



Your Annual Drinking Water Quality Report For

The City of Sault Sainte Marie

January 1, 2020 - December 31, 2020

Dear Customer:

We're pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality of the water and services we deliver to you every day. Since its inception over 120 years ago, the City of Sault Ste. Marie Water Department's goal has been to produce the safest, highest quality, "Superior Water" for all of its customers. We are proud of our history and quality of service. To maintain our commitment to you, our analysts routinely collect and test water samples every step of the way, from source water to various points throughout the distribution system checking quality and resolving potential problems. Our treatment facility is constantly maintained, evaluated and updated to stay abreast of advancements in technology, health, science and governmental regulations. Our water quality laboratory is the heart of our quality assurance program. Staffed by State of Michigan certified personnel, our lab analyzes thousands of water samples annually to assure the highest quality water for our families, friends, and neighbors in Sault Ste. Marie.

Where does our water come from?

Our water source is surface water from the St Mary's River; it is our sole source of water. The St. Mary's river joins Lake Superior with Lake Huron. The State performed an assessment of our source water to determine the susceptibility or the relative potential of contamination. The intent of these assessments will ultimately be to prioritize protection activities for all sources of public drinking water. The susceptibility rating is on a seven-tiered scale from "very-low" to "very-high" based on geologic sensitivity, source intake, water chemistry, and contamination sources. Our susceptibility rating was determined to be "high", due to land uses and potential contaminant within the source water.

Your source water is pumped to your water treatment facility at 1634 W. 24th Street, where the water is disinfected, filtered, pH adjusted for corrosion control, fluoridated and pumped to your home or business. As you will see in the following information, the City of Sault Ste. Marie monitors our source water and drinking water supplied to you very closely to ensure its quality.

The City of Sault Ste. Marie wants their customers to be informed about their water quality and will be glad to answer any questions pertaining to your water supply. If you as a customer are confused or feel misinformed, give your utility the opportunity to clarify things.

We routinely monitor your drinking water for contaminants according to federal and state laws. The following tables included with this report show the results from the City of Sault Ste. Marie's Water Treatment Plant and Distribution System. This monitoring is for the period of January 1 to December 31, 2020. Sample results that are more than five years old need not be included in the report, even if it is the last available data for the supply (e.g., some metals are collected on a nine-year frequency).

It's our pleasure to report that in 2020 as in all years past, the water delivered from the water treatment plant met or surpassed all federal and state standards for quality.

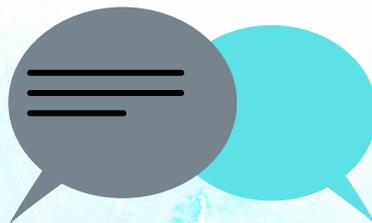
If you wish to obtain a copy of this report contact please contact the Water Plant. If you have questions concerning the contents of this report or the water utility, contact:

Sault Ste. Marie – Water Treatment Plant
Kirk Tews – Water Director
225 E. Portage Ave.
Sault Ste. Marie, MI 49783
906-632-8981

OPPORTUNITIES FOR PUBLIC PARTICIPATION:

We believe that informed citizens can be strong allies of water systems as they take action on pressing problems. The following is a listing of meeting dates and locations where your elected officials may discuss water system issues.

Board of Commissioners	Regular Meeting Schedule	Location/Contact
The City of Sault Ste. Marie	1st and 3rd Monday Monthly	Commission Chambers 225 E. Portage Ave. Sault Ste. Marie, MI



WATER QUALITY DATA

The table below lists all the drinking water contaminants that we detected during the 2020 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, 2020. 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.

City of Sault Ste. Marie - Water Treatment Plant							
PRIMARY STANDARDS – Required sampling for substances which have federally enforced regulations, these substances are directly related to the safety of drinking water.							
Inorganic/Organic Chemicals	Sample Date	MCLG	MCL	Result Average	Range of all Results	Violation	Likely source
Fluoride (ppm)	Daily	4	4	0.56	0.77 / 0.97	No	Water additive to protect teeth
Turbidity	Sample Date	MCLG	MCL/TT	Highest Result	Range of all Results	Violation	What is Turbidity?
NTU Filtered Water	Daily	N/A	TT = 1	0.16	0.01 – 0.16	No	Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.
% of samples Filtered Water	Daily	N/A	95% <0.3NTU	100.0 %	N/A	No	
Microbial Contaminants	Sample Date	MCLG	MCL		Detected	Violation	Likely source
Total Coliform	Daily	0	>1 positive monthly sample, >5% of all samples		0	No	Naturally present in environment
E.Coli	Daily	0	>1 positive routine & repeat samples		0	No	Naturally present in environment
REGULATED CONTAMINANTS – Per- and polyfluoroalkyl substances (PFAS) Sampled at Raw Water Plant Tap							
Regulated Contaminant	MCL, TT, or MRDL	MCLG or MRDLG	Level Detected	Range	Year Sampled	Violation	Likely source
Hexafluoropropylene oxide dimer acid (HFPO-DA) (ppt)	370	N/A	ND	ND	2020	No	Discharge and waste from industrial facilities utilizing the Gen X chemical process
Perfluorobutane sulfonic acid (PFBS) (ppt)	420	N/A	ND	ND	2020	No	Discharge and waste from industrial facilities; stain-resistant treatments
Perfluorohexane sulfonic acid (PFHxS) (ppt)	51	N/A	ND	ND	2020	No	Firefighting foam; discharge and waste from industrial facilities
Perfluorohexanoic acid (PFHxA) (ppt)	400,000	N/A	ND	ND	2020	No	Firefighting foam; discharge and waste from industrial facilities
Perfluorononanoic acid (PFNA) (ppt)	6	N/A	ND	ND	2020	No	Discharge and waste from industrial facilities; breakdown of precursor compounds
Perfluorooctane sulfonic acid (PFOS) (ppt)	16	N/A	ND	ND	2020	No	Firefighting foam; discharge from electroplating facilities; discharge and waste from industrial facilities
Perfluorooctanoic acid (PFOA) (ppt)	8	N/A	ND	ND	2020	No	Discharge and waste from industrial facilities; stain-resistant treatments

