

2024 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 concerning the City of Mt. Morris Water System, please contact:

Spencer Lewis,

City Manager

810-686-2160

- Paul Zumbach,

DPW Superintendent

810-686-8380

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

- Cheyanne Anderson

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 7:15 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 2024 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 purchased its water from the Genesee County Water and Waste System. Your source water for GCDC-WWS is the Lake Huron watershed. The watershed includes numerous short, seasonal streams that drain to Lake Huron. EGLE 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 Genesee County/Lake Huron source water treatment plant has historically provided satisfactory treatment of the source water to meet drinking water standards.

The Bottom Line

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, GCDC-WWS has compiled the lists of substances detected in the water supply. Although all 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, may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- Inorganic contaminants, such as salts and metals, can naturally occur 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, 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.

To ensure that tap water is safe to drink, EPA prescribes regulations, which limit the number 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 some small amounts of 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. Immuno-compromised people such as people with cancer undergoing chemotherapy, people who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk for 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)**

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

We are committed to providing you with 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 because of short-term exposure. The U.S. EPA is considering decreasing that time frame to 24 hours.

2024 Regulated Detected Contaminant Tables

| Inorganic Chemicals – Monitoring at the Plant Finished Water Tap | | | | | | | | |
|--|-----------|------|------------------|-------------------|------------------------|--------------------|------------------|---|
| Regulated Contaminant | Test Date | Unit | Health Goal MCLG | Allowed Level MCL | Highest Level Detected | Range of Detection | Violation yes/no | Major Sources in Drinking Water |
| Fluoride | Daily | ppm | 4 | 4 | 0.73 | 0.310-00.73 | no | Erosion of natural deposits; Water additive, which promotes strong teeth; Discharge from fertilizer and aluminum factories. |
| Arsenic | 2024 | ppb | 0 | 10 | ND | ND0-00.54 | no | Erosion of natural deposits; runoff from orchard; runoff from glass and electronics production wastes. |
| Barium | 2024 | ppm | 2 | 2 | 0.012 | 0.012-0.014 | no | Erosion of natural deposits; discharge of metal refineries; discharge of drilling wastes. |
| Nitrate (as Nitrogen) | 2024 | ppm | 10 | 10 | ND | ND -.05 | No | Run off from fertilizer use, leaching from septic, systems, sewage, and erosion of natural deposits |

| Disinfection By-Products – Monitoring in Distribution System, Stage 2 Disinfection By-Products | | | | | | | | |
|--|--------------|------|-------------------------|--------------------------|-----------------|------------------------------------|---------------------|--|
| REGULATED CONTAMINANT | Test Date | Unit | Health Goal MCLG | Allowed Level MCL | Highest LRAA | RANGE OF DETECTION | VIOLATION yes/no | MAJOR SOURCES IN DRINKING WATER |
| Total Trihalomethanes (TTHM) | 2024 | PPB | N/A | 80 | 53.8 | 150-053.8 | NO | By-product of drinking water disinfection |
| Haloacetic Acids (HAA5) | 2024 | PPB | N/A | 60 | 34.6 | 0-34.6 | NO | By-product of drinking water disinfection |
| Disinfectant Residuals – Monitoring in Distribution System by Treatment Plant | | | | | | | | |
| REGULATED CONTAMINANT | Test Date | Unit | Health Goal MRDLG | Allowed Level MRDL | Highest RAA | QUARTERLY RANGE OF DETECTION | VIOLATION YES/NO | MAJOR SOURCES IN DRINKING WATER |
| Total Chlorine Residual | 2024 | ppm | 4 | 4 | .96 | .19-.96 | no | Water additive used to control microbes |

| 2024 Turbidity – Monitored every 4 hours at Plant Finished Water | | | | | |
|--|--|---|---------------------------------|---------------------|--------------------------------------|
| HIGHEST SINGLE MEASUREMENT CANNOT EXCEED 1 NTU | LOWEST MONTHLY % OF SAMPLES MEETING TURBIDITY LIMIT OF 0.3 NTU (MINIMUM 95%) | VIOLATION YES/NO | MAJOR SOURCES IN DRINKING WATER | | |
| 0.07 | 100 % | no | SOIL RUNOFF | | |
| TURBIDITY IS A MEASURE OF THE CLOUDINESS OF WATER. WE MONITOR IT BECAUSE IT IS A GOOD INDICATOR OF THE EFFECTIVENESS OF OUR FILTRATION SYSTEM. | | | | | |
| 2024 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, or Presence of Coliform bacteria > 5% of monthly samples | 0 | NO | Naturally present in the environment |
| E. coli Bacteria | 0 | A ROUTINE SAMPLE AND A REPEAT SAMPLE ARE TOTAL COLIFORM POSITIVE, AND ONE IS ALSO FECAL OR E.COLI POSITIVE. | 0 | No | Human waste and animal fecal waste. |

