

2017 Village of Ontonagon Annual Water Quality Report

Is my water safe?

Last year your tap water met all U.S. Environmental Protection Agency [EPA] and State of Michigan drinking water health standards. ** This report is a snap shot of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to EPA and State of Michigan standards. We are committed to providing you with information because informed customers are our best allies.

** While we did not have any violations for your finished water quality, we did have a reporting violation in 2017. On June 2, 2017 water from one individual filter exceeded 1.0 NTU for more than two consecutive measurements taken 15 minutes apart. This data was supposed to be reported to the DEQ within 10 days of the end of the month in which it was collected. We did not report this data on time. Due to an outdated computer system and difficult to access historical filter data we were unable to produce the data on time. We have since retrieved the data and submitted it to the DEQ. This reporting violation along with plant equipment deficiencies caused us to come under an ACO (administrative consent order) from the DEQ. We are currently working with the DEQ on a set timeline to correct these deficiencies, and have a major upgrade of the plant computer and monitoring equipment set to begin this year. These upgrades will help us to further protect the quality of your drinking water.

Where does my water come from?

The Ontonagon Regional Water System gets its water from Lake Superior through an intake tunnel just out from the mouth of the Big Iron River. From here the water is pumped to the water treatment plant located at the White Pine mine site. This surface water is being treated with a chemical called alum to help remove particles that make the water cloudy or turbid. Soda ash aids this removal. It also controls corrosion in the water that could cause lead or copper to leach out of pipes. The water flows through slow mixing chambers, and then goes to sedimentation basins which allow particles to settle out of the water. Next the sand filters remove more particles. Finally, chlorine is added to kill harmful bacteria. The water flows to a clearwell storage tank and is ready to enter the distribution system.

A source water assessment was completed by the Department of Environmental Quality in 2003. The purpose of this assessment is to determine the susceptibility of our source water to potential contamination. The Ontonagon Regional Water Supply source water has been determined to have moderately high susceptibility, based primarily on geologic sensitivity, water chemistry, and contaminant source. If you would like to know more about the report please contact Jeremy Graff at the water plant (906) 885-5631.

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 the 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 (1-800-426-4791).

Some people maybe 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 lesson the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

The sources of drinking water (both tap 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, urban stormwater 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 stormwater runoff and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and 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. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

The following informational statement about lead in drinking water is required for all community water systems to include in their Consumer Confidence Reports. It does not reflect any changes to your water quality.

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. Ontonagon water service 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 the water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information about 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>.

If you have any questions about the quality of your water or the data in this report, please call Jeremy Graff at the water filtration plant at (906) 885-5631. This report will not be mailed to individual water customers. If you would like a personal copy, please contact the water plant or village office (906) 884-2305.

The Ontonagon Village Council meets at 6:00pm on the second and fourth Monday of each Month. Meetings are held at the village office at 315 Quartz Street. Please feel free to come and participate.

Water Quality Data Table

The table below lists all the drinking water contaminants that were detected during the 2017 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 in 2017. 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 of the data is representative of the 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. MCLG's 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 Disinfection Level (MRDL)** : This is the highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbiological contaminants.
- **Maximum Residual Disinfectant Level Goal (MRDLG)** : This is the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs don't reflect the benefit of disinfection for controlling microbiological contaminants.
- **N/A** : Not applicable **N/D** : Not detected at testing limit **ppb** : Parts per billion **ppm** : Parts per million **pCi/L** : Picocuries per liter (a measure of radioactivity) **TT** : Treatment Technique is a specific treatment method required by EPA instead of creating a MCL **NTU** : Measurement of the turbidity, or cloudiness of the water. It is a good indicator of the effectiveness of the filtration system.
- **Action Level** : The concentration of a contaminant which, if exceeded triggers treatment or other requirements for us to comply with.

Regulated Contaminant	MCL	MCLG	Level Detected	Sample Date	Violation Yes/No	Typical source of Contaminant
Flouride (ppm)	4	4	0.03	2017	No	Erosion of natural deposits
Chlorine (ppm)	MRDL=4	MRDLG=4	Range 0.3-1.4 Average 0.8	2017	No	Water additive used to control microbes
Barium (ppm)	2000	2000	20	2003	No	Discharge of drilling wastes; Erosion of natural deposits
Haloacetic Acids (ppb)	60	N/A	Range 21-43 Average 32	2017 Quarterly	No	Byproducts of drinking water disinfection
Total Trihalomethanes (ppb)	80	N/A	Range 37-85 Average 62	2017 Quarterly	No	Byproducts of drinking water disinfection
Nitrate as N (ppm)	10	10	0.38	2017	No	Agricultural Runoff

Microbiological Contaminants	Filter confluence sample point	Level Detected	Sample Date	Violation Yes/No	Typical source of contamination
Turbidity	TT = 1 NTU maximum	Maximum 0.46 NTU	2017	No	Soil runoff
	TT = 95% of samples must be <= 0.3 NTU	99.9% of samples were <= 0.3 NTU	2017	No	

Unregulated Contaminates	Level detected	Sample Date	Typical source of contamination
Sulfate (ppm)	8.3	2017	Erosion of natural deposits
Chloride (ppm)	10	2017	Erosion of natural deposits
Sodium (ppm)	7.7	2017	Erosion of natural deposits

Ⓢ unregulated contaminants are those for which the EPA has not established drinking water standards, monitoring helps determine if new regulations are needed.

Contaminate subject to AL	Action Level	90% of samples <= to this level	Sample Date	Number of samples above AL	Typical source of contamination
Lead (ppb)	15	2	2015	0	Corrosion of household plumbing
Copper (ppm)	1.3	0	2015	0	Corrosion of household plumbing

