

# Water Quality Report for Maple Rapids 2019

This report covers the drinking water quality for Maple Rapids for the 2019 calendar year. This information is a snapshot of the quality of the water that we provided to you in 2019. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards.

Your water comes from 2 groundwater wells, each over 177'. 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, well construction, water chemistry and contamination sources. The susceptibility of our source is well # 1 moderately high & well #2 moderately low.

There are no Significant sources of contamination include in our water supply. We are making efforts to protect our sources by the use of our wellhead protection program(approved Aug 8,2003).

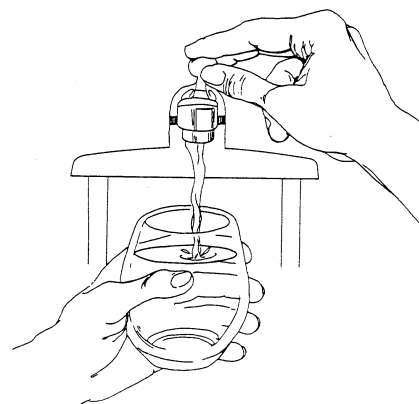
If you would like to know more about the report please contact Michael Townsend at 989-682-4569.

- **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 **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. EPA/CDC 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. Our water comes from 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:
  - T **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
  - T **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.
  - T **Pesticides and herbicides**, which may come from a variety of sources such as agriculture and residential uses.
  - T **Radioactive contaminants**, which are naturally occurring or be the result of oil and gas production and mining activities.
  - T **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.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that 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 provide the same protection for public health.



## Water Quality Data

The table below lists all the drinking water contaminants that we detected during the 2019 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 – December 31, 2019. 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 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):** means 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):** means 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.
- **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).
- **Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Regulated Contaminant	MCL	MCLG	Your Water	Range	Sample Date	Violation Yes / No	Typical Source of Contaminant
Chloride (ppm)		0	12	8.9 - 12		NO	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)			.048				
Arsenic ppm			<.00.1				
Cadmium ppm	2	2	.0021		9-17-19	NO	Discharge of drilling wastes; Discharge of metal refineries; Erosion of natural deposits
Chromium ppm			.0022				
Nickle ppm			002				
Nitrate (ppm)	10	10	<.20		9-17-19	NO	Runoff from fertilizer use, leaking from septic tanks, sewage, Erosion of natural deposits
Nitrite (ppm)							
Fluoride (ppm)	4	4	.15		9-17-19	NO	Erosion of natural deposits. Discharge from fertilizer and aluminum factories.
TTHM - Total Trihalomethanes (ppb)	80	N/A	.7.2 ug/L	3.6 – 7.2	6-14-19	yes	Byproduct of drinking water disinfection
HAA5 Haloacetic Acids (ppb)	60		<.001				
Bromoform (ppm)	0.80		.0017				
Chloroform (ppm)	0.80	N/A			6-14-20	yes	Byproduct of drinking water disinfection
Bromodichloro Methane (ppm)	0.80		.75 ug/L				
Chlorodibromo Methane (ppm)	0.80						
	<b>MRDL</b>	<b>MRDLG</b>					
							Water additive used to control microbes
Chlorine	4	4	.44	.08 - .44	3-11-19	NO	Water additive used to control microbes

(ppm)							
Radioactive Contaminant	MCL	MCLG	Your Water	Range	Sample Date	Violation Yes / No	Typical Source of Contaminant
Alpha emitters (pCi/L)	15	0	-10.0 0.6 pCi/L	.65 .58 -10.0 0.6	9-6-14	NO	Erosion of natural deposits
Combined radium (pCi/L)	5	0	3.3 0.8 pCi/L	2.6 .8 3.3 .8	9-10-14	NO	Erosion of natural deposits
Special Monitoring and Unregulated Contaminant ***			Your Water	Range	Sample Date	Typical Source of Contaminant	
Sodium (ppm)			4.6	4.1 – 4.6	6-14-19	Erosion of natural deposits	
Sulfate ppm			21	21 - 23	6-14-19		
Hardness ppm			320		6-14-19		
Iron ppm			<.10		6-14-19		
17-alpha-ethynylestradiol Ug/L			<.0009		8-12-14		
17-beta-estradiol Ug/L			<.0004		8-12-14		
4-androstene-3,17-dione Ug/L			<.0003		8-12-14		
Equilin Ug/L			<..004		8-12-14		
Estriol Ug/L			<.0008		8-12-14		
Estrone Ug/L			<.002		8-12-14		
Testosterone Ug/L			<.0001		8-12-14		

