



Village of Mayville

2020 Consumers Annual Water Quality Report

The Consumers Annual Water Quality Report provides important information about your drinking water. This report includes information about the source of the water, related health information, charts summarizing regulatory required testing results, and a table giving explanations of important terms and abbreviations to help in understanding this report. The Village of Mayville Department of Public Works (DPW) is dedicated to providing quality drinking water to the residents of the community. The Village of Mayville DPW is committed to prompt and thorough notification to our consumers if there is any reason for concern about the quality of the drinking water. Information about your drinking water is also available on the Village of Mayville web page at www.villageofmayville.org or by calling the Village of Mayville DPW at 989-843-6621. General drinking water information can also be found on the USEPA web site at www.epa.gov/safewater/.

Water Source

The Village of Mayville currently utilizes two wells located within the Village as a raw water source. The average depth of the wells is 380 ft and the wells draw from the Michigan Formation watershed. The State performed an assessment of our source water in 2003 to determine the susceptibility or the relative potential of contamination. The susceptibility rating is on a six-tiered scale from “very-low” to “high” based primarily on geologic sensitivity, water chemistry and contaminate sources. The Wells scored “Moderately High” on the contamination susceptibility scale. The results of assessment are available at this time. You may get a copy of the source water assessment at the Village of Mayville DPW garage 5950 Fox St.

General Information

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 systems. The Food & Drug Administration (FDA) regulations establish limits for contaminants in bottled water. Water samples are regularly collected and analyzed by DPW staff, or sent to the Michigan Department of Environment, Great Lakes, and Energy (EGLE) Drinking Water Laboratory for analysis. 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 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 (800-426-4791).

General Information (cont)

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 other substances resulting from the presence of animals, or human activity. Contaminants that may be present 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 by-products of industrial processes and petroleum production, and can also, come from gas stations, urban storm water runoff, and septic tanks.
- *Radiological contaminants*, which can be naturally occurring or be the result of oil and gas production and mining activities.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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 lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

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 Village of Mayville 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, 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>. The next round of Lead & Copper sampling for the Village will take place in 2021, during the months of June through September.

The Village of Mayville routinely monitors for constituents in your drinking water according to Federal and State laws. The following table shows the results of our monitoring for the period of January 1st to December 31st, 2020. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.

PFAS/PFOS Testing Information

In 2018, the Michigan Department of Environmental Quality (MDEQ) conducted sampling for Perfluoralkyl and Polyfluoroalkyl Substances (PFAS/PFOS) as a proactive measure to identify where these substances occur to help determine actions necessary to protect public health. Currently, there is no regulatory drinking water standard for any of the PFAS chemicals. However, the U.S. Environmental Protection Agency established a non-regulatory Lifetime Health Advisory (LHA) for PFOA and PFOS of 70 parts per trillion combined, or individually if only one of them is present. All community water supplies with their own source of water were sampled. Sampling was conducted in Mayville on October 11, 2018 and testing was completed on October 22, 2018. Testing consisted of analysis for 14 different chemicals, none of which were detected. The next sampling for PFAS will be conducted in January of 2021.

In the following table you will find many terms and abbreviations to help you better understand the contaminant testing results on the following page.

Common Abbreviations for Understanding Testing Results		
Symbol	Abbreviation for	Definition / Explanation
AL	Action Level	The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements which a water system must follow.
HAA5	Halo-acetic acids	The total of bromoacetic, chloroacetic, dibromoacetic, dichloroacetic, and trichloroacetic acids. Compliance is based on the total.
LRAA	Locational Running Annual Average	Average of the previous 12 months, at a specific location.
MCL	Maximum Contaminant Level	The highest level of a contaminant that is allowed in water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.
MCLG	Maximum Contaminant Level Goal	The of contaminant in drinking water below which there is no known or expected risk to health.
mg/L	Milligrams per Liter	A milligram = 1/1000 gram, and is equal to 1 part per million.
MRDL	Maximum Residual Disinfectant Level	The highest level of disinfectant allowed in drinking water.
MRDLG	Maximum Residual Disinfectant Level Goal	The level of drinking water disinfectant below which there is no known or expected risk to health.
n/a	Not applicable	
ND	Not Detected	
ppb	Parts per Billion	One in one billion and is equal to 1 microgram per liter.
ppm	Parts per Million	One in one million and is equal to 1 milligram per liter.
RAA	Running Annual Average	Average based on the previous 12 months of results.
TTHM	Total Trihalomethanes	Total Trihalomethanes is the sum of chloroform, bromodichloromethane, dibromochloromethane, and bromoform. Compliance is based on the total.
ug/L	Micrograms per Liter	A microgram = 1/1,000,000 gram and is equal to 1 part per billion.

