

Source Water Assessment

The source water assessment of our supply has been completed by the Illinois EPA. If you would like a copy of this information, please stop by the Village Administration Building or call (815) 469-2177. To view a summary version of the completed Source Water Assessments, including: Importance of Source Water; Susceptibility to Contamination Determination; and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois EPA website at <http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl>.

Based on information obtained in a Well Site Survey, published in 1990 by the Illinois EPA, nineteen potential sources or possible problem sites were identified within the survey area of Frankfort's wells. Furthermore, information provided by the Leaking Underground Storage Tank and Remedial Project Management Sections of the Illinois EPA indicated several additional sites with ongoing remediation which may be of concern. The Illinois EPA has determined that the Frankfort Community Water Supply's source water is not susceptible to contamination. This determination is based on a number of criteria including: monitoring conducted at the wells; monitoring conducted at the entry point to the distribution system; and available hydrogeological data on the wells.

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Want to Know More?

We want our residents to be informed about their water quality. If you would like to learn more, please feel free to reach out to any of the following:

Village of Frankfort

www.villageoffrankfort.com

(815) 469-2177

Michael Stone, Director of Utilities

Illinois EPA Bureau of Water

www2.illinois.gov/epa/topics/water-quality/Pages/default.aspx

United States EPA

<http://water.epa.gov/drink>

Safe Drinking Water Hotline

(800) 426-4791



FOR YEAR
2019

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PUBLIC WATER SUPPLY
#IL1970400

VILLAGE
OF
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Water Report



WHAT IS THE PURPOSE OF THIS REPORT?

This report is intended to provide you with important information about your drinking water and the efforts made by the Village of Frankfort to provide safe drinking water. This report includes drinking water facts, information on violations, and contaminants detected in your drinking water supply. The Village provides a new report each year.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations also establish limits for contaminants in bottled water which must provide the same protection for public health.

Dedicated to Water Quality

The Environmental Protection Agency (EPA) regulates every public water supply (PWS) to ensure that there is an adequate supply of safe water to serve the community. The EPA requires a community to have a sufficient supply of water and adequate facilities staffed by certified personnel. To monitor and ensure compliance, the EPA requires extensive sampling and testing of the water with the test results submitted monthly. EPA field inspectors also conduct site visits to check the condition and operation of the facilities.

The Village of Frankfort is a compliant PWS that is dedicated to exceeding the requirements of the EPA. In 2019, The Village proudly served over one billion gallons of water to more than 24,000 people within its boundaries and nearby unincorporated areas. The utility is funded by water rates, new tap fees, and capacity expansion fees. The utility is not subsidized with tax dollars.

The Village's certified water operators operate ten wells that pump water out of the ground through treatment facilities and ultimately to homes and businesses through an underground network of pipes. Six elevated tanks provide 5.7 million gallons of storage for water pressure and fire protection purposes. Water treatment consists of chlorine disinfection to kill harmful bacteria, addition of fluoride to promote dental health, and filtration and phosphate addition to remove iron, which is naturally present in our ground water.

Please review the entire report to find out more about important health information, source water assessment information, and various ways to connect for additional information related to water.

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2019 Regulated Contaminants Detected

How to Read This Report

The Village wants you to be informed about your water system. A brief description of the type of data in each section of this page is listed below:

Outside Edge of Page: The information on the outside sections of this page provide you with general data about drinking water characteristics, possible health concerns and a brief EPA assessment of Frankfort's water system. Contact data for more detailed information is provided.

Middle of Page: The information in the middle portion of the page provides specific data about the contaminants found in Frankfort's drinking water. All public drinking water supplies contain contaminants and the tables in this section provide testing results for each contaminant. The contaminant name, date sampled, result, EPA level allowed, violation status and the likely source is provided.

Sources of Drinking Water

Sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pickup substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

-Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

-Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

-Pesticides and herbicides, which may come from a variety of sources such as agricultural, urban storm water runoff, and residential uses.

-Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

-Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

Water Quality Tests Results (Terms and Definitions)

ALG = Action Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

AL = Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Avg = Average: Regulatory compliance with some MCLs are based on running annual average of monthly samples.

Level 1 Assessment: A Level 1 Assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in the water system.

Level 2 Assessment: A Level 2 Assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in the water system on multiple occasions.

MCL = Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG = Maximum Contaminant Level Goal: The level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MRDL = Maximum Residual Disinfectant Level: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG = Maximum Residual Disinfectant Level Goal: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

N/A = Not applicable

pCi/L = picocuries per liter (a measure of radioactivity)

ppb = Parts per billion—or micrograms per liter—or one ounce in 7,350,000 gallons of water.

ppm = Milligrams per liter of parts per million—or one ounce in 7,350 gallons of water.

