluorooctane sulfonic acid (PFOS) was found to be present at 17.7 parts per trillion (ng/L) in water tested from the Richard Renneker Treatment Plant (RRTP).

Additional sampling was performed at the RRTP and source water in August and September, 2022 to better quantify the amount of PFOS in our various wellfields. Based on the test results, PFOS appears to be limited to southern wellfield area. Testing of our finished water resulted in PFOS concentrations ranging from 14.7 to 22.3 ng/L.

In January 2023, Warren County completed our state-of-the-art nanofiltration membrane process used to soften our water. The newly installed process is effective at removing PFAS compounds but additional treatment will be

required to meet upcoming Ohio EPA regulations. The County is currently performing additional testing to confirm that the membranes are reducing PFOS levels to 8.0 ng/L.

What is Warren County doing about these compounds?

The County is moving quickly to address the PFAS issue and is taking the following steps to meet the requirements of the forthcoming regulations:

Operational Changes – The County will make operational changes to limit PFAS levels in our finished water. The PFOS levels in our water can be reduced by a combination of the following:

- Limiting the water taken from the south wellfields.
- Reducing production from the RRTP by supplemental water from the Franklin Area water.

Expanded PFAS Testing –PFAS testing will be expanded to include 29 Per- and Polyfluoroalkyl substances. Testing of the RRTP will be completed in May and November 2023 while testing at the Franklin Area and Socialville water systems will occur in 2024.

US Environmental Protection Agency Guidance – The County is working with experts from the US Environmental Protection Agency Office of Research and Development Response to implement changes at our RRTP that will meet the recently issued Health Advisories and the forthcoming drinking water regulations.

Treatment Plant Upgrades – The County is working with a nationally recognized water treatment engineering consultant to aggressively identify plant upgrades that will safely, effectively, and reliably remove PFAS. Once these improvements are identified the County will seek out alternative procurement methods including design/build to expedite the construction process.

Providing safe, reliable drinking water is the County's highest priority. We will continue to work with the US and Ohio EPA to quickly implement improvements to our treatment facilities that will meet the future regulations. For more information on PFAS please visit <https://www.epa.gov/pfas>.