

STATE OF TENNESSEE

DEPARTMENT OF ENVIRONMENT AND CONSERVATION

**DIVISION OF WATER RESOURCES**

Nashville Environmental Field Office

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January 10, 2025

The Honorable Ms. Marylin Parker Mayor

MAYOR@TELLICOPLAINSTN.ORG

Tellico Plains Water Department

405 Veterans Memorial Dr

Tellico Plains Tennessee 37385

RE: TDEC Sampling of System Source (Raw) Water for PFAS Analytes

Tellico Plains Water Department

PWSID # TN0000693

Monroe County

Dear Mayor Parker:

The Tennessee Department of Environment and Conservation (TDEC) is undertaking a statewide initiative to sample source (raw) water at public water systems to determine whether per-and polyfluoroalkyl substances (PFAS) are present in Tennessee waters. TDEC’s sampling effort will help TDEC better understand the presence of 29 PFAS analytes in Tennessee.

PFAS have been manufactured and used in a variety of industries and products since the 1940s. PFAS can be found in fire-fighting foams, stain repellants, nonstick cookware, waterproof clothing, food wrappers, and many other household products. Research has shown some PFAS are persistent in the environment. Government organizations such as the EPA and the Agency for Toxic Substances and Disease Registry (ATSDR) cite evidence indicating exposure to certain PFAS is associated with adverse human health effects.

On April 10, 2024, the EPA announced the [final National Primary Drinking Water Regulation](https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas) establishing legally enforceable levels, called Maximum Contaminant Levels (MCLs), for six PFAS in drinking water. The EPA set individual MCLs for PFOA, PFOS, PFHxS, PFNA, and HFPO-DA (GenX Chemicals). Additionally, the EPA set a Hazard Index MCL for PFAS mixtures containing at least two or more of PFHxS, PFNA, HFPO-DA, and PFBS to account for combined and co-occurring levels of these PFAS in drinking water. The Hazard Index is a long-established tool that EPA regularly uses to understand health risk from chemical mixtures. The Hazard Index limits take into account that mixtures of PFAS can pose a health risk greater than each chemical on its own. EPA’s Maximum Contaminant Level Goal (MCLG) is the maximum level of a contaminant in drinking water at which no known or anticipated adverse effect on the health of persons would occur, based on health effects data. The MCLG and MCL for a PFAS may vary because current technology does not allow for measuring PFAS concentrations at the level of the MCLG. The final MCLs for the six PFAS are as follows:

|  |  |  |
| --- | --- | --- |
| **Compound**  | **Final MCLG**  | **Final MCL (enforceable levels)**  |
| PFOA  | Zero  | 4.0 parts per trillion (ppt) (also expressed as ng/L)  |
| PFOS  | Zero  | 4.0 ppt  |
| PFHxS  | 10 ppt  | 10 ppt  |
| PFNA  | 10 ppt  | 10 ppt  |
| HFPO-DA (commonly known as GenX Chemicals)  | 10 ppt  | 10 ppt  |
| Mixtures containing two or more of PFHxS, PFNA, HFPO-DA, and PFBS  | 1 (unitless) Hazard Index  | 1 (unitless) Hazard Index  |

This final rule triggers a number of steps to implement and comply.Public water systems must begin monitoring for these PFAS and have three years to complete initial monitoring (by 2027), followed by ongoing compliance monitoring. Water systems must also provide the public with information on the levels of these PFAS in their drinking water beginning in 2027. Public water systems have five years (by 2029) from the date of the final rule to implement solutions that reduce these PFAS if monitoring shows that drinking water levels exceed these MCLs. Beginning in five years (2029), public water systems that have PFAS in drinking water which exceeds one or more of these MCLs must take action to reduce levels of these PFAS in their drinking water and must provide notification to the public of the violation.

Tellico Plains Water Department’s source water was tested by TDEC’s Division of Water Resources (DWR) on March 5, 2025. The test results are attached and will also be made available to the public on the TDEC PFAS webpage, <https://www.tn.gov/environment/policy/pfas.html>. Out of the 29 PFAS tested at Tellico Plains Water Department, the following table shows the six primary chemicals of concern:

Results for Tellico Plains Water Department TN0000693\_WL02-01\*

|  |  |  |  |
| --- | --- | --- | --- |
| Compound | Sample result of Source Water | Maximum Contaminant Level Goal (MCLG) | Maximum Contaminant Level (MCL) |
| PFOA Perfluorooctanoic acid | <0.7 ng/L U | 0 | 4.0 ppt |
| PFOS Perfluorooctanesulfonic acid | <0.5 ng/L U | 0 | 4.0 ppt |
| PFHxS Perfluorohexanesulfonic acid | <0.4 ng/L U | 10 ppt | 10 ppt |
| HFPO-DA (GenX) | <0.4 ng/L U | 10 ppt | 10 ppt |
| PFNA Perfluorononanoic acid | <0.5 ng/L U | 10 ppt | 10 ppt |
| PFBS Perfluorobutanesulfonic acid | <0.5 ng/L U | N/A\*\*  | N/A \*\* |

The remainder of the analytes are included in the attached Analytical Results Sheet

\* Please note that the test results shown are for source (raw) water. While the EPA has finalized finished drinking water MCLs for six PFAS, there are no regulatory levels for source (raw) water.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

U - Indicates the compound was analyzed for, but not detected.

