

CITY OF ST. IGNACE

2022 WATER QUALITY REPORT

IS MY WATER SAFE?

Last year, as in years past, your tap water meets all United States Environmental Protection Agency (EPA) and state drinking water health standards. The City of St. Ignace vigilantly safeguards its water supplies and we are proud to report that our system has never violated a maximum contaminant level or any other water quality standard.

WHERE DOES MY WATER COME FROM?

The City of St. Ignace sources our drinking water from Lake Huron. The water is pumped from Lake Huron to the water plant where Chlorine and Alum are added to the water. Chlorine is added to the treatment process to kill harmful bacteria. Alum causes small dirt particles to clump together creating larger clumps of dirt called Flocs that are more easily filtered out of the water. After the water has passed through our filter system, Soda Ash is added to the water for corrosion control. Corrosive water can cause lead and copper to leach out of pipes. Fluoride, a water additive which promotes strong teeth, is also added after the filtration process.

WHY ARE THERE CONTAMINANTS IN MY DRINKING 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. The sources of drinking water (both tap and bottled) 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 materials, and can pick up substances resulting from the presence of animals or from human activity.

1. Microbial Contaminants such as viruses and bacteria may come from sewer treatment plants, septic systems, farming operations, swimmers, and wildlife.
2. Inorganic contaminants such as salts and metals can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharge, oil and gas products, or farming.
3. Pesticides and Herbicides may come from a variety of sources such as agriculture, storm water runoff, and residential users.
4. Organic Chemical Contaminants including synthetic and volatile organic chemicals are by-products of industrial processes, storm water runoff, and septic systems.
5. Radioactive contaminants can be naturally occurring, the result of oil and gas production, or mining activities. 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. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.
6. 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 St. Ignace Water Department is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. When water has been sitting for several hours you can minimize the potential for lead exposure by flushing your tap for one half to two minutes before using water for drinking or cooking. If you are concerned about lead in your water you may 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 at 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants and Health effects are available from the Safe Drinking Water Hotline (1-800-426-4791).

2022 WATER QUALITY DATA TABLE

The tables below list all of the drinking water contaminants that we detected during the calendar year of this report. Some of the data, though representative of the water quality, may be more than one year old. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk unless otherwise noted.

TERMS AND ABBREVIATIONS USED

- 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. MCL's are set as close to the MCLG 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 disinfection is necessary for control of microbial contaminants.
- Maximum Residual Disinfection 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
- Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Level 1 Assessment: A study of the water supply to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
- Level 2 Assessment: 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 our water system on multiple occasions.

UNIT DESCRIPTIONS

Parts per million (ppm) Parts per billion (ppb) Not detected (ND)
 Not applicable (N/A) Pico curies per liter (pCi/L)

Disinfectants and Disinfectant By-Products								
	MRDL/ MCL	MRDLG/ MCLG	YOUR WATER	RANGE		SAMPLE DATE	VIOLATIONS	TYPICAL SOURCE
				Low	High			
T.Trihalomethanes (ppb)	80	N/A	38	-	-	2022	NO	By-Product of chlorination
T.Haloacetic Acid (ppb)	60	N/A	11	-	-	2022	NO	By-Product of chlorination
Chlorine (ppm)	4.0	4.0	0.68	0.14	1.26	2022	NO	Water additive

Radiological								
	MRDL/ MCL	MRDLG/ MCLG	YOUR WATER	RANGE		SAMPLE DATE	VIOLATIONS	TYPICAL SOURCE
				Low	High			
Gross alpha	15	0	0.40	-	-	2016	NO	Erosion of natural deposits
Combined Radium	5	0	0.64	-	-	2016	NO	Erosion of natural deposits

Inorganic Contaminants (ppm)								
	MRDL/ MCL	MRDLG/ MCLG	YOUR WATER	RANGE		SAMPLE DATE	VIOLATIONS	TYPICAL SOURCE
				Low	High			
Fluoride (ppm)	4.0	4.0	0.69	0.65	0.74	2022	NO	Additive
Sodium (ppm)	N/A	N/A	9.6	-	-	2022	NO	Naturally Present
Nitrate (ppm)	10	10	0.25	-	-	2022	NO	Human and animal waste