² E. coli MCL violation occurs if: (1) routine and repeat samples are total coliform-positive and either is E. coli-positive, or (2) the supply fails to take all required repeat samples following E. coli-positive routine sample, or (3) the supply fails to analyze total coliform-positive repeat sample for E. coli

| Inorganic Contaminant Subject to Action Levels (AL) | Action Level | MCLG | Your Water ¹ | Range of Results | Year Sampled | Number of Samples Above AL | Typical Source of Contaminant |
|---|--------------|------|-------------------------|------------------|--------------|----------------------------|--|
| Lead (ppb) | 15 | 0 | 1 | 0-2 | 2024 | 0 | Lead service lines, corrosion of household plumbing including fittings and fixtures; Erosion of natural deposits |
| Copper (ppm) | 1.3 | 1.3 | 0 | 0-0.1 | 2024 | 0 | Corrosion of household plumbing systems; Erosion of natural deposits |

| Regulated Contaminant | Treatment Technique | Typical Source of Contaminant |
|----------------------------|---|-------------------------------|
| Total Organic Carbon (ppm) | The Total Organic Carbon (TOC) removal ratio is calculated as the ratio between the actual TOC removal and the TOC removal requirements. The TOC was measured each month and because the level was low, there is no TOC removal requirement | Erosion of natural deposits |

| Radionuclides 2019 | | | | | | | |
|-----------------------------|-----------|-------|------------------|---------------|----------------|------------------|---------------------------------|
| Regulated contaminant | Test date | Unit | Health Goal MCLG | Allowed Level | Level detected | Violation Yes/no | Major Sources in Drinking water |
| Combined Radium 226 and 228 | 2/13/19 | pCi/L | 0 | 5 | 1.1 ± 0.50 | no | Erosion of natural deposits |
| Gross Alpha | 2/13/19 | pCi/L | 0 | 15 | 2.0 ± 1.0 | no | Erosion of natural deposits |

2024 Unregulated Detected Contaminant

| Contaminant | MCLG | MCL | LEVEL DETECTED | SOURCE OF CONTAMINATION |
|--------------|------|-----|----------------|---|
| Sodium (ppm) | N/A | N/A | 8.6 | Erosion of natural deposits |
| Magnesium | N/A | N/A | 7.5 | Erosion of natural deposits |
| Sulfate | N/A | N/A | 22 | Run Off /leaching from natural deposits |

Additional Sampling results.

Every 5 years the United States Environmental Protections Agency (USEPA) establishes 30 unregulated contaminants for additional sampling. Unregulated contaminants are those for which the USEPA has not established drinking water standards. As required by the USEPA, Genesee County Drain Commissioner Division of Water & Waste (GCDC-WWS) Services began testing for several unregulated contaminants in 2013 and will continue additional sampling in 2019 and 2023. The purpose of unregulated contaminants monitoring is to assist USEPA in determining the occurrence of unregulated contaminants in drinking water and whether future

regulation is warranted. Before USEPA regulates contaminants, it considers adverse health effects, the occurrence of the contaminant in drinking water, and whether the regulation would reduce health risk. The following tables list the unregulated contaminants detected during the **2019** calendar year.

Unregulated Contaminants– Monitored at the Primary Source (AM1: metals, pesticides, alcohols, SVOCs) – tested for in 2019

| Contaminant | Units | Results | Source |
|----------------------|-------|-----------|--|
| Bromide | ppm | ND - 23.2 | Naturally present in fossil fuel, coal, and shale. |
| Total Organic Carbon | ppm | 2 - 2.4 | Erosion of natural deposits. |

Unregulated Contaminants– Monitored at the Treatment Plant and Entry Point into the System – tested for in 2019

| Contaminant | Units | Range | Source |
|------------------|-------|------------|---------------------------------------|
| Manganese, total | ug/l | 2.1 – 10.6 | Naturally present in the environment. |

Unregulated Contaminants– Monitored in the Distribution System – tested for in 2019

| Contaminant | Units | Range | Source |
|-----------------------------------|-------|------------|--|
| Dichloroacetic acid (DCAA) | ug/l | 1.2 -13.2 | By-product of drinking water disinfection. |
| Trichloroacetic acid (TCAA) | ug/l | 1.6 – 16.5 | By-product of drinking water disinfection. |
| Bromo chloroacetic acid (BCAA) | ug/l | 0.3 – 3.9 | By-product of drinking water disinfection. |
| Bromo dichloroacetic acid (BDCAA) | ug/l | ND – 3.1 | By-product of drinking water disinfection. |
| Dibromo acetic acid (DBAA) | ug/l | ND – 0.8 | By-product of drinking water disinfection. |
| ChloroDiBromoAcetic acid | ug/l | ND – 0.6 | By-product of drinking water disinfection. |
| HAA5 Group | ug/l | 2.8 – 22.6 | By-product of drinking water disinfection. |
| HAA6Br Group | ug/l | 0.6 – 8.1 | By-product of drinking water disinfection. |
| HAA9 Group | ug/l | 3.7 – 29.9 | By-product of drinking water disinfection. |

