

2020 Water Quality Report for The City of Marquette

Water Supply Serial Number: 4120

This report covers the drinking water quality for the City of Marquette for the 2020 calendar year. This information is a snapshot of the quality of the water that we provided to you in 2020. 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 Lake Superior. 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, water chemistry and contamination sources. The susceptibility of our source water is moderate.

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. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune systems 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. 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.

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 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.

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
- **ppm:** parts per million or milligrams per liter
- **ppb:** parts per billion or micrograms per liter
- **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Regulated Contaminant	MCL, TT, or MRDL	MCLG or MRDLG	Level Detected	Range	Year Sampled	Violation Yes/No	Typical Source of Contaminant
Fluoride (ppm)	4	4	0.62	0.45 - 0.86	2020	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Sodium ¹ (ppm)	N/A	N/A	8.02	7.00 – 8.80	2020	No	Erosion of natural deposits
TTHM Total Trihalomethanes (ppb)	80	N/A	22.0	14.4 – 29.5	2020	No	Byproduct of drinking water disinfection
HAA5 Haloacetic Acids (ppb)	60	N/A	10.5	0.0 – 11.0	2020	No	Byproduct of drinking water disinfection
Chlorine ² (ppm)	4	4	0.68	.021 – 0.92	2020	No	Water additive used to control microbes
Total Coliform (total number or % of positive samples/month)	TT	N/A	N/A	N/A	2020	No	Naturally present in the environment
E. coli in the distribution system (positive samples)	See E. coli note ³	0	0	N/A	2020	No	Human and animal fecal waste
Inorganic Contaminant Subject to Action Levels (AL)	Action Level	MCLG	Your Water ⁴	Range of Results	Year Sampled	Number of Samples Above AL	Typical Source of Contaminant
Lead (ppb)	15	0	5.00	0.00 – 25.00	2020	2	Lead service lines, corrosion of household plumbing including fittings and fixtures; Erosion of natural deposits
Copper (ppm)	1.3	1.3	0.08	0.00 – 0.09	2020	0	Corrosion of household plumbing systems; Erosion of natural deposits

¹ Sodium is not a regulated contaminant.

² The chlorine "Level Detected" was calculated using a running annual average.

³ E. coli MCL violation occurs if: (1) routine and repeat samples are total coliform-positive and either is E. coli-positive, or (2) the supply fails to take all required repeat samples following E. coli-positive routine sample, or (3) the supply fails to analyze total coliform-positive repeat sample for E. coli.

⁴ Ninety (90) percent of the samples collected were at or below the level reported for our water.

During the monitoring period from 01/01/2020 to 12/31/2020, we did not take the required number of routine samples for Pesticides. This violation did not pose a threat to the quality of the drinking water. The sample was submitted to and received by the lab but was ruined in a lab accident. Notification of the lab accident was not noticed at first and the resample was taken just outside the sampling period, a technical violation. Resample was submitted and analyzed.

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. The City of Marquette 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 have a lead service line it is recommended that you run your water for at 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 or at www.epa.gov/safewater/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 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.

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. Other than the sampling violation, we met all the monitoring and reporting requirements for 2020.

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 the City of Marquette, Utility Billing office, 300 W. Baraga Avenue, and the Marquette Water Filtration Plant, 320 Lakeshore Boulevard, Marquette, Michigan.

We invite public participation in decisions that affect drinking water quality. The Marquette City Commission meets the second and last Monday of each month at 6:00 p.m. in the Commission Chambers located at 300 W. Baraga Avenue, Marquette, Michigan.

For more information about your water, or the contents of this report, please contact Mark O'Neill, Director of Municipal Utilities at (906) 225-4054 or moneill@marquettemi.gov. This report is also posted on the City of Marquette web site, www.marquettemi.gov/municipal-utilities. For more information about safe drinking water, visit the U.S. EPA at www.epa.gov/safewater.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Monitoring Requirements Not Met for Marquette

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 January 1, 2018, to September 30, 2020, we did not monitor for the pesticides test 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 January 1, 2018 to September 30, 2020, how often we are supposed to sample for these contaminants, and how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which follow-up samples were (or will be) taken.

Contaminant	Required sampling frequency	Number of samples taken	When all samples should have been taken	Date additional samples were taken
Pesticides	Every 3 years	1	1/1/2018 to 9/30/2020	12/28/2020

What happened? What is being done? We sample for Pesticide's every three years. In 2020 we did collect a pesticide sample as required on 9/28/2020. Unfortunately, the sample was lost in a lab accident, and we were not notified. As soon as we found out, we resampled 12/28/2020. We will be sure to monitor every 3 years as required.

For more information, please contact Mr. Mark O'Neill at 906-225-4054, 300 West Barage Ave, Marquette, Michigan 49855.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly.

This notice is being sent to you by the City of Marquette.

CERTIFICATION:

WSSN: 04120

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: Mark O'Neill Title: Director of Utilities Date Distributed: July 30, 2021