



2023 Water Quality Report for City of Fennville, Michigan

Water Supply Serial Number: 02260

This report covers the drinking water quality for City of Fennville for the 2022 calendar year. This information is a snapshot of the quality of the water that we provided to you in 2022. Included are details about where your water comes from, what it contains, and how it compares to United States Environmental Protection Agency (U.S. EPA) and state standards.

Your water comes from three (3) groundwater wells, ranging in depth from 130 feet to 260 feet. The State performed an assessment of our source water to determine the susceptibility or the relative potential of contamination. The susceptibility rating is on a seven-tiered scale from "very-low" to "very-high" based on geologic sensitivity, well construction, water chemistry and contamination sources. The susceptibility of our source is as follows:

- Well #4 Moderately High
- Well #6 Moderately High
- Well #7 Low

Significant sources of contamination include: City lagoons within 2,000 feet of wells and septic systems within 200 feet of wells.

If you would like to know more about the report, please contact: Kathryn Beemer, City Administrator at (269) 561-8321 or kbeemer@fennville.com.

Contaminants and their presence in water: 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 U.S. EPA's Safe Drinking Water Hotline (800-426-4791).

Vulnerability of sub-populations: Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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. U.S. EPA/Center for Disease Control 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).

Sources of drinking water: The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. Our water comes from 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 pick up 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 stormwater 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 agriculture and residential uses.
- **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.
- **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 stormwater runoff, and septic systems.

In order to ensure that tap water is safe to drink, the U.S. EPA prescribes regulations that limit the levels of certain contaminants in water provided by public water systems. Federal Food and Drug Administration regulations establish limits for contaminants in bottled water which provide the same protection for public health.

Water Quality Data

The table below lists all the drinking water contaminants that we detected during the 2022 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 through December 31, 2022. The State allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. All the data is representative of the water quality, but some are more than one year old.

Terms and abbreviations used below:

- Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- Maximum Contaminant Level (MCL): 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.
- Maximum Residual Disinfectant Level (MRDL): 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.
- Maximum Residual Disinfectant Level Goal (MRDLG): 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.
- Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.
- N/A: Not applicable
- ND: not detectable at testing limit
- ppt: parts per trillion or nanograms per liter (ng/L)
- ppb: parts per billion or micrograms per liter (µg/L)
- ppm: parts per million or milligrams per liter (mg/L)
- pCi/L: picocuries per liter (a measure of radioactivity).
- Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Regulated Contaminant (unit)	MCL, TT, or MRDL	MCLG or MRDLG	Level Detected	Range	Year Sampled	Violation Yes/No	Typical Source of Contaminant
Arsenic (ppb)	10	0	ND	N/A	2021	No	Erosion of natural deposits; Runoff from orchards
Barium (ppm)	2	2	0.23	N/A	2021	No	Discharge of drilling wastes; Discharge of metal refineries; Erosion of natural deposits
Nitrate (ppm)	10	10	0.7	<0.4 - 0.7	2022	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Fluoride (ppm)	4	4	ND	N/A	2022	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Total Trihalomethanes (TTHM) (ppb)	80	N/A	39.0	20.8 - 39.0	2022	No	Byproduct of drinking water disinfection
Chlorine ¹ (ppm)	4	4	0.6	0.24 - 1.07	2022	No	Water additive used to control microbes
Combined radium (pCi/L)	5	0	1.32	N/A	2020	No	Erosion of natural deposits
Haloacetic Acids (HAA5) (ppb)	60	N/A	6	4 - 6	2022	No	Byproduct of drinking water disinfection

¹The chlorine "Level Detected" was calculated using a running annual average.

Unregulated Contaminants*	MCL, TT, or MRDL	MCLG or MRDLG	Level Detected	Range	Year Sampled	Violation Yes/No	Typical Source of Contaminant
Sodium (ppm)	Not Regulated	N/A	33	6.4-33	2022	N/A	Erosion of natural deposits

*These are contaminants for which the EPA has not established drinking water standards. The purpose of the unregulated contaminants monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water.