\*\*To calculate the Hazard Index for mixtures containing two or more of the chemicals PFHxS, PFNA, HFPO-DA and PFBS please utilize the formula found at: <https://www.epa.gov/system/files/documents/2024-04/pfas-npdwr_fact-sheet_hazard-index_4.8.24.pdf>

Results for Tellico Plains Water Department TN0000693\_WL02-01 DUP\*

|  |  |  |  |
| --- | --- | --- | --- |
| Compound | Sample result of Source Water | Maximum Contaminant Level Goal (MCLG) | Maximum Contaminant Level (MCL) |
| PFOA Perfluorooctanoic acid | <0.7 ng/L U | 0 | 4.0 ppt |
| PFOS Perfluorooctanesulfonic acid | <0.5 ng/L U | 0 | 4.0 ppt |
| PFHxS Perfluorohexanesulfonic acid | <0.4 ng/L U | 10 ppt | 10 ppt |
| HFPO-DA (GenX) | <0.4 ng/L U | 10 ppt | 10 ppt |
| PFNA Perfluorononanoic acid | <0.5 ng/L U | 10 ppt | 10 ppt |
| PFBS Perfluorobutanesulfonic acid | <0.5 ng/L U | N/A\*\* | N/A\*\* |

The remainder of the analytes are included in the attached Analytical Results Sheet

\* Please note that the test results shown are for source (raw) water. While the EPA has finalized finished drinking water MCLs for six PFAS, there are no regulatory levels for source (raw) water.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

U - Indicates the compound was analyzed for, but not detected.

\*\* To calculate the Hazard Index for mixtures containing two or more of the chemicals PFHxS, PFNA, HFPO-DA and PFBS please utilize the formula found at: <https://www.epa.gov/system/files/documents/2024-04/pfas-npdwr_fact-sheet_hazard-index_4.8.24.pdf>

Results for Tellico Plains Water Department TN0000693\_WL02-02\*

|  |  |  |  |
| --- | --- | --- | --- |
| Compound | Sample result of Source Water | Maximum Contaminant Level Goal (MCLG) | Maximum Contaminant Level (MCL) |
| PFOA Perfluorooctanoic acid | <0.7 ng/L U | 0 | 4.0 ppt |
| PFOS Perfluorooctanesulfonic acid | <0.5 ng/L U | 0 | 4.0 ppt |
| PFHxS Perfluorohexanesulfonic acid | <0.4 ng/L U | 10 ppt | 10 ppt |
| HFPO-DA (GenX) | <0.4 ng/L U | 10 ppt | 10 ppt |
| PFNA Perfluorononanoic acid | <0.5 ng/L U | 10 ppt | 10 ppt |
|  PFBS Perfluorobutanesulfonic acid | <0.5 ng/L U | N/A\*\* | N/A\*\* |

The remainder of the analytes are included in the attached Analytical Results Sheet

\* Please note that the test results shown are for source (raw) water. While the EPA has finalized finished drinking water MCLs for six PFAS, there are no regulatory levels for source (raw) water.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

U - Indicates the compound was analyzed for, but not detected.

\*\* To calculate the Hazard Index for mixtures containing two or more of the chemicals PFHxS, PFNA, HFPO-DA and PFBS please utilize the formula found at: <https://www.epa.gov/system/files/documents/2024-04/pfas-npdwr_fact-sheet_hazard-index_4.8.24.pdf>

The results of this study may be used to identify watersheds or aquifers that have sources of PFAS contamination. If the system results are above the MCL for any of the sampled PFAS and the system is not participating in the Unregulated Contaminant Monitoring Rule 5 (UCMR 5), TDEC suggests testing finished water. If the system is participating in UCMR5, TDEC is using the same 29 PFAS analytes as the UCMR5, so there is no need to resample the finished water in addition to the UCMR5 sampling at this time. If detections are found in finished drinking water, TDEC suggests consideration of potential treatments and funding sources to alleviate the PFAS components to meet compliance standards for public water systems per EPA’s National Primary Drinking Water Regulation final rule issued on April 10, 2024.

You are welcome to contact TDEC for additional information regarding treatment and funding. Please remember that all results from UCMR 5 sampling need to be published in the Consumer Confidence Report.

To learn more about PFAS, visit these websites:

* TDEC’s PFAS webpage website serving as the main resource for public information on PFAS in Tennessee: <https://www.tn.gov/environment/policy/pfas.html>
* Tennessee Department of Health’s website includes an overview of PFAS, information on exposure and health effects, and links to additional resources: [https://www.tn.gov/health/cedep/environmental/environmental-health-topics/eht/pfas.html](http://www.tn.gov/health/cedep/environmental/environmental-health-topics/eht/pfas.html)
* ASTDR’s website includes health information, exposure, and links to additional resources: [www.atsdr.cdc.gov/pfas](http://www.atsdr.cdc.gov/pfas)
* EPA’s website includes basic information, EPA actions, and links to informational resources: <https://www.epa.gov/pfas>

The Division appreciates Tellico Plains Water Department’s commitment to producing quality drinking water for the citizens of Tennessee. If you have any questions or need additional information, please contact me at 615-351-7410 or scotty.sorrells@tn.gov .

Sincerely,



Scotty Sorrells, Environmental Consultant

Nashville Environmental Field Office

Division of Water Resources

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File

Attachment: Analysis Results from Pace Lab for Tellico Plains Water Department