

2016 Annual Drinking Water Quality Report

The City of Mt. Morris is pleased to report that our drinking water meets all state and federal requirements

How to obtain additional information.

If you have questions about this report or concerning the Mt. Morris Water System, please contact:

- Vicki Flshell
City Manager
810-686-2160
- Paul Zumbach,
DPW Superintendent
810-686-8380

If you need information on billing practices, rates, etc., please contact:

- Megan Peel
Water Clerk
810-686-2160

The City wants our valued customers to be informed about their water utility. If you want to learn more about the Mt. Morris water system or express an opinion on the system, please attend any of our regularly scheduled City Council meetings. The meetings are normally held at 7:00 p.m. each second and fourth Monday of the month at City Hall, 11649 N. Saginaw, Mt. Morris, MI 48458.

The City of Mt. Morris is proud to present to the citizens our 2016 Water Quality Report. In complying with recent legislation, the City developed this report to provide you with valuable information about your drinking water. From this report, you will realize what the City has always known— *your water supply meets all state and federal requirements.* The City of Mt. Morris purchases its water from the Genesee County Water and Sewer System. Your source water comes from the lower Lake Huron watershed. The watershed includes numerous short, seasonal streams that drain to Lake Huron. The MDEQ in partnership with the U.S. Geological Survey, the Detroit Water and Sewage Department, and the Michigan Public Health Institute performed a source water assessment in 2004 to determine the susceptibility of potential contamination. The susceptibility rating is a seven-tiered scale ranging from “very low” to “very high” based primarily on geologic sensitivity, water chemistry, and contaminant sources. The Lake Huron source water treatment plant has historically provided satisfactory treatment of the source water to meet drinking water standards.

What is in the water?

The City is pleased to report that during the past year, the water delivered to your home or business complied with, or did better than, all state and federal drinking water requirements. For your information, the City of Detroit Water and Sewer Department has compiled the lists of substances detected in the water supply. Although all of the substances listed below are under the Maximum Containment Level

(MCL) set by the U.S.EPA, and therefore not expected to cause any health risks, we feel it is important that you know exactly what was detected and how much of the substance was present in the water.

Contaminants that may be present in source water:

- 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 may 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, EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Substances expected to be in 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.

Substances that may be present in source water include microbial contaminants, such as viruses and bacteria; inorganic contaminants,

such as salts and metals; pesticides and herbicides; organic chemical contaminants; and, radioactive contaminants. 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.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 microbial contaminants are available from the Safe Drinking Water Hotline (800426-4791).

How will I know if there is a problem with the water?

We are committed to providing you safe, reliable and healthy water. We will update this report annually, and will also keep you informed of any problems that may occur

throughout the year, as they happen. State and Federal drinking water regulations require us to notify you within 72 hours in situations with significant potential to have

serious adverse effects on human health as a result of short-term exposure. The U.S.EPA is considering decreasing that time frame to 24 hours.

2016 Regulated Detected Contaminants Tables

Contaminant	Test Date	Units	Health Goal MCLG	Allowed Level PPB	Level Detected	Range		Major Sources in Drinking Water
						Low	High	
Inorganic Chemicals— Annual Monitoring at Plant Finished Water Tap								
Fluoride (ppm)	05/10/2016	ppm	4	4	0.50	N/A	No	Erosion of natural deposits; Water additive, which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate	05/10/2016	ppm	10	10	0.46	N/A	No	Runoff from fertilizer use; Leaching from septic tanks; Sewage; Erosion of natural deposits
Disinfection By-Products— Quarterly Monitoring in Distribution System								
Haloacetic Acids (HAA5)	12/21/2016	ppb	N/A	60	0.024	N/A	N/A	By-product of drinking water disinfection
Total Trihalomethanes	08/10/2016	ppb	N/A	80	0.0478	N/A	N/A	By-Product of Drinking Water Chlorination.
Total Trihalomethanes is a sum of chloroform, bromodichloromethane, dibromochloromethane, and bromoform. Compliance is based on the total.								
Turbidity — Monitored every 4 hours at Plant Finished Water Tap								
Highest Single Measurement Cannot exceed 1NTU		Lowest Monthly % of Samples Meeting Turbidity Limit of 0.3 NTU (minimum 95%)						Soil Runoff
0.28 NTU		100%						
Turbidity is a measure of the cloudiness of water. We monitor it because it is a good indicator of the effectiveness of our								

Lead and Copper Monitoring at Customers' Tap (testing done once every three years)

Contaminant	Test Date	Units	Health Goal MCLG	Action Level AL	90th Percentile Value*	Number of Samples over AL	Major Sources in Drinking Water
Lead	2014	ppb	0	15	0	0	Corrosion of household plumbing system; erosion of natural deposits.
Copper	2014	ppm	1.3	1.3	0	0	Corrosion of household plumbing system; Erosion of natural deposits; Leaching from wood preservatives

*The 90th percentile value means 90 percent of the homes tested have lead and copper levels below the given 90th percentile value. If the 90th percentile value is above the AL additional requirements must be met.

