

2020 WATER QUALITY REPORT

The Water We Drink

In 1998, a new Federal rule was passed to ensure that consumers of community water supplies receive annual documentation of drinking water quality. At the Village of Romeo, our goal is to provide you with safe and dependable drinking water. Therefore, we are pleased to have this opportunity to inform you about the quality of the water that was provided to you.

In 2004, the State performed an assessment of our source water in order to determine the susceptibility or the relative potential of contamination. The susceptibility rating is on a seven-tiered scale from “very-low” to “high” based primarily on geologic sensitivity, water chemistry and contaminant sources. The Village of Romeo gets its water from several ground water wells. Water supplied to the Industrial Park comes from the Great Lakes Water Authority, which is the Lake Huron Water Treatment Plant. Based on the seven-tiered scale, the susceptibility of Romeo’s source is “moderately-low” and “moderate” for our wells. The susceptibility of the Detroit River source water intake was determined to be “highly” susceptible to potential contamination. However, all four Detroit water treatment plants that use source water from the Detroit River have historically provided satisfactory treatment of this source water to meet drinking water standards. If you would like to know more about these reports, you can contact the Village Office or you can visit the GLWA’s website at <https://www.glwater.org/>.

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 Environmental Protection Agency’s (EPA) Safe Drinking Water Hotline (800) 426-4791.

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, 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:

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 organics, which are by-products of industrial processes and petroleum production, and can 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. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

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.

In accordance with Federal and State laws, the Village of Romeo routinely monitors for contaminants in your drinking water. The following tables on this report show the results of our monitoring for the period of January 1st through December 31st, 2020, unless otherwise noted.

The Results: At this time, we are able to report that according to the test results, your drinking water meets all Federal and State requirements for quality and safety and that all monitoring and reporting requirements were met for 2020.

Additional Testing

Arsenic Testing

On January 22, 2001, the new Arsenic Regulation was published in the Federal Register. The new rule changes the Maximum Contaminant Level (MCL) for arsenic from 0.05 milligrams per liter (mg/L) to 0.010 mg/L or 10 parts per billion (ppb). The rule applies to all Type 1 water systems and became effective January 23, 2006.

Arsenic is a naturally occurring mineral and its presence in water is caused from erosion of natural deposits. During 2019, the Village of Romeo's systems wells were sampled and were found to be in compliance with the new maximum contaminant level.

Lead and Copper Testing

The Village of Romeo has been working in conjunction with the Michigan Department of Environmental Quality to test the homes for Lead and Copper contaminants in our water supply system. *All tests indicate the water supply has tested far below the action level.*

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is 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 Romeo 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 have a lead service line, it is recommended that you run your water 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, 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 at 1-800-426-4791 or at <http://water.epa.gov/drink/info/lead>.

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

News from the Department of Public Works (DPW)

- **Moving & Account Updates**

It is your responsibility to call the DPW to request a Final Bill for water/sewer. We require a minimum of a 24-hour notice to generate any Final Bill. For any account updates, such as name or address changes, please contact the Department of Public Works at (586) 752-2684.

- **Meter Repairs & Maintenance** - Repairs and maintenance to your meters are sometimes necessary and require entry into your home or facility. If you receive a letter requesting to make an appointment, please contact our offices as soon as possible in order so that we may keep our records up to date and current.

- **Non-Emergency Water Requests** - The Department of Public Works will no longer schedule any after-hour non-emergency water requests such as having your water turned on and/or off. The DPW hours are 7:00 am – 3:30 pm, Monday through Friday. All non-emergency water requests should be scheduled during normal business hours. *For all after-hour water and/or sewer emergencies, please contact the Romeo Police Department at (586) 752-3587.*

For Your Information

The Village Clerk's Office is located at 121 W. St. Clair. The office hours are 8:30 a.m. through 4:30 p.m., Monday through Thursday. Water Bills can be paid at the Village Clerk's Office. **We now accept credit and/or debit card payments.** Additional copies of this report can be requested by calling the Department of Public Works or sending a written request.

The Village of Romeo Department of Public Works is located at 70350 Powell Road between 32 Mile Road and 33 Mile Road. The office hours are 7:00 a.m. to 3:30 p.m., Monday through Friday. Any questions regarding your water/sewer bills should be directed to the Department of Public Works at (586) 752-2684.

Visit the Village Website: We encourage residents to visit our website for information regarding the different departments and committees within the Village of Romeo. www.villageofromeo.org.

Attend a Council Meeting: In an attempt to keep our valued customers aware of their utility, as well as any changes that may be occurring, we invite you to one of our regularly scheduled council meetings. The meetings are held at the Romeo Community Center (South Building Meeting Room), 361 Morton Street, at 7:00 p.m. on the third Monday of each month. All are welcome!