Tested for but not Detected Unregulated Contaminants:

Germanium, Chlorpyrifos, Dimethipin, Ethoprop, alpha-Hexachlorocyclohexane, Oxyfluorfen, Total Permethrin, Profenophos, Tebuconazole, Tribufos, butylated hydroxy anisole, o-toluidine, Quinoline, 1-butanol, 2-methoxyethanol, 2-propen-1-ol, MonoChloroacetic acid, MonoBromoAcetic acid, TriBromoAcetic acid, PFAS/PFOS

During the **2020** calendar year, the Unregulated Contaminants that were sampled were not detected.

Tested for but not Detected Unregulated Contaminants:

Anatoxine-a, Cylindrospermopsin, Total Microcystins, PFAS/PFOS

Per- and Polyfluoroalkyl Substances (PFAS):

Per- and polyfluoroalkyl substances (PFAS), an area group of chemicals that are resistant to heat, water, and oil. PFAS have been classified by the United States Environmental Protection Agency (US EPA) as an emerging contaminant on the national landscape. For decades, they have been used in many industrial applications and consumer products such as carpeting, waterproof clothing, upholstery, food paper wrappings, fire-fighting foam, and metal plating. They are still used today. PFAS has been found at low levels both in the environment and blood samples from the general US population.

These chemicals are persistent, which means they do not break down in the environment. They also accumulate, meaning the amount builds up over time in the blood and organs. Although our understanding of these emerging contaminants is constantly evolving, elevated levels of PFAS have the potential to cause increased cholesterol, changes in the body's hormones and immune system, decreased fertility, and increased risk of certain cancers. Links to these health effects in humans are supported by epidemiologic studies and by laboratory studies in animal models.

Are there health advisory levels?

The US EPA has not established enforceable drinking water standards, called maximum contaminant levels, for these chemicals. However, the US EPA has set a lifetime health advisory (LHA) level in drinking water for two PFAS: perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS). The PFOA and PFOS LHA are the level or amount *below which no harm is expected from these chemicals*. The LHA level is 70 parts per trillion (ppt) for PFOA and 70 ppt for PFOS. If both PFOA and PFOS are present, the LHA is 70 ppt for the combined concentration. We are happy to report that the city of Mt Morris took part in EPA, UCMR, PFAS testing program, in 2023 and no contamination was found.

The amount of PFOA and PFOS combined in the sample collected from our raw water intake was ND (Non-Detectable), for these two chemicals. There are other PFAS compounds that currently do not have LHA level. For information on PFOA, PFOS, and other PFAS, including possible health outcomes, you may visit these websites: <https://www.epa.gov/pfas>; <https://www.atsdr.cdc.gov/pfas/>; or <http://www.michigan.gov/pfasresponse>.

If any resident has additional questions regarding this issue, the State of Michigan Environmental Assistance Center can be contacted at 800-662-9278. Representatives may be reached to assist with your questions Monday through Friday, 8:00 AM to 4:30 PM.

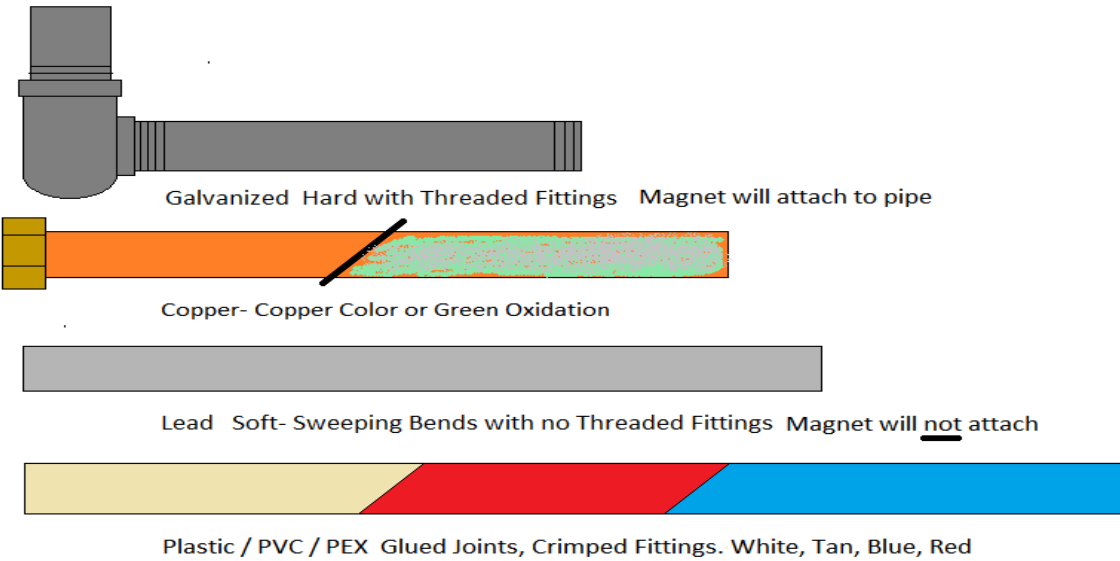
Information about lead: Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula – fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. The City of MT. Morris is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formulas, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for at

