



**CITY OF ROCHESTER, NEW YORK**

DEPARTMENT OF ENVIRONMENTAL SERVICES  
BUREAU OF WATER

Water Supply ID# NY2704518

Pure and  
Wholesome  
Water Since  
1876

# 2021 WATER QUALITY REPORT



Malik D. Evans, Mayor



City of Rochester, NY  
Rochester City Council



**THE CITY OF ROCHESTER WATER BUREAU** is pleased to present your 2021 Water Quality Report. This report includes water quality information for the 2021 calendar year. The US Environmental Protection Agency (EPA) requires all water utilities to produce and distribute water quality reports on an annual basis. In 2021, the City met or exceeded all of the drinking water standards set by the EPA and the New York State Department of Health (NYSDOH).

The City of Rochester Water Bureau provides water to 210,000 people and many businesses located within the City of Rochester. In addition, the City partners with the Livingston County Water & Sewer Authority (LCW&SA), Monroe County Water Authority (MCWA) and the Village and Town of Lima to provide water to some of their service areas. The Rochester Water Bureau is committed to providing safe, high quality water and excellent service, while adhering to safe and environmentally friendly practices. The Water Bureau is a part of the Department of Environmental Services, governed by the Mayor of the City of Rochester.

Providing safe and reliable drinking water requires a team of over

120 experienced, dedicated and specially trained employees. Over 40 Water Bureau employees have obtained NYSDOH certification as water system operators.

In 2021, the City continued its commitment to water quality through its involvement with the Partnership for Safe Water. The goal of this voluntary American Water Works Association (AWWA) and EPA program is to help water utilities optimize strategies to provide consumers with quality water that exceeds what current regulations require. 2021 marked the 20th year in a row that the Hemlock Filtration Plant earned the Partnership's "Director's Award for Filtration Plants."

This report provides information about your water system including the source of your drinking water, its treatment and water quality test results. Should you have any questions or require further information, please contact us at **(585) 428-6680, ext 1**.

## WHERE DOES MY DRINKING WATER COME FROM AND HOW IS IT TREATED?

Since 1876, Rochester residents have relied upon Hemlock Lake, with Canadice Lake added in 1919, for their drinking water supply. The City also purchases water from MCWA's Shoresmont Treatment Plant on Lake Ontario. (MCWA water quality information is available at [MCWA.com](http://MCWA.com).) The City's Hemlock Water Filtration Plant is a direct filtration plant with a capacity of 48 million gallons per day and employs processes involving pH adjustment, coagulation, filtration, disinfection and fluoridation.

### Filtration & Disinfection:

During coagulation, chemicals are added to untreated water, causing the natural particulates to clump together into larger particles called floc. The floc is removed by filtration

**HOW CAN I SAVE MONEY ON WATER?** Simple changes in your daily routine can save you money on your water bill and also reduce stress on the environment. Always repair dripping and leaking faucets, toilets and garden hoses. Log on to <http://www.dec.ny.gov/lands/5009.html> for more conservation tips.

and the water is then disinfected with chlorine.

### Corrosion Control:

The City uses carbon dioxide to adjust water pH as part of its corrosion control strategy. A pH range of 7.7-8.0 is maintained to ensure water in the distribution system is stable and not corrosive to pipes. This pH range, along with the natural hardness and alkalinity levels in the water have ensured that the City is in compliance with the Lead and Copper Rule.

### Fluoridation:

The City of Rochester is one of the many New York water utilities providing drinking water with a controlled low level of fluoride for consumer dental health protection. According to the U.S. Centers for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at an



optimal level of 0.7 mg/L. To ensure optimal dental protection, the State Department of Health requires that we monitor fluoride levels on a daily basis. In 2021 the fluoride levels in your water were within 0.1 mg/L of the CDC's recommended optimal level 100% of the time.