Additional information about PFAS and PFOA contaminants can be found here: <https://www.michigan.gov/pfasresponse>

City of Sault Ste. Marie - Water Treatment Plant			
UNREGULATED CONTAMINANTS – Required sampling for substances which the EPA requires monitoring but has yet to establish standards. Monitoring helps the EPA determine where these contaminants occur and whether regulation is warranted in the future.			
Unregulated Contaminant	Sample Date	Result	Likely source
Sodium	5/6/2020	1.6	Erosion of natural deposits

Additional information about unregulated contaminants can be found here: www.epa.gov/dwucmr and <https://www.chippewahd.com>

City of Sault Ste. Marie – Distribution System							
Copper & Lead -							
Contaminant	Sample Date	MCLG	AL	90 th Percentile	Range of all Results	Violation	Likely source
Copper (ppm)	2020	1.3	1.3	0.1	0 – 0.1	No	Corrosion of household plumbing
Lead (ppb)	2020	0	15	2	0 – 7	No	Lead service lines, corrosion of household plumbing including fittings and fixtures; erosion of natural deposits
Disinfectant By-Products – Total Trihalomethanes (TTHMs), Haloacetic Acids (HAA5s) – The level detected was calculated using a running annual average							
Contaminant	Sample Date	MCLG	MCL	Level Detected	Range of all Results	Violation	Likely source
TTHMs (ppb)	Quarterly	N/A	80	45	17.1 - 66	No	Disinfection By-product
HAA5 (ppb)	Quarterly	N/A	60	23.5	15 – 25.3	No	Disinfection by-product
Disinfectant Residual – The chlorine level detected was calculated using a running annual average.							
Disinfectant	Sample Date	MRDLG	MRDL	Level Detected	Range of all Results	Violation	Likely source
Free Chlorine (ppm)	2020	4.0	4.0	0.69	0.37 – 1.05	No	Water additive to control microbes.
Microbial Contaminants -							
Contaminant	Sample Schedule	MCLG	MCL	Detected	Violation	Likely source	
Total Coliform	15/month	0	>1 positive monthly sample, >5% of all samples	0	No	Naturally present in environment	
E.Coli	15/month	0	>1 positive routine & repeat samples	0	No	Naturally present in environment	

In the table you may find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Action Level (AL) - The concentration of a contaminant that if exceeded triggers treatment or other requirements that a water system must follow.

Environmental Protection Agency (EPA)

Food and Drug Administration (FDA)

Maximum Contaminant Level (MCL) - The “Maximum Allowed” is 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 Contaminant Level Goal (MCLG) - The "Goal" is 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 residual disinfectant level (MRDL) - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the 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.

Michigan Department of Environment, Great Lakes and Energy (EGLE)

Nephelometric Turbidity Unit (NTU) - Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Not regulated (NR) - The substance is not currently regulated by the USEPA and or EGLE. Monitoring helps EPA to determine where these contaminants occur and whether there is a need to regulate them.

Not applicable (NA)

Not Detected (ND)

Parts per million (ppm)

Parts per billion (ppb)

Parts per trillion (ppt)

Treatment Technique (TT) - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

IMPORTANT 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 services lines and home plumbing. The City of Sault Ste. Marie 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 your water for drinking or cooking. If you have a service line that is lead, galvanized previously connected to lead, or unknown but likely to be lead, it is recommended that you run your water for a least 5 minutes to flush water from both your home plumbing and the lead service line. 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 (800-426-4791) or at <http://www.epa.gov/safewater/lead>. The City of Sault Ste. Marie has 5,244 active service lines. Of these 5,244 service lines 2560 are of unknown composition and 2594 service lines are of known composition.



The City of Sault Ste. Marie is proud that your drinking water meets all federal and state requirements. We have learned from our monitoring and testing that some contaminants have been detected but are well within the standards. The EPA has determined that your water is safe at these levels.

Information for people with special health concerns

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

The sources of all 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 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 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 agriculture, urban storm water runoff, and residential uses.
- Organic Chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts 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 in 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. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

For more information about safe drinking water, visit the U.S. EPA at <http://www.epa.gov/safewater>.