PUBLIC NOTICES

Sprinkling Restrictions: In an ongoing effort to conserve water and alleviate unnecessary strain on the water system the Village of Romeo will continue to implement an odd/even sprinkling restriction. At this time, the restriction is on a voluntary basis, however, should extreme weather conditions warrant, the Village of Romeo may impose mandatory watering restrictions.

Site Addresses: According to the Village of Romeo Ordinance – Michigan Residential Code, all premises must have a site address plainly visible and legible from the street fronting the property. Please be sure your house numbers can be seen from the street for any safety or emergency services.

Sidewalk Repairs & Maintenance: No person shall permit any sidewalk which adjoins property owned by him to fall into a state of disrepair or to be unsafe. Should the Village determine that a sidewalk is unsafe for use, notice may be given to the owner of the lot or premises, at which time it shall be the duty of the owner to place the sidewalk in a safe condition. For more detailed information about sidewalk repair & maintenance, see the Village Code of Ordinances on the Village website, under Chapter 38 – Article III Sidewalks.

Key to the Detected Contaminants Table

Symbol	Abbreviation	Definition/Explanation
AL	Action Level	The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements which a water system must follow.
°C	Celsius	A scale of temperature in which water freezes at 0° and boils at 100° under standard conditions.
>	Greater than	
HAA5	Haloacetic Acids	HAA5 is the total of bromoacetic, chloroacetic, Dibromoacetic, dichloroacetic, and trichloroacetic acids. Compliance is based on the total.
Level 1	Level 1 Assessment	A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in the water system.
Level 2	Level 2 Assessment	A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
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.
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. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.
n/a	not applicable	
ND	Not Detected	
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.
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 during the previous four quarters.
SMCL	Secondary Maximum Contaminant Level	An MCL which involves a biological, chemical or physical characteristic of water that may adversely affect the taste, odor, color or appearance (aesthetics), which may thereby affect public confidence or acceptance of the drinking water.
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.
µohms	Microohms	Measure of electrical conductance of water

VILLAGE OF ROMEO TABLE
For 2020
Regulated Detected Contaminants Tables

Contaminant	Test Date	Units	Health Goal MCLG	Allowed Level MCL	Level Detected	Range of Detection		Violation Major Sources in Drinking Water
						Low	High	
Inorganic Chemicals – Annual Monitoring at Plant Finished Water Tap								
Fluoride (Wells #3 & 5)	8/19/20	ppm	4	4	.16	n/a	n/a	Erosion of natural deposits; Water additive, which promotes strong teeth; Discharge from fertilizer and aluminum factories
Fluoride (Well #2)	8/19/20	ppm	4	4	.22	n/a	n/a	Erosion of natural deposits; Runoff from Orchards; Runoff from glass and Electronics production wastes
Arsenic (Wells #3 & 5)	8/15/19	ppm	10	10	ND	n/a	n/a	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Arsenic (Well #2)	8/15/19	ppm	10	10	ND	n/a	n/a	
Nitrate	8/17/20	ppm	10	10	ND	n/a	n/a	

Disinfectant Residuals and Disinfection By-Products – Monitoring in distribution System

Total Trihalomethanes/TTH M	9/2/20	ppb	n/a	80	27.3	n/a	n/a	By-product of drinking water chlorination
Haloacetic Acids/HAA5	8/18/20	ppb	n/a	60	4	n/a	n/a	By-product of drinking water disinfection
Chlorine Residual	Jan-Dec 2020	ppm	MRDGL 4	MRDL 4	.675	.360	1.023	Water additive used to control microbes

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; however, some are more than one year old.

Microbiological Contaminants – Monthly Monitoring in Distribution System

Contaminant	MCLG	MCL	Highest Number of Samples Detected	Major Sources in Drinking Water
Total Coliform Bacteria *	0	Presence of Coliform bacteria >5% of monthly samples	0	Coliform are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present.
<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	Human waste and animal fecal waste.

Lead and Copper Monitoring at Customers' Tap

Contaminant	Test Date	Units	Health Goal MCLG	Action Level AL	90 th Percentile Value*	Number of Samples Over AL	Range of Individual Sample Results	Major Sources in Drinking Water
Lead	Aug 2020	ppb	0	15	3	0	0-4	Lead services lines, corrosion of household plumbing including fittings and fixtures; erosion of natural deposits.
Copper	Aug 2020	ppm	1.3	1.3	.6	0	0.1-0.6	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.

Unregulated Detected Contaminants Tables

Contaminant	Test Date	Units	MCLG	MCL	Level Detected	Range	
						Low	High
Sodium (Well #3 & 5)	8/20/20	ppm	none	none	130	n/a	n/a
Sodium (Well #2)	8/20/20	ppm	none	none	11	n/a	n/a

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.

