

Special Water Quality Information

Dear Water System Customer,

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.

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 In the interim, Illinois EPA has developed health-based Draft Guidance Levels for the small number of PFAS for which there is appropriate information to do so. There is not enough information available to scientists to develop health-based Draft Guidance Levels for most PFAS. Draft Guidance Levels are intended to be protective of all people consuming the water over a lifetime of exposure. It is important to understand that Draft Guidance Levels are not regulatory limits for drinking water. Rather, the Draft Guidance Levels are benchmarks against which sampling results are compared to determine if additional investigation or other response action is necessary.

Illinois EPA testing has compared that levels of PFAS in the analytical results from our water supply to the Guidance Levels and **none of the results exceeded those levels**. Illinois EPA health-based Draft Guidance Levels, as provided in the table below.

PFAS Analyte	Acronym	Draft Guidance Level	Analytical Results (ppt)	
			Sample Collected 2-24/2021	Sample Collected 3/23/2021
Perfluorobutanesulfonic acid	PFBS	0.14 mg/L (140,000 ppt)	ND	ND
Perfluorohexanesulfonic acid	PFHxS	0.00014 mg/L (140 ppt)	11	9.9
Perfluorononanoic acid	PFNA	0.000021 mg/L (21 ppt)	ND	ND
Perfluorooctanesulfonic acid	PFOS	0.000014 mg/L (14 ppt)	ND	ND
Perfluorooctanoic acid	PFOA	0.000000002 mg/L (2 ppt)	ND	ND
Perfluorohexanoic acid	PFHxA	0.00056 mg/L (560,000 ppt)	ND	ND
Hexafluoropropylene oxide dimer acid	HFPO-DA	0.00000056 mg/L (560 ppt)	ND	ND

Sample
Collected by the Village Water Dept.
May 10/2021

Perfluorohexanesulfonic	0.00014 mg/L
Acid	PFHxS (140 ppt) 3.5

Our water may contain other PFAS at concentrations greater than or equal to the minimum reporting levels. However, 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 has taken measures to respond to the results of this testing. As a proactive measure(s) to protect our drinking water supply, the Village is working to:

- continue to monitor PFAS values through quarterly sampling
- test and identify which water source intake/well is affected
- begin evaluating treatment options and developing a plan to reduce PFAS in potable water

Based on these initial results, the Village will perform additional sampling in May 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 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: North Pekin Superintendent of Public Works Frank Hardy at 309-382-3464

or the EPA at:

Illinois Environmental Protection Agency
Barb Lieberoff, Office of Community Relations
epa.pfas@illinois.gov
217-524-3038

Illinois Department of Public Health
Brian Koch, Division of Environmental Health
Brian.Koch@illinois.gov
217-782-5830

What are PFAS?

Per- and poly-fluoroalkyl substances are a group of thousands of chemicals collectively known as PFAS. Since the 1940s, PFAS have been used in manufacturing, firefighting, water- and oil-resistant products, and many consumer products such as carpet, clothing, cosmetics, and food packaging. Two of the most common compounds within this class, perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS), stopped being produced in the United States (U.S.) in the early 2000s, but these compounds may still be present in imported goods.

Most people are exposed to these chemicals from water, food, and consumer products. PFAS are very stable and do not break down easily in the environment. They are often referred to as “forever chemicals.”

What are the potential health concerns associated with PFAS exposure?

Studies indicate that exposures to high levels of PFAS contaminated water over time may cause certain adverse health effects. Exposure to PFAS above the recommended Draft Guidance Levels does not necessarily mean that a person will get sick or an adverse health effect will occur. Research on the health effects associated with PFAS is ongoing.

Scientific studies of laboratory animals, as well as studies on human populations exposed to PFOA and PFOS over periods of time, have shown that exposure to PFOA and PFOS above certain levels may result in adverse effects such as:

- increased cholesterol levels
- changes in liver enzymes
- decreased response to vaccines in children
- increased risk of high blood pressure or pre-eclampsia in pregnant women
- small decreases in infant birth weight
- increased risk of kidney or testicular cancer

If you have specific health concerns, please consult your health care professional.

What should you do if PFAS have been detected in your drinking water?

Exposure to PFAS in drinking water can be minimized by

- using bottled water that has been tested for PFAS for drinking, cooking, and preparing infant formula.
- installing filters or treatment systems certified by American National Standards Institute (ANSI) or NSF International for the reduction of PFOA and PFOS. A searchable list is available here: <http://info.nsf.org/Certified/DWTU/>.

Boiling water does not destroy PFAS.

There are no adverse effects from using your water for bathing and showering as PFAS is not easily absorbed into the skin.

Background

The United States Environmental Protection Agency (U.S. EPA) evaluates the presence of emerging and unregulated contaminants in community water supplies on a national basis pursuant to the Unregulated Contaminant Monitoring Rule (UCMR). U.S. EPA uses the data collected from these sample results to establish new drinking water standards known as maximum contaminant levels or MCLs. Traditionally, U.S. EPA develops MCLs that are then adopted by the states and used to determine if additional actions are needed to respond to contaminant concerns in drinking water. U.S. EPA has started the regulatory process for listing MCLs for PFOA and PFOS.

In 2016, U.S. EPA adopted a Lifetime Health Advisory for PFOA and PFOS of 70 parts per trillion (ppt), both individually and combined when both are present. This is a non-enforceable value intended to provide guidance for evaluating unregulated drinking water contaminants.

Given the concern about these unregulated contaminants, Illinois EPA developed health-based Draft Guidance Levels for PFOA, PFOS, and five other PFAS, perfluorobutanesulfonic acid (PFBS), perfluorohexanesulfonic acid (PFHxS), perfluorononanoic acid (PFNA), Perfluorohexanoic acid (PFHxA) and Hexafluoropropylene oxide dimer acid (HFPO-DA) using the procedures from 35 Illinois Administrative Code 620. In 2020, Illinois EPA also initiated a statewide investigation of all community water systems to determine how commonly PFAS can be found in community drinking water supplies. Illinois EPA will compare the analytical results of this testing with the PFAS Draft Guidance Levels to help community water supplies evaluate future actions that may need to be taken. This data will also be used to aid in the development of future regulatory standards in Illinois.

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

Additional Information

Illinois EPA: <https://www2.illinois.gov/epa/topics/water-quality/pfas/Pages/default.aspx>

United States Environmental Protection Agency: <https://www.epa.gov/pfas>

Centers for Disease Control and Prevention: https://www.cdc.gov/biomonitoring/PFAS_FactSheet.html

Agency for Toxic Substance and Disease Registry: <https://www.atsdr.cdc.gov/pfas/index.html>