PER- AND POLYFLUOROALKYL SUBSTANCES

What are Per- and polyfluoroalkyl substances (PFAS) and why are they harmful?

Per- and polyfluoroalkyl substances (PFAS), sometimes called PFCs, are a group of chemicals that are resistant to heat, water, and oil. 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 of 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. Studies in people who were exposed to PFAS found links between the chemicals and increased cholesterol, changes in the body's hormones and immune system, decreased fertility, and increased risk of certain cancers.

What other ways could I be exposed to PFOA, PFOS and other PFAS compounds?

PFAS are used in many consumer products. They are used in food packaging such as fast food wrappers and microwave popcorn bags; waterproof and stain resistant fabrics such as outdoor clothing, upholstery, and carpeting; nonstick coatings on cookware; and cleaning supplies including some soaps and shampoos. People can be exposed to these chemicals in house dust, indoor and outdoor air, food, and drinking water. There is still uncertainty regarding these routes of exposure and more research is necessary.

How can I stay updated on the situation?

The state has created a website where you can find information about PFAS contamination and efforts to address it in Michigan. The site is updated as more information becomes available. The website address is <http://michigan.gov/pfasresponse>

Monitoring and Reporting to the Department of Environment, Great Lakes, and Energy (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 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, Chippewa County Health Department and the Bayliss Public Library. This report will not be sent to you.

The City's Water Treatment Facility and the Sewer and Water Department Staff continue to work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life, and our children's future.



IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Monitoring Requirements Not Met for Sault Ste. Marie

We are required to monitor your drinking water for specific analytes on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During April 19 to May 2, 2020, and May 17 to May 30, 2020, we did not monitor for water quality parameters¹ (WQP) and, therefore, cannot be sure of the quality of our drinking water during that time. However, this violation **does not** pose a threat to your supply's water.

What should I do? There is nothing you need to do at this time. This is not an emergency. You do not need to boil water or use an alternative source of water at this time. Even though this is not an emergency, as our customers, you have a right to know what happened and what we did to correct the situation.

The table below lists the analytes we did not properly test for, how often we are supposed to sample for this analyte, how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date we will collect follow-up samples.

Analytes	Required sampling frequency	Numbers of samples taken	When all samples should have been taken between	Date samples were taken on
WQP¹	1 sample/every two weeks	0	April 19 to May 2, 2020	May 6, 2020
WQP¹	1 sample/every two weeks	0	May 17 to May 30, 2020	June 3, 2020

What happened? What is being done? We failed to take and analyze samples for all the required parameters within the required sampling periods. Monitoring of WQP is an essential part of a corrosion control treatment program and is used to evaluate the potential aggressiveness of water on plumbing and fixtures. Sampling of WQPs is required to safeguard public health. We will continue to work with the Michigan Department of Environment, Great Lakes, and Energy to remain in compliance.

For more information, please contact Mr. Kirk Tews, 906-632-8981 or 225 East Portage Ave., Sault Ste Marie, Michigan 49783.

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.

This notice is being sent to you by Sault Ste Marie.

¹ WQP are a group of analytes that are indicators of corrosivity. They can include pH, alkalinity, sulfate, and chloride.

CERTIFICATION:

WSSN: 05950

I certify that this water supply has fully complied with the public notification regulations in the Michigan Safe Drinking Water Act, 1976 PA 399, as amended, and the administrative rules.

Signature:  Title: Water Director Date Distributed: 6/8/21

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Monitoring Requirements Not Met for Sault Ste. Marie

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During April 1 to June 30, 2020, we did not complete all monitoring for Total Trihalomethanes and Haloacetic acids and therefore cannot be sure of the quality of our drinking water during that time.

What should I do? There is nothing you need to do at this time. This is not an emergency. You do not need to boil water or use an alternative source of water at this time.

The table below lists the contaminant(s) we did not properly test for during this time, how often we are supposed to sample for the contaminants and how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date we will collect follow-up samples.

Contaminant	Required sampling frequency	Numbers of samples taken	When all samples should have been taken	Date additional samples will be taken
Total Trihalomethanes	2 @ 3 months	0	June 1 to June 30, 2020	September 2020
Haloacetic acids	2 @ 3 months	0	June 1 to June 30, 2020	September 2020

What happened? What is being done? We monitor our distribution system every 3 months for Trihalomethanes and Haloacetic acids. We did take a sample set at our required 2 sites for TTHM and HAA5 in June, but they did not meet thermal compliance requirements and cannot be used for compliance. Sampling can only take place during specific time periods and at specific locations. We have taken steps to be sure to monitor for Trihalomethanes and Haloacetic acids, as required.

For more information, please contact Mr. Kirk Tews, 906-632-8981 or 225 East Portage Ave., Sault Ste Marie, Michigan 49783.

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.

This notice is being sent to you by Sault Ste Marie.

CERTIFICATION:

WSSN: 9590

I certify that this water supply has fully complied with the public notification regulations in the Michigan Safe Drinking Water Act, 1976 PA 399, as amended, and the administrative rules.

Signature:  Title: Water Director Date Distributed: 6/8/21