CITY OF MONTROSE

139 S. Saginaw Street
Montrose, MI 48457

Est. 1899

Phone (810) 639-6168
Fax (810) 639-6125

2022 CONSUMER CONFIDENCE REPORT

CITY OF MONTROSE

May 16, 2023

Dear City Water Consumers:

It is my privilege to report the City of Montrose 2022 Consumer Confidence Report. The Michigan Department of Environmental, Great Lakes, and Energy (EGLE) along with the Safe Drinking Water Act (SOWA) requires community water systems to supply consumers with an annual report. Inside this report, you will find information regarding source, treatment, sample collecting, and other important information regarding your drinking water. This report covers the period from January 1-December 31, 2022. City council meetings are held at the City office 139 S. Saginaw St the third Thursday of each month at 7pm.

Drinking water is important to our community and region. The City of Montrose, The Genesee County Drain Commission Water and Waste Services (GCDC-WWS), and the Great Lakes Water Authority {GLWA) are committed to meeting state and federal water quality standards, including the Lead and Copper Rule (LCR). With the Great Lakes as our water source and proven treatment technologies, the GLWA consistently delivers safe drinking water to our community. The City of Montrose operates the system of water mains that deliver this water to your home's service line. This year's Water Quality Report highlights the performance of the GLWA and the City of Montrose water professionals in delivering some of the nation's best drinking water. Together, we remain committed to protecting public health and maintaining open communication with the public regarding our drinking water.

Thank you,

Sam Spence - Department of Publics Works Supervisor

Lead and Copper for 2022

Safe drinking water is a shared responsibility. The water that the Great Lakes Water Authority (GLWA) delivers to our community does not contain lead. Lead can leach into drinking water through home plumbing fixtures, and in some cases, a customer service lines. Corrosion control reduces the risk of lead and copper from leaching into your water. Orthophosphates are added during the treatment process as a corrosion control method to create a protective coating in service pipes throughout the system, including your home or business. The City of Montrose performs required lead and copper sampling and testing in our community. Water consumers have the responsibility to maintain the plumbing in their homes and businesses, and we can take steps to limit their exposure to lead. The City of Montrose successfully tested 20 residents.

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 Montrose 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 (800-426-4791} or at http://www.epa.gov/safewater/lead.

Estimated Number of Service Connections by Service Line Material

A service line includes any section of pipe from the water main to the building plumbing at the first shut-off valve inside the building, or 18 inches inside the building, whichever is shorter.

Any Portion Contains Lead	Contains Galvanized Previously Connected to Lead*	Unknown			Contains neither Lead, nor Galvanized Previously Connected to Lead	Total**
		Likely Contains Lead	Likely Does Not Contain Lead	Material(s) Unknown		
			657			657

Water Source

Your source water comes from the lower Lake Huron watershed. The watershed includes numerous short, seasonal streams that drain to Lake Huron. The Michigan Department of Environmental Quality in partnership with the U.S. Geological Survey, the Detroit Water and Sewerage 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 source. The Lake Huron source water intake is categorized as having a moderately low susceptibility to potential contamination sources.

In 2015, GLWA received a grant from the Michigan Department of Environmental Quality to develop a source water protection program for the Lake Huron water treatment plant intake. The program includes seven elements that include the following; roles and duties of government units and water supply agencies, delineation of a source water protection plan, identification of potential of source water protection area, management approaches for protection, contingency plans, siting of new sources and public participation and education. The water supplier changed in November 2017. If you would like to know more information about the Source Water Assessment report please, contact your water department at (810-639-6168).

In the summer of 2021 the City of Montrose, in conjunction with Montrose Township and Genesee County Drain Commission Water and Waste Services, completed a secondary water feed supplying water to both City and Township. This allows for more security and redundancy for our water system.

The City of Montrose and the Great Lakes Water Authority are committed to safeguarding our water supply and delivering the highest quality drinking water to protect public health. Please contact us with any questions or concerns about your water.

Thank you,

Sam Spence

DPW Supervisor-City of Montrose

How do I read this Chart?

It's easy! Our water is tested to assure that it is safe and healthy. These Tables are based on tests conducted by City of Montrose within the last five (5) calendar years. We conduct many tests throughout the year, however, only tests that show the presence ofa 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 a contaminant that 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 contaminant in drinking water below which there is no known or expected risk to health. *MCLG's allows for a margin of safety.*
MRDL	Maximum Residual Disinfectant Level	The highest level of disinfectant allowed in drinking water. There is convincing evidence that 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. MRLDG'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	Result is not detectable at or below the laboratory detection level.
NTU	Nephelometric Turbidity	Measures the cloudiness of
pCi/L	Units Picocuries Per Liter	water. 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	A required process intended to reduce the level of a contaminant 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.
	90th Percentile Value	The concentration of lead or copper in tap water exceeded by 10 percent of the sites sampled during a monitoring period.

2022 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	0.83	0.36 – 0.82	no	Erosion of natural deposits; Water additive, which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Barium	2022	ppm	2	2	0.014	n/a	no	Erosion of natural deposits; discharge of metal refineries; discharge of drilling wastes.

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)	2022	ppb	n/a	80	48	26-48	NO	By-product of drinking water disinfection
Haloacetic Acids (HAA5)	2022	ppb	n/a	60	15	7-15	NO	By-product of drinking water disinfection

Disinfectant Residuals – Monitoring in Distribution System

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	2022	ppm	4	4	.6	.2-.6	NO	Water additive used to control microbes

2022 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
0.09	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.

2022 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.

2022 Lead and Copper Monitoring at Customer Tap

Regulated Contaminant	Test Date	Unit	Health Goal MCLG	Action Level AL	90th Percentile Value*	Number of Samples over AL	Violation yes/no	Major Sources in Drinking Water
Lead (Jan-June)	2022	**ppb**	**0**	**15**	**0**	**0**	NO	Lead service lines; corrosion of household plumbing system; Erosion of natural deposits.

Lead (July-Dec)	2022	ppb	0	15	0	0	NO	Lead service lines; corrosion of household plumbing system; Erosion of natural deposits.
Copper (Jan-June)	2022	ppm	1.3	1.3	0	0	NO	Corrosion of household plumbing system; Erosion of natural deposits; Leaching from wood preservatives.
Copper (July-Dec)	2022	ppm	1.3	1.3	0	0	NO	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.

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

2022 Unregulated Detected Contaminant

Contaminant	MCLG	MCL	Level Detected	Source of Contamination
Sodium (ppm)	n/a	n/a	8.9	Erosion of natural deposits
Magnesium	n/a	n/a	7.5	Erosion of natural deposits
Sulfate	n/a	n/a	24	Runoff/leaching from natural deposits