

2016 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.

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 clear well 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 John Dupie 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 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 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 John Dupie 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.

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 we detected during the 2016 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 2016. 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. 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 Disinfection Level (MRDL):** means the highest level of disinfectant allowed in the drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- **Maximum Residual Disinfection Level Goal (MRDLG):** means 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 of controlling microbial contaminants.
- **N/A:** Not applicable **ND:** Not detectable at testing limit **ppb:** Parts per billion or micrograms per liter **ppm:** Parts per million or milligrams per liter **pCi/L:** Picocuries per liter (a measure of Radioactivity) **TT:** Treatment Technique.
- **Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that water system must follow.

Regulated Contaminant	MCL	MCLG	Level Detected	Sample Date	Violation Yes/No	Typical Source of Contaminant
Fluoride (ppm)	4	4	N/D	2016	No	Erosion of natural deposits.
Chlorine (ppm)	MRDL=4	MRDLG=4	1.31 avg	2016	No	Water additive used to control Microbes
Barium (ppm)	2000	2000	20	2003	No	Discharge of drilling wastes; Discharge of Metal refineries; Erosion of natural deposits
Haloacetic Acids (ppb)	60	N/A	22-41 30 avg	2016 *Quarterly	No	Byproducts of drinking water disinfection
Total Trihalomethenes (ppb)	80	N/A	34-81 60 avg	2016 *Quarterly	No	Byproducts of drinking water disinfection
Total Organic Carbon (ppm)	N/A	N/A	.67 ppm	2016	No	Byproducts of drinking water disinfection
Nitrate as N (ppm)	10	10	N/D	2016	No	Agricultural runoff
Nitrite as N (ppm)	1	1	N/D	2016	No	Agricultural runoff
Cyanide (ppm)	0.02	N/A	N/D	2016	No	Industrial runoff
Pesticides			N/D	2015	No	Agricultural runoff
Herbicides			N/D	2015	No	Agricultural runoff
Carbamates			N/D	2015	No	Agricultural runoff
Radioactive Contaminants						
Combined Radium (pCi/L)	5	0	N.D.	2016	No	Erosion of natural deposits
Microbiological Contaminants						
Turbidity	TT=5 NTU TT=% of samples <=0.3 NTU		.04 NTU maximum 100% samples <=0.3 NTU	2016	No	Soil runoff
Special Monitoring and Unregulated Contaminant*		Level detected		Sample Date		Typical Source Of Contaminants
Sulfate (ppm)		0		2016		Erosion of natural deposits
Chloride (ppm)		6		2016		Erosion of natural deposits
Sodium(ppm)		8		2016		Erosion of natural deposits
Contaminant subject to AL	Action Level	90% of samples<=this level		Sample Date	Number of samples above AL	Typical source of Contaminant
Lead (ppb)	15	0.01		2015	0	Corrosion of household plumbing; erosion of natural deposits
Copper (ppb)	1300	0.01		2015	0	Corrosion of household plumbing; erosion of natural deposits;

*Unregulated contaminants are those for which the EPA has not established drinking water standards, monitoring helps determine whether regulations are needed.

*We were 3 days late collecting the February 2016 TTHM/HAA5 samples. This was an oversight on our part. These tests are due quarterly in a specific month. This error does not affect the quality of the water. We have completed the sampling since in the proper months.