Water treated at the Hemlock Filtration Plant flows to the city by gravity through three large pipelines. Along the way, water is sold wholesale to water districts in the Town and Village of Lima, LCW&SA and MCWA. The treated water is stored in the City's three reservoirs—Rush Reservoir, Cobbs Hill Reservoir and Highland Park Reservoir. It is disinfected again as it exits each reservoir and enters a complex grid (over 550 miles) of water mains that distribute the water to city customers. Lake Ontario water from MCWA is pumped into the City distribution system at the Mt. Read Boulevard pump station, near West Ridge Road. Some areas of the city receive either Hemlock Lake or Lake Ontario water—or a mixture of both—depending on the season.

### **SOURCE WATER ASSESSMENT SUMMARY:**

To raise awareness about the importance of preventing water pollution, the NYDOH has evaluated the susceptibility of water supplies statewide for potential contamination under the Source Water Assessment Program (SWAP). Through its assessment of the Hemlock/Canadice Lake watershed, SWAP identified several potential sources of contamination, none particularly noteworthy. The City's extensive testing of these pristine lakes confirms that contamination

from human activity is negligible. For more information on **SWAP**, please call **(585) 428-6680**, or the Monroe County Department of Public Health at **(585) 753-5057**.

### **WHAT TYPES OF WATER SYSTEM IMPROVEMENTS WERE COMPLETED OR INITIATED IN 2021?**

The City is diligent in reinvesting in your water system through its capital improvement program. In 2021, the Water Bureau spent more than \$8 million on system improvements to the Hemlock Filtration Plant, transmission system, distribution system, reservoirs and dams. Some of the program highlights performed in 2021 include, replacing 1.9 miles of water main pipe and appurtenances, cleaning and lining 4.63 miles of water main pipe, structurally lining 0.60 miles of water main pipe. Through various water main projects and efforts by in-house staff 990 lead containing water services were replaced in 2021. Improvements continue to the filtration plant automation controls, backup power, and physical and cyber security components. The ongoing program to recalibrate or replace customer's water meters have led to 74% of our system incorporating radio read meters. Other programs involving inspection of fire hydrants, operating main line valves, water main flushing and sampling and testing of the water were also continued.

### **IMPORTANT INFORMATION FROM THE EPA:**

- *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 **EPA's Safe Drinking Water Hotline 1-800-426-4791**.

- 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 radioactive material, and can pick up substances resulting from the presence of animals or from human activities. Contaminants that may be present in source water include: microbial contaminants, inorganic contaminants, pesticides and herbicides, organic chemical contaminants and radioactive contaminants.

To ensure that tap water is safe to drink, the state and the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and Food and Drug Administration's (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 disease-causing microorganisms or pathogens in drinking water than the general population. Immuno-compromised individuals, such as people with cancer undergoing chemotherapy, organ transplant recipients, people with HIV/AIDS or other immune system disorders, some elderly and



## 2021 STATISTICS

The City of Rochester has a population about or approximately 210,000, and over 58,000 metered accounts. The base charge for water was \$3.62 per 1,000 gallons.

The average daily production at the Hemlock Water Filtration Plant was 34.3 million gallons per day (MGD) some of which was sold to wholesale customers. Approximately 22.5 MGD was delivered to City retail customers and 6 MGD was considered non-revenue water (NRW). The NRW is used for firefighting purposes, water main flushing, or otherwise attributed to distribution system leaks, meter and billing inaccuracies and water illegally obtained. The Water Bureau continues to focus on reducing the amount of NRW.

infants may be particularly at risk from infections. These people should seek advice from their health care providers about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium*, *Giardia* and other microbial pathogens are available from the **Safe Drinking Water Hotline (1-800-426-4791)**.

### SHOULD I BE CONCERNED ABOUT CHEMICAL CONTAMINANTS IN MY WATER?

As NY State regulations require, we routinely test your drinking water for numerous contaminants and we have found no contaminants in our water at levels that raise concern. Some substances such as chlorine and fluoride are added to the water supply for health reasons.

### IS THERE LEAD IN MY DRINKING WATER?

Lead is a toxic metal known to have negative health effects for people of all ages, particularly **pregnant women, infants and young children**. Lead has been linked to learning disabilities, behavioral problems and other issues.

