

‘Barely detectable’ level of PFAS found in drinking water

►Fenton City, county and state to investigate source of compound and ways to eliminate it

By Sharon Stone

The city of Fenton is doing its own investigation, in addition to Michigan Department of Environment, Great Lakes, and Energy (EGLE) and the Genesee County Health Department (GCHD) after a trace amount of a single PFAS compound was detected during a routine test in January of the city’s water supply.

Fenton City Council approved a contract April 12 with Wood Environment & Infrastructure Solutions Inc. for an amount not to exceed \$9,120 to conduct the preliminary investigation in an attempt to find the source of the PFAS (see sidebar).

Stephen Guy, water treatment superintendent, and Fenton City Manager Lynn Markland both said they want the residents of Fenton know that the city is going above and beyond what is required to determine and eliminate the source of the PFAS that was detected from the January water sample.

Markland said the water is safe to drink since the trace amount detected is way below the standard, but the city is determined to find the source and to eliminate it. “It’s barely a detectable level,” he said.

In a memo from Guy to Department of Public Works (DPW) Director Dan Brisson, Guy explained the testing and investigation.

In August 2020, EGLE finalized the PFAS rule regarding municipal water supply systems. The rule requires water systems to test the water plant tap for seven PFAS compounds in concentrations of parts per trillion (ppt).

Classified as a medium sized water system, Fenton City was required to test in 2017 for PFAS through the Environmental Protection Agency’s (EPA) unregulated contaminant monitoring rule three (UCMR 3) with no PFAS detected in 2017.

Similarly, in 2018 the Fenton water system was required to be tested for PFAS compounds when all Michigan public water systems were tested. Again, the 2018 result was a non-detect for all compounds tested and analyzed.

With the new PFAS rule requirements, any water system that was previously tested with results of non-detect were not required to test until the beginning of February 2021.

On Jan. 17, a sample from the Fenton City water plant was collected and sent to the lab for testing to comply with the rule. The result of the compliance sampling was a detection of one of the analyzed PFAS compounds. The compound that was detected is Perfluorohexanoic Acid (PFHxA). The maximum contaminant level (MCL) of this compound is 400,000 ppt and it was detected at a level of 2.4 ppt. This low level is just above the laboratory detectable level of 1.9 ppt and well below the MCL.

Due to the recent detection of a PFAS compound the city of Fenton is now required to test for PFAS on a quarterly basis rather than annually. EGLE also recommended to take an additional resample prior to the end of the quarter, which was done. The result of this second sample was

again a detection of PFHxA at a level of 2.2 parts per trillion. So, although the city is in compliance and the water is safe to drink, out of an abundance of caution the city is going above and beyond what is required in an attempt to determine the source of this contaminant.

As a result of a detection of this emerging contaminant Stephen Guy, the city's water treatment superintendent, asked Wood Environment & Infrastructure Solutions, Inc. to put together a proposal to do an investigation to locate the source of the PFAS being detected in the water system.

Guy said Wood E&I has extensive experience with investigation, risk evaluation and remediation of PFAS and other emerging contaminants. He said they also have assisted other municipalities with situations like this and have significant experience with risk communication and public relations related to PFAS. Wood E&I has a Professional Practice Group division devoted to emerging contaminants like PFAS.

Some links to include for informational purposes.

- The **MPART Web site** (www.Michigan.gov/PFASResponse): Provides information on MPART and its efforts to protect the public's water in Michigan.
- The **US Environmental Protection Agency (USEPA) PFAS Web site** (<http://www.epa.gov/pfas>): Provides basic information about PFAS, related actions by the USEPA, and links to additional PFAS informational resources.
- The **Agency for Toxic Substances and Disease Registry (ATSDR) Web site** (www.atsdr.cdc.gov/pfas): Provides PFAS-related information on toxicology, exposure, and human health, as well as links to additional PFAS resources.