TT = Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination & Comments
Copper	9/10/2018	1.3	1.3	0.682	0	ppm	No	Erosion of natural deposits; leaching from wood preservatives; Corrosion of household plumbing systems.
Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination & Comments
Chlorine	2019	1.4	1.3 - 1.4	MRDLG=4	MRDL=4	ppm	No	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2019	18	5.8 - 18	No goal for total	60	ppb	No	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2019	47	43.7 - 47.1	No goal for total	80	ppb	No	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination & Comments
Barium	2019	0.0969	0.0969 - 0.0969	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2019	0.68	0.68 - 0.68	4	4.0	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Sodium	2019	23.3	23.3 - 23.3	N/A	N/A	ppm	No	Erosion from naturally occurring deposits. Use in water softener regeneration.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination & Comments
Combined Radium 226/228	7/16/2018	1.284	1.284 - 1.284	0	5	pCi/L	No	Erosion of natural deposits.
Gross Alpha excluding Radon and Uranium	7/16/2018	2.22	2.22 - 2.22	0	15	pCi/L	No	Erosion of natural deposits.

Violation Summary

The Village properly collected samples for synthetic organic compounds (SOCs) during the 1/1/2017 through 12/31/2019 sampling period. However, due to sampling equipment errors at the private lab, some of the required results were not available within the specified time frame and resulted in the issuance of routine monitoring violations as described in the Public Notice. Failure to monitor SOC's could allow trace quantities of these chemicals to go undetected for extended periods of time. SOC's include chemicals such as atrazine, carbofuran, and oxamyl. These chemicals have been associated with health related problems if water containing these chemicals is consumed for extended periods of time. SOC's were not detected in additional samples collected on 2/24/2020 and 3/26/2020.

Public Notice

The Village is required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During the compliance period of 1/1/2017 through 12/31/2019, the Village did not complete all monitoring or testing for synthetic organic compounds as listed below, and therefore cannot be sure of the quality of your drinking water during that time*.

Alachlor: Some people who drink water containing alachlor in excess of the MCL over many years could have problems with their eyes, liver, kidneys, or spleen, or experience anemia, and may have an increased risk of getting cancer.

Atrazine: Some people who drink water containing atrazine in excess of the MCL over many years could experience problems with their cardiovascular system or reproductive difficulties.

Benzo (a) pyrene: Some people who drink water containing benzo (a) pyrene in excess of the MCL over many years may experience reproductive difficulties and may have an increased risk of getting cancer.

Carbofuran: Some people who drink water containing carbofuran in excess of the MCL over many years could experience problems with their blood, or nervous or reproductive systems.

Di (2-ethylhexyl) adipate: Some people who drink water containing di (2-ethylhexyl) adipate in excess of the MCL over many years could experience general toxic effects or reproductive difficulties.

Di (2-ethylhexyl) phthalate: Some people who drink water containing di (2-ethylhexyl) phthalate in excess of the MCL over many years may have problems with their liver, or experience reproductive difficulties, and may have an increased risk of getting cancer.

Diquat: Some people who drink water containing diquat in excess of the MCL over many years could get cataracts.

Endothall: Some people who drink water containing endothall in excess of the MCL over many years could experience problems with their stomach or intestines.

Oxamyl [Vydate]: Some people who drink water containing oxamyl in excess of the MCL over many years could experience slight nervous system effects.

Simazine: Some people who drink water containing simazine in excess of the MCL over many years could experience problems with their blood.

*The Village properly collected samples for synthetic organic compounds (SOCs) during the 1/1/2017 through 12/31/2019 sampling period. However, due to sampling equipment errors at the private lab, some of the required results were not available within the specified time frame. SOC's were not detected in additional samples collected on 2/24/2020 and 3/26/2020. The Village has coordinated with the private lab to ensure all samples are analyzed and reported properly.

There is nothing you need to do at this time. Alternative water supplies do not need to be used. For more information regarding this notice, please contact the Village of Frankfort Utilities Department: 432 W. Nebraska Street, Frankfort, IL 60423; (815) 469-2177.

Please share this information with all other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

Where does our drinking water come from?

The Village of Frankfort's source water is groundwater. There are ten wells that pump water out of the Silurian-Dolomite aquifer, which is a geological formation that contains water.

Important Health Information

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800) 426-4791.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers.

EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800) 426-4791.

Lead Information

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Village cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.