least 5 minutes to flush water from both your home plumbing and the lead service line. If you are concerned about lead in your water and wish to have your water tested, contact The City of MT. Morris at (810)686-2160 for available resources. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <https://www.epa.gov/safewater/lead>.

There is no safe level of lead in drinking water. Exposure to lead in drinking water can cause serious effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of people who are exposed to lead before and during pregnancy can have an increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney, or nervous system problems.

Our water supply has 63 lead service lines and 148 service lines of unknown material out of a total of 1147 service lines. If you would like to know more about this report, please contact: The City of MT. Morris office, 11649 N. Saginaw ST, MT. Morris Michigan 48458 at (810)686-2160, or visit the city website www.Cityofmtmorris.org. Monitoring and Reporting to the Department of Environment, Great Lakes, and Energy (EGLE) Requirements: The State of Michigan and the U.S. EPA require us to test our water on a regular basis to ensure its safety. We met all the monitoring and reporting requirements for 2024.

Customers are urged to help identify the type of plumbing materials in their home. Please contact us at dpw@cityofmtmorris.org for more information, or feel free to attend one of our city council meetings which are held at the city office every second and fourth Monday of the month at approximately 7:00 P.M.



Regulated Contaminants Continued

How do I read this Chart?

It's easy! Our water is tested to ensure that it is safe and healthy. These Tables are based on tests conducted by (**COMMUNITY NAME**) within the last five (5) calendar years. We conduct many tests throughout the year, however, only tests that show the presence of a contaminant are shown here. The table on this page is a key to the terms used in the following table. Sources of Contaminants show where this substance usually originates.

Key to Detected Contaminants Table

| Symbol | Non-Abbreviated Symbol or Term | 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 | HAA5 is the total of bromoacetic, chloroacetic, dibromo acetic, dichloroacetic, and trichloroacetic acids. Compliance is based on the total. |
| LRAA | Locational Running Annual Average | The average of analytical results for samples at a particular monitoring location during the previous four quarters. |
| MCL | Maximum Contaminant Level | The highest level of contamination is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. |
| MCLG | Maximum Contaminant Level Goal | The level of contamination in drinking water is below which there is no known or expected risk to health. <i>MCLG's allows for a margin of safety.</i> |
| MRDL | Maximum Residual Disinfectant Level | The highest level of disinfectant is allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants. |
| MRDLG | Maximum Residual Disinfectant Level Goal | The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants. |
| n/a | not applicable | Does not apply. |
| ND | Not Detected | The result is not detectable at or below the laboratory detection level. |
| NTU | Nephelometric Turbidity Units | Measures the cloudiness of water. |
| pCi/L | Picocuries Per Liter | A measure of radioactivity |
| ppb | Parts Per Billion (one in one billion) | The ppb is equivalent to micrograms per liter. A microgram = 1/1000 milligram. |
| ug/L | Micrograms per liter | A microgram = 1/1000 milligrams. 1 microgram per liter is equal to 1 part per billion (ppb). |
| ppm | Parts Per Million (one in one million) | The ppm is equivalent to milligrams per liter. A milligram = 1/1000 gram. |
| RAA | Running Annual Average | The average of analytical results for all samples taken during the previous twelve months. |
| TT | Treatment Technique | The required process is intended to reduce the level of contaminants in drinking water. |
| TTHM | Total Trihalomethanes | Total Trihalomethanes is the sum of chloroform, bromodichloromethane, dibromochloromethane and bromoform. Compliance is based on the total. |
| °C | Celsius | A scale of temperature in which water freezes at 0° and boils at 100° under standard conditions. |
| > | Greater than | Mathematical symbol that denotes a value "greater than" another value. |
| | 90 th Percentile Value | The concentration of lead or copper in tap water exceeded by 10 percent of the sites sampled during a monitoring period. |

For the Monitoring Period Calendar Year 2024, 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 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 at (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 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 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.

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