Monitoring Data for Inorganic Contaminants

Per- and polyfluoroalkyl substances (PFAS)								
Regulated Contaminant (abbreviation)	MCL, TT or MRDL	MCLG or MRDLG	Level Detected	Range	Year Sampled	Violation Yes/No	Typical Source of Contaminant	
Hexafluoropropylene oxide dimer acid (HFPO-DA) (ppt)	370	N/A	ND	N/A	2022	No	Discharge and waste from industrial facilities utilizing the Gen X chemical process	
Perfluorobutane sulfonic acid (PFBS) (ppt)	420	N/A	ND	N/A	2022	No	Discharge and waste from industrial facilities; stain-resistant treatments	
Perfluorohexane sulfonic acid (PFHxS) (ppt)	51	N/A	ND	N/A	2022	No	Firefighting foam; discharge and waste from industrial facilities	
Perfluorohexanoic acid (PFHxA) (ppt)	400,000	N/A	ND	N/A	2022	No	Firefighting foam; discharge and waste from industrial facilities	
Perfluorononanoic acid (PFNA) (ppt)	6	N/A	ND	N/A	2022	No	Discharge and waste from industrial facilities; breakdown of precursor compounds	
Perfluorooctane sulfonic acid (PFOS) (ppt)	16	N/A	ND	N/A	2022	No	Firefighting foam; discharge from electroplating facilities; discharge and waste from industrial facilities	
Perfluorooctanoic acid (PFOA) (ppt)	8	N/A	ND	N/A	2022	No	Discharge and waste from industrial facilities; stain-resistant treatments	

PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)

Per- and polyfluoroalkyl substances (PFAS), sometimes called PFCs, are a group of chemicals that are resistant to heat, water, and oil. PFAS have been classified by the United States Environmental Protection Agency (U.S. EPA) as an emerging contaminant on the national landscape. For decades, they have been used in many industrial applications and consumer products such as carpeting, waterproof clothing, upholstery, food paper wrappings, fire-fighting foams, and metal plating. They are still used today. PFAS have been found at low levels both in the environment and in blood samples from the general U.S. population.

These chemicals are persistent, which means they do not break down in the environment. They also bioaccumulate, meaning the amount builds up over time in the blood and organs. Although our understanding of these emerging contaminants is constantly evolving, elevated levels of PFAS have the potential to cause increased cholesterol, changes in the body's hormones and immune system, decreased fertility, and increased risk of certain cancers. Links to these health effects in humans are supported by epidemiologic studies and by laboratory studies in animal models.

WHERE CAN I LEARN MORE ABOUT PFAS?

For information on PFOA, PFOS, and other PFAS, including possible health outcomes, you may visit these websites: • www.epa.gov/pfas • www.atsdr.cdc.gov/pfas • www.michigan.gov/pfasresponse

Inorganic Contaminant Subject to Action Levels (AL)	Action Level	MCLG	Fennville Water ²	Range of Results	Year Sampled	Number of Samples Above AL	Typical Source of Contaminant
Lead (ppb)	15	0	3	1 - 5	2022	0	Lead service lines, corrosion of household plumbing including fittings and fixtures; Erosion of natural deposits
Copper (ppm)	1.3	1.3	0.06	0.05 - 0.19	2022	0	Corrosion of household plumbing systems; Erosion of natural deposits

² Ninety (90) percent of the samples collected were at or below the level reported for our water.

Information about lead: 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. City of Fennville is responsible for providing high quality drinking water but 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 www.epa.gov/safewater/lead.

Our water supply has no known lead service lines and 417 service lines of unknown material out a total of 645 service lines.

Monitoring and Reporting to the Department of Energy, Great Lakes and Environment (EGLE) Requirements: The State of Michigan and the U.S. EPA require us to test our water on a regular basis to ensure its safety. We met all the monitoring and reporting requirements for 2022.

We will update this report annually and will keep you informed of any problems that may occur throughout the year, as they happen. Copies are available at City Hall or on the City's website at www.fennville.com. This report will not be sent to you.

We invite public participation in decisions that affect drinking water quality. For more information about your water, or the contents of this report, contact Kathryn Beemer, City Administrator at (269) 561-2444 or kbeemer@fennville.com or visit the City's website at www.fennville.com. For more information about safe drinking water, visit the U.S. EPA at www.epa.gov/ground-water-and-drinking-water/basic-information-about-your-drinking-water.

Spanish (Espanol): Este informe contiene informacion muy importante sobre la calidad de su agua beber. Traduscalo o hable con alguien que lo entienda bien.