Contaminant Subject to AL	Action Level	MCLG	90% of Samples ≤ This Level	Sample Date	Number of Samples Above AL	Typical Source of Contaminant
Lead (ppb)	15	0	.0026	6-26-19	NO	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppb)	1300	1300	.064	6-26-19	NO	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

\*\* EPA considers 50 pCi/l to be the level of concern for beta particles.

\*\*\* Unregulated contaminants are those for which EPA has not established drinking water standards. Monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.

Microbial Contaminants	MCL	MCLG	Number Detected	Violation Yes / No	Typical Source of Contaminant
Total Coliform Bacteria	1 positive monthly sample (5% of monthly samples positive)	0	0	NO	Naturally present in the environment
Fecal Coliform and <i>E. coli</i>	Routine and repeat sample total coliform positive, and one is also fecal or <i>E. coli</i> positive	0	0	NO	Human and animal fecal waste

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider. *If present, elevated levels of lead can cause serious health problems, especially for pregnant women & young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Village of Maple Rapids 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 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 <http://www.epa.gov/safewater/lead>.* Additional information is available from the Safe Drinking Water Hotline at 800-426-4791. A detection of a UCMR3 does not represent cause for concern, it itself. The implications of the detection should be judges considering health effects information, which is often still under development or being refined for unregulated contaminants. For more information on occurrence data consult "UCMR 3 Data Considerations, Definitions Reference Concentrations and Summary at <http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/data.cf#ucmr2013>.

Lead & copper results were given to residents of the sampling sites the Consumer Notice of Lead Results was sent to them after EPA deadline. This in no way had a effect on the water safety.

Monitoring and Reporting Requirements: The State and EPA require us to test our water on a regular basis to ensure its safety. Results of regular monitoring are a indicator of wether or not drinking water meets health standards. During June 1,2016 to Jun30, 2016 we did not monitor for Trihalomethanes (TTHM) and Haloacetic (five) (HHA5). They were done on 5-16-16 but cannot be used to meet our monitoring requirement. We cannot be sure of the quality of your drinking water time. What should I do? There is nothing you need to do at this time. YOU DO NOT NEED TO BOIL WATER or use alternative source of water at this time. Even though this is not a emergency, as our customers you have a right to know what happened and what we are doing to correct the situation.

The following list of contaminants we did not properly test for, how often we are supposed to be sample for these contaminants, how many samples supposed to take, how many samples we took, when samples should have taken, and the dates we will collect TTHM 1 every year. O Taken. 1 Required every June 1 – June 30. The same is required for HAA5. What happened? What is being done? We inadvertently collected sample during the wrong time of year. We are making every effort to make sure this doesn't happen again. We will be doing follow up sample.

For more info. Please contact Michael Townsend the operator in charge at 989-682-4569.

Please share this info with all other people who drink this water especially those who may not received this notice directly ( for example people in apartments, nursing homes, schools, and businesses)

This notice is being sent to you by the Village of Maple Rapids.

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 DPW Office This report will not be sent to you.

We invite public participation in decisions that affect drinking water quality. Council meetings are the 1<sup>st</sup> Wednesday of every month at the Maple Rapids Community Center . For more information about your water, or the contents of this report, contact Michael Townsend at 989-682-4569. For more information about safe drinking water, visit the U.S. Environmental Protection Agency at [www.epa.gov/safewater/](http://www.epa.gov/safewater/).