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 Mt. Morris 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 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your 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>.

**Lake Huron Water Treatment Plant
2016 Unregulated Detected Contaminants Tables**

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

Symbol	Abbreviation for	Definition/Explanation
MCLG	Maximum Contaminant Level Goal	The level of contaminant in drinking water which there is no known or expected risk to health.
MCL	Maximum Contaminant Level	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.
MRDLG	Maximum Residual Disinfectant Level Goal	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.
MRDL	Maximum Residual Disinfectant Level	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.

Contaminant	Test Date	Units	*Future MCLG	*Future MCL	Average Level Detected	Low	High
Sodium	2016	ppm	N/A	N/A	4.0	N/A	N/A

2016 Microbiological Contaminants - Monthly Monitoring in Distribution System

Regulated Contaminant	MCLG	MCL	Highest Number Detected	Violation Yes/no	Major Sources in Drinking Water
Total Coliform Bacteria	0	> 1 positive monthly sample (>5.0% of monthly sample positive)	0	NO	Naturally present in the environment
Fecal Coliform And E. coli	0	Routine and repeat sample total	0	NO	Human and animal fecal waste

Symbol	Abbreviation for	Definition/Explanation
ppb	Parts per billion (one in one billion)	The ppb is equivalent to micrograms per liter. A microgram = 1/1000 milligram.
ppm	Parts per million (one in one million)	The ppm is equivalent to milligrams per liter. A milligram = 1/1000 gram.
NTU	Nephelometric Turbidity Units	Measures the cloudiness of water.
TT	Treatment Technique	A required process intended to reduce the level of a contaminant in drinking water.
AL	Action Level	The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements which a water system must follow.

Monitoring and reporting of compliance data violations

Our water system failed to conduct monitoring for complete metal* on time. We are required to sample every nine years. Due to an oversight, we took the sample 3 months late. Although the late sample was below the MCL we are uncertain whether or not there may be any adverse health risks associated with this violation. We have recently implemented a new monitoring scheduling system which should prevent this type of oversight in the future.

For more information, please contact Paul Zumbach, DPW Superintendent, at 810-686-8380

*Metals are tested by collecting one sample and testing that sample for antimony, barium, beryllium, cadmium, chromium, mercury, nickel, selenium, and thallium.

For the Monitoring Period Calendar Year 2016, There were No Contaminants Above the MCL Detected in the Mt. Morris Water Supply

Drinking water, including bottled water, may be reasonably 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 (800-426-4781).

Drinking Water Improvement Projects

The City of Mt. Morris has a continuing program of improving its water system. The City Council is studying the reports on the water system and considering which projects should be implemented from the water master plan.

Working hard for you.

Under the Safe Drinking Water Act (SDWA), EPA is responsible for setting national limits for hundreds of substances in drinking water and also specifies various treatments that water systems must use to remove these substances. Similarly, FDA regulations

establish limits for contaminants in bottled water, which must provide the same protection for public health. Each system continually monitors for these substances and reports directly to the EPA if they were detected in the drinking water. The EPA uses this data to ensure that consumers are receiving clean water and verifying that states are enforcing the laws that regulate drinking water.

The publication of this report conforms to the new federal regulation under SDWA requiring water utilities to provide detailed water quality information to their customers annually. Individual copies of this report will not be mailed but if you would like a copy of this report they can be obtained from the Mt. Morris City Hall, 11649 N. Saginaw, Mt. Morris, MI 48458. We are committed to providing you with this information about your water supply, because customers who are well informed are our best allies in supporting improvements necessary to maintain the highest drinking water standards.

<p>CITY OF MT. MORRIS 11649 N. Saginaw Street Mt. Morris, MI 48458-2092 Phone: 810-686-2160 Fax: 810-686-7330</p>
<p><i>Duane Dunkel, Mayor</i></p> <p><i>Tonya Davis, Mayor Pro-Tem</i></p> <p><i>Jeff Roth, Council Member</i></p> <p><i>Randy Michaels, Council Member</i></p> <p><i>Dan Davis, Council Member</i></p> <p><i>Daniel Williams, Council Member</i></p> <p><i>James Young, Council Member</i></p>