Microbial Contaminants								
		MRDLG/ MCLG	YOUR WATER	RANGE Low/High		SAMPLE DATE	VIOLATIONS	TYPICAL SOURCE
Total Coliform	TT	N/A	0	0	1	2022	NO	Naturally Present
E-coli	TT	0	0	0	0	2022	NO	Human and animal waste

Inorganic Contaminants								
	AL	MCLG	YOUR WATER 90 th Percentile	RANGE Low/High		# of sites Out of 10 Over AL	SAMPLE DATE	VIOLATIONS
Lead (ppb)	15	0	1	0	7	0	2022	NO
Copper (ppm)	1.3	1.3	0.1	0.0	0.1	0	2022	NO

The City of St. Ignace updates this report annually and will keep you informed of any problems throughout the year as they happen. 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 geological sensitivity, well construction, water chemistry, and contamination sources. The susceptibility of our source is highly susceptible. The “Source Water Assessment Report” for the City of St. Ignace was completed in October of 2003 and is on file at the Water Treatment Plant or City Hall. We invite public participation in decisions that affect drinking water quality. City of St. Ignace council meetings are held on the first and third Mondays of every month at 7pm if you have input and would like to attend. This report will not be sent to you. Copies of this report are available at the Water Treatment Plant or at City Hall.

The City of St. Ignace has conducted an inventory analysis on all service lines within its distribution system. According distribution records and visual inspections no lead services have been found. There is one service that does contain galvanized pipe but it is unlikely to contain a lead gooseneck as all others on this water main have copper services.

For more information contact Russell Winberg (Operator in Charge) at the:
 ST. IGNACE WATER DEPARTMENT
 999 CHURCH ST.
 PHONE (906) 643-9670

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

The City of St. Ignace Did Not Meet Treatment Requirements

Our water system recently violated a drinking water standard. Although this situation does not require that you take immediate action, as our customers, you have a right to know what happened, what you should do, and what we are doing to correct this situation.

We treat our water to maintain corrosion control and prevent lead and copper in the pipes from dissolving into the water. To ensure we are maintaining optimal corrosion control, we routinely sample the water at the entry point to the distribution system (EPTDS) and in the distribution system for Water Quality Parameters (WQP) such as pH and alkalinity. We are required to maintain these parameters within state-designated ranges. We did not maintain these parameters within the set ranges for more than nine days during the January through June 2022 monitoring period.

What should I do?

You do not need to boil your water or take other corrective actions. However, if you have specific health concerns, consult your doctor.

What does this mean?

This situation does not require that you take immediate action. If it had, you would have been notified immediately. This is a treatment violation, but it does not mean there is lead or copper in your drinking water. The most recent monitoring indicates that lead and copper levels were below the action levels in at least 90 percent of residential drinking water taps sampled. However, it is important that everyone takes measures to control lead and copper levels in the water because ingesting lead or copper can cause serious health consequences.

Lead: Infants and children who drink water containing lead could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

Copper: Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their personal doctor.

What happened? What is being done?

The Michigan Department of Environment, Great Lakes, and Energy set ranges for our WQPs on June 9, 2021. After these ranges were designated, we collected samples at the EPTDS throughout the January to June 2022 monitoring period that were below the required minimum value for alkalinity. We received excursion days for the days of March 28, April 25, May 8, May 15, May 19-23, May 25, and May 29. Even though the majority of samples were above the minimum value for alkalinity, we still have more than nine days below the minimum state-designated value. We are working on following up with all WQP results timely to prevent this from happening again.

For more information, please contact Russell Winberg, rwinberg@cityofstignace.com, 906-643-9670, or 396 North State Street, St. Ignace, Michigan 49781.

Please share this information with all the 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.