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 In the interim, Illinois EPA has developed health-based Draft Guidance Levels for the small number of PFAS for which there is appropriate information to do so. There is not enough information available to scientists to develop health-based Draft Guidance Levels for most PFAS. Draft Guidance Levels are intended to be protective of all people consuming the water over a lifetime of exposure. It is important to understand that Draft Guidance Levels are not regulatory limits for drinking water. Rather, the Draft Guidance Levels are benchmarks against which sampling results are compared to determine if additional investigation or other response action is necessary.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one or more PFAS were detected in our water system at values greater than or equal to the Illinois EPA health-based Draft Guidance Levels, as provided in the table below.

			Analytical Results (ppt)			
PFAS Analyte	**Acronym**	**Guidance Level**	**Sample Result at TP01 - Sampled 05/05/2021**	**Sample Result at TP01 - Sampled 06/07/2021**	**Sample Result at TP02 - Sampled 05/05/2021**	**Sample Result at TP02 - Sampled 06/07/2021**
Perfluorobutanesulfonic acid	PFBS	2,100 ppt (0.0021 mg/L)	ND	ND	ND	ND
Perfluoroheptanoic acid	PFHpA	-----[a]	ND	ND	ND	ND
Perfluorohexanesulfonic acid	PFHxS	140 ppt (0.00014 mg/L)	ND	ND	2.2	2.1
Perfluorononanoic acid	PFNA	21 ppt (0.000021 mg/L)	ND	ND	ND	ND
Perfluorooctanesulfonic acid	PFOS	14 ppt (0.000014 mg/L)	2.0	ND	2.4	2.1
Perfluorooctanoic acid	PFOA	2 ppt (0.000002 mg/L)	ND	ND	ND	ND
Perfluorodecanoic acid	PFDA	-----[a]	ND	ND	ND	ND
Perfluorododecanoic acid	PFDoA	-----[a]	ND	ND	ND	ND
Perfluorohexanoic acid	PFHxA	560,000 ppt (0.56 mg/L)	ND	ND	ND	ND
Perfluorotetradecanoic acid	PFTA	-----[a]	ND	ND	ND	ND
Perfluorotridecanoic acid	PFTrDA	-----[a]	ND	ND	ND	ND
Perfluoroundecanoic acid	PFUnA	-----[a]	ND	ND	ND	ND
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	11Cl-PF3OUdS	-----[a]	ND	ND	ND	ND
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid	9Cl-PF3ONS	-----[a]	ND	ND	ND	ND
4,8-dioxa-3H-perfluorononanoic acid	ADONA	-----[a]	ND	ND	ND	ND
N-methyl perfluorooctanesulfonamidoacetic acid	NMeFOSAA	-----[a]	ND	ND	ND	ND
Hexafluoropropylene oxide dimer acid	HFPO-DA	560 ppt (0.00056 mg/L)	ND	ND	ND	ND
N-ethyl perfluorooctanesulfonamidoacetic acid	NEtFOSAA	-----[a]	ND	ND	ND	ND

[a] No toxicity criteria available
Minimum Reporting Level (MRL) = 2.0 ppt
ND = Not Detected

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

- Continue to monitor PFAS values through quarterly sampling
- Test and identify which water source intake/well is affected

Based on these initial results, the City of Sandwich will perform additional sampling beginning in February 2021 and will keep the community updated and informed. The City may then work to isolate the affected water source intake to reduce levels and begin evaluating treatment options and develop a plan to reduce PFAS in the water supply.

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 the Illinois EPA PFAS webpage: https://www2.illinois.gov/epa/topics/water-quality/pfas/Pages/default.aspx

The confirmed sampling results for the City of Sandwich 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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or the EPA at:

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PFAS Fact Sheet for Water Consumers

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
- Increase risk of high blood pressure or pre-eclampsia in pregnant women
- Small increases 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.

PFAS Fact Sheet for Water Consumers

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.htm