Per- and polyfluoroalkyl substances (PFAS)

Regulated Contaminant	MCL, TT, or MRDL	MCLG or MRDLG	Level Detected	Range	Year Sampled	Violation Yes/No	Typical Source of Contaminant
Hexafluoropropylene oxide dimer acid (HFPO-DA) (ppt)	370	N/A	Not Detected	N/A	2021	No	Discharge and waste from industrial facilities utilizing the Gen X chemical process
Perfluorobutane sulfonic acid (PFBS) (ppt)	420	N/A	Not Detected	N/A	2021	No	Discharge and waste from industrial facilities; stain-resistant treatments
Perfluorohexane sulfonic acid (PFHxS) (ppt)	51	N/A	Not Detected	N/A	2021	No	Firefighting foam; discharge and waste from industrial facilities
Perfluorohexanoic acid (PFHxA) (ppt)	400,000	N/A	Not Detected	N/A	2021	No	Firefighting foam; discharge and waste from industrial facilities
Perfluorononanoic acid (PFNA) (ppt)	6	N/A	Not Detected	N/A	2021	No	Discharge and waste from industrial facilities; breakdown of precursor compounds
Perfluorooctane sulfonic acid (PFOS) (ppt)	16	N/A	Not Detected	N/A	2021	No	Firefighting foam; discharge from electroplating facilities; discharge and waste from industrial facilities
Perfluorooctanoic acid (PFOA) (ppt)	8	N/A	Not Detected	N/A	2021	No	Discharge and waste from industrial facilities; stain-resistant treatments

2020 Lake Huron Regulated Detected Contaminants Table

2020 Inorganic Chemicals - Annual Monitoring at Plant Finished Tap								
Regulated Contaminant	Test Date	Unit	Health Goal MCLG	Allowed Level MCL	Highest Level Detected	Range of Detection	Violation	Major Sources in Drinking Water
Fluoride	3-10-2020	ppm	4	4	0.72	n/a	no	Erosion of natural deposit; Water additive, which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate	3-10-2020	ppm	10	10	0.30	n/a	no	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Barium	5-16-17	ppm	2	2	0.01	n/a	no	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.

2020 Disinfection Residual - Monitoring in the Distribution System								
Regulated Contaminant	Test Date	Unit	Health Goal MRDLG	Allowed Level MRDL	Highest Level RAA	Range of Quarterly Results	Violation	Major Sources in Drinking Water
Total Chlorine Residual	2020	ppm	4	4	0.77	0.70-0.85	no	Water additive used to control microbes

2020 Disinfection By-Products - Stage 2 Disinfection By-Products Monitoring in the Distribution System								
Regulated Contaminant	Test Date	Unit	Health Goal MCLG	Allowed Level MCL	Highest Level LRAA	Range of Quarterly Results	Violation	Major Sources in Drinking Water
(TTHM) Total Trihalomethanes	2020	ppb	n/a	80	36.9	n/a	no	By-product of drinking water chlorination
(HAA5) Haloacetic Acids	2020	ppb	n/a	60	15	n/a	no	By-product of drinking water chlorination

2020 Turbidity - Monitored Every 4 Hours at the Plant Finished Water Tap				
Highest Single Measurement Cannot Exceed 1 NTU	Lowest Monthly % of Samples Meeting Turbidity Limit of 0.3 NTU (minimum 95%)		Violation	Major Sources in Drinking Water
0.10 NTU	100%		no	Soil Runoff
<p>Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.</p>				

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 is measured each quarter and because the level is low, there is no requirement for TOC removal.	Erosion of natural deposits

Radionuclides - Monitored at the Plant Finished Tap in 2014							
Regulated Contaminant	Test Date	Unit	MCLG	MCL	Level Detected	Violation	Major Sources in Drinking Water
Combined Radium Radium 226 and 228	5/13/14	pCi/L	0	5	0.86 ± 0.55	no	Erosion of natural deposits

Lead and Copper Monitoring at the Customer's Tap in 2020

Regulated Contaminant	Test Date	Unit	Health Goal MCLG	Action Level AL	90 th Percentile Value*	Number of Samples Over AL	Range of Individual Samples Results	Violation	Major Sources in Drinking Water
Lead	2020	ppb	0	15	3	n/a	0-13	no	Lead services lines, corrosion of household, plumbing including fittings and fixtures; erosion of natural deposits
Copper	2020	ppm	1.3	1.3	0.3	n/a	0-0.4	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.

2020 Special Monitoring

Contaminant	Test Date	Unit	MCLG	MCL	Highest Level Detected	Source of Contaminant
Sodium	3-10-2020	ppm	n/a	n/a	4.91	Erosion of natural deposits

These tables are based on tests conducted by GLWA in the year 2020 or the most recent testing done within the last five calendar years. GLWA conducts tests throughout the year only tests that show the presence of a substance or require special monitoring are presented in these tables. 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.