

## Village of Antioch PFAS Information

The Illinois Environmental Protection Agency (Illinois EPA) recently tested our water system for compounds known as Per- and Polyfluoroalkyl Substances (PFAS) as part of a statewide investigation of community water supplies. PFAS are a group of thousands of manmade substances that have been produced in the United States since the 1940s and utilized for a variety of applications ranging from water and stain-proofing to firefighting. Some PFAS have been phased out of production due to environmental and human health concerns, yet they persist in the environment and may contaminate surface and ground waters. For additional PFAS information please utilize the link for "PFAS Fact Sheet for Water Consumers".

Neither the Illinois EPA nor the U.S. EPA have yet developed enforceable drinking water standards for PFAS. In the interim, Illinois EPA has developed health-based Draft Guidance Levels for the small number of PFAS for which there is appropriate information to do so. There is not enough information available to scientists to develop health-based Draft Guidance Levels for most PFAS. Draft Guidance Levels are intended to be protective of all people consuming the water over a lifetime of exposure. It is important to understand that Draft Guidance Levels are not regulatory limits for drinking water. Rather, the Draft Guidance Levels are benchmarks against which sampling results are compared to determine if additional investigation or other response action is necessary. Neither the Illinois EPA nor the U.S. EPA currently have Draft Guidance Levels for these additional compounds.

PFAS are present in many consumer goods, including food packaging and personal care products, and scientists have found values of PFAS in blood of nearly all individuals tested. Exposure to high levels of PFAS may cause adverse health effects such as increased cholesterol levels, increased risk for thyroid disease, low infant birth weights, reduced response to vaccines, pregnancy-induced hypertension and increased risk of liver and kidney cancer as seen in studies of laboratory animals. Exposure to PFAS above the recommended Draft Guidance Levels does not guarantee that a person will get sick or an adverse health effect will occur. Draft Guidance Levels are conservative estimates. The possible health effects from PFAS are dependent on how much a person is exposed to and how long they are exposed to it. Exposure to PFAS above recommended Draft Guidance Levels for periods of time may mean that a person is at a greater risk of experiencing these adverse effects.

The Village of Antioch has taken measures to respond to the results of this testing. As a proactive measure(s) to protect our drinking water supply, The Village of Antioch is working to:

- Continue to monitor PFAS values through quarterly sampling
- Reduce the amount of water being supplied by well 7
- Investigate filtration and other remediation options
- Continue to collaborate with the IEPA on guidance until a MCL is finalized



Based on these initial results, The Village of Antioch will perform additional sampling beginning February 17 2021 and will keep the community updated and informed.

Additional information regarding PFAS, the statewide PFAS investigation network, and the impact to public health can be found in the attached fact sheet as well as on the Illinois EPA PFAS webpage: https://www2.illinois.gov/epa/topics/water-quality/pfas/Pages/default.aspx.

The confirmed sampling results for The Village of Antioch are also available on Illinois EPA's Drinking Water Watch system at http://water.epa.state.il.us/dww/index.jsp.

If you have questions, please contact:

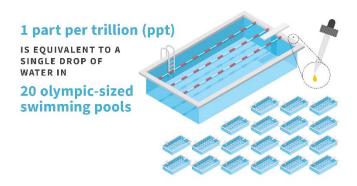
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## **PFAS Sample Results**

Illinois EPA testing has determined that one or more PFAS were detected in our water system at values greater than or equal to the Illinois EPA health-based Draft Guidance Levels, as provided in the table below. PFAS is measured in parts per trillion (ppt) or milligrams per liter (mg/l).



Sample Results from January 19<sup>th</sup>, 2021

			Village of Antioch Wells								
PFAS Analyte	Acrony m	Draft Guidance Level	TP01	TP02	TP03	TP05	TP06	TP07	TP08	TP09	TP10
Perfluorobutanesulfonic acid	PFBS	0.14 mg/L (140,000 ppt)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanesulfonic acid	PFHxS	0.00014 mg/L (140 ppt)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorononanoic acid	PFNA	0.000021 mg/L (21 ppt)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorooctanesulfonic acid	PFOS	0.000014 mg/L (14 ppt)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorooctanoic acid	PFOA	0.000000002 mg/L (2 ppt)	ND	ND	ND	ND	ND	2.4 ppt	ND	ND	ND
Perfluorohexanoic acid	PFHxA	0.00056 mg/L (560,000 ppt)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexafluoropropylene oxide dimer acid	HFPO-DA	0.00000056 mg/L (560 ppt)	ND	ND	ND	ND	ND	ND	ND	ND	ND

<sup>\*</sup> ND is no detectable concentrations found

## Sample Results from February 23<sup>rd</sup>, 2021

			Village of Antioch Wells								
PFAS Analyte	Acrony m	Draft Guidance Level	TP01	TP02	TP03	TP05	TP06	TP07	TP08	TP09	TP10
Perfluorobutanesulfonic acid	PFBS	0.14 mg/L (140,000 ppt)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanesulfonic acid	PFHxS	0.00014 mg/L (140 ppt)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorononanoic acid	PFNA	0.000021 mg/L (21 ppt)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorooctanesulfonic acid	PFOS	0.000014 mg/L (14 ppt)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorooctanoic acid	PFOA	0.000000002 mg/L (2 ppt)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanoic acid	PFHxA	0.00056 mg/L (560,000 ppt)	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexafluoropropylene oxide dimer acid	HFPO-DA	0.00000056 mg/L (560 ppt)	ND	ND	ND	ND	ND	ND	ND	ND	ND

<sup>\*</sup> ND is no detectable concentrations found