Regulated Contaminant Testing Results								
Regulated Contaminant	Test Date	Units of Measure	MCL	MCLG	Highest Level Detected	Range of Detection	Violation Y/N	Major Source of Contamination
Inorganic Chemicals – Monitored at the Water Treatment Plant								
Barium	08/14/17	ppm	2	2	0.10	n/a	N	Discharge of drilling wastes; Discharge of metal refineries; Erosion of natural deposits.
Fluoride	05/14/20	ppm	4	4	0.51	n/a	N	Erosion of natural deposits
Nitrate	05/14/20	ppm	10	10	ND	n/a	N	Erosion of natural deposits, runoff from fertilizer use; Leaching from septic fields
Disinfectant By-Product Monitoring in Distribution system								
Regulated Contaminant	Test Date	Units of Measure	MCL	MCLG	Level Detected (LRAA)	Range of Detection	Violation Y/N	Major Source of Contamination
TTHM's	09/30/20	ppb	80	n/a	8.2	n/a	N	By-product of drinking water disinfection
HAA5's	09/30/20	ppb	60	n/a	4	n/a	N	By-product of drinking water disinfection
Disinfectant (Total Chlorine Residual)	1/1/20 through 12/31/20	ppm	MRDLG 4	MRDL 4	1.0	0.2 – 1.0	N	Water additive used to control microbes.
Microbiological Contaminants – Monthly Monitoring in Distribution System								
Regulated Contaminant	MCLG	MCL		Highest Level Detected	Violation Y/N	Major Source of Contamination		
Total Coliform Bacteria	0	One routine positive sample and one positive follow up sample		0	N	Naturally present in the environment		
<i>E. coli</i> or Fecal coliform bacteria	0	A routine sample and a repeat sample are total coliform positive , and one is also Fecal or <i>E. coli</i> positive		0	N	Human and animal waste		
Lead & Copper Monitoring – at Consumer Tap								
Regulated Contaminant	Test Date	Units of Measure	Number of samples	Action Level (AL)	Number of samples exceeding AL	90 th Percentile	Violation Y/N	Major Source of Contamination
Lead	June-Sept. 2018	ppb	10	15	0	4	N	Corrosion of household plumbing; Erosion of natural deposits
Copper	June-Sept. 2018	ppb	10	1300	0	280	N	Corrosion of household plumbing; Erosion of natural deposits
Unregulated Contaminant Testing Results								
Contaminant	Test Date	Units of Measure	MCL	MCLG	Highest Level Detected	Range of Detection	Violation Y/N	Major Source of Contamination
Sodium	05/14/20	ppm	n/a	n/a	7.7	n/a	N	Erosion of natural deposits
Sulfate	05/14/20	ppm	n/a	n/a	40	n/a	N	Erosion of natural deposits
Total Hardness	05/14/20	ppm	n/a	n/a	307	n/a	N	Erosion of natural deposits

Arsenic samples are collected and tested monthly. In 2020, arsenic was not detected in any of the samples collected.

Monitoring Violations

The Village of Mayville received two violation notices from EGLE in 2020 for not meeting sample monitoring requirements. The first occasion, a sample was not collected for complete metals prior to 9/30/2020. The second occasion, a coliform bacteria sample was not collected in the month of November 2020. The violations were the result of a transition in the DPW and staff with limited experience filling in for the Director of Public Works vacancy. The Village has corrected the situation by providing additional monitoring training for the new staff. Not collecting the samples did not constitute an emergency, but as our customer you have the right to know what happened, and what we did to correct the situation. The official violation public notices are listed below.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Monitoring Requirements Not Met for the Village of Mayville

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 2020, we did not monitor for complete metals, 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 contaminants we did not properly test for, how often we are supposed to sample for these contaminants, 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	Number of samples taken	When all samples should have been taken	Date samples will be taken by
Complete Metals	1 @ 36 months	0	01/01/2018 to 12/31/2020	09/30/2021

What happened? What is being done? We inadvertently missed taking a sample during the required time period. We are making every effort to assure this does not happen again. For more information, please contact Mayville DPW at 989-843-6621, 5950 Fox Street, Mayville, Michigan 48744.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Monitoring Requirements Not Met for the Village of Mayville

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 your drinking water meets health standards. During November 1 to November 30, 2020, we did not monitor or test for total coliform bacteria and, therefore, cannot be sure of the quality of your 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. 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 contaminant we did not properly test for, how often we are supposed to sample for this contaminant, how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date we collected follow-up samples.

Contaminant	Required sampling frequency	Number of samples taken	When all samples should have been taken	Date additional samples were taken
Total Coliform Bacteria	1 sample per month	0	November 1, 2020 to November 30, 2020	December 14, 2020

What happened? What is being done?

We inadvertently missed taking a sample within this required sampling period. We are making every effort to ensure this does not happen again. We returned to compliance on December 14, 2020.