Lead is not found in Rochester's source water or in the water mains. Lead can be present in the service lines connecting homes to water mains and in brass fixtures, faucets and solder in copper plumbing. These items can pass lead into the water you use for drinking and cooking. Because lead poses health risks, the EPA has set a Maximum Contaminant Level Goal (MCLG) of zero for lead. Due to the potential health risks of lead, follow these steps to find out if there is lead in your water.

- 1. Check Available Records:** Water service material records are available in the Property Information Application at **maps.cityofrochester.gov**. Enter address and click "Water" tab or call the Water Dispatch office at **(585) 428-7500**.
- 2. Have Your Water Tested for Free:** Contact the Water Bureau's Laboratory at **(585) 428-6680 Ext 1**, or by email to: **watertest@cityofrochester.gov**.
- 3. Inspect Your Plumbing:** To identify sources of lead in your plumbing go to: **www.lslr-collaborative.org/identifying-service-line-material.html**  
Contact a licensed plumber: call the City's Bureau of Buildings and Zoning Permit Office at **(585) 428-6526** or go to **www.cityofrochester.gov/licensedtrades/**

### Simple steps you can take to reduce lead:



- **Use ONLY Cold Water** for drinking, cooking and preparing baby formula. Hot water dissolves lead more quickly.
- **Flush your pipes** any time water has been unused for more than 4-6 hours. Lead levels are highest when water has been sitting in the pipe.
- **Periodically Clean Faucet Screens** which can accumulate lead and rust particles.
- **Use a Water Filter**—If you have concerns about levels of lead in your water, consider using a water filter that is certified by the NSF International to remove lead. Find out more on filter certification at [www.nsf.org](http://www.nsf.org)

Additional information is available at:

- [www.cityofrochester.gov/drinkingwatersafety](http://www.cityofrochester.gov/drinkingwatersafety)
- **EPA's Safe Drinking Water Hotline at 1-800-426-4791**
- [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead)
- **Coalition to Prevent Lead Poisoning:**  
[www.letsmakeleadhistory.org](http://www.letsmakeleadhistory.org).

## CRYPTOSPORIDIUM AND GIARDIA

Cryptosporidium is a microbial pathogen found in surface water and groundwater under the influence of surface water. Although filtration removes Cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal.

The Long Term 2 Enhanced Surface Water Treatment Rule (LT2) requires that uncovered finished water storage reservoirs either be covered or have treatment installed

to inactivate cryptosporidium. In order to comply with LT2, the City of Rochester entered into a compliance agreement with the Monroe County Department of Health and the New York State Department of Health in 2012. It was revised and updated in 2021.

The Agreement requires the City to conduct routine Cryptosporidium monitoring (twice monthly) from both Highland and Cobbs Hill reservoirs. During 2020, as part of our routine sampling plan, forty eight (48) samples for Cryptosporidium or Giardia oocysts were collected, twenty five at Highland Reservoir and twenty three at Cobbs Hill. No Cryptosporidium or Giardia oocysts were recovered for any samples collected at Cobbs Hill. At Highland Reservoir, on January 5, 2021, there was one occurrence of detection-one giardia cyst was detected (0.02 cysts/liter). This detection fell into the No Action category of our Cryptosporidium and Giardia Action Plan.

## WHAT IF I HAVE QUESTIONS?

For more information about Water Bureau activities, fees and other water-related issues, visit: [www.cityofrochester.gov/waterbureau](http://www.cityofrochester.gov/waterbureau) or call **(585) 428-7500**. You may contact a customer service representative by dialing **311**. Call **(585) 428-5990** if outside of the city limits. Our offices are at **10 Felix St., Rochester, NY 14608**.

# TABLE OF DETECTED CONTAMINANTS

## ENTRY POINT – TREATMENT PLANT EFFLUENT

SUBSTANCE	UNITS	MCLG	MCL	HEMLOCK AVERAGE (RANGE)	ONTARIO AVERAGE (RANGE)
<b>COMBINED RADIUM 226+228 (2019)</b>	pCi/L	0	5	1.11±0.54	ND
<b>ALKALINITY</b>	mg/L	NA	NA	71 (68-75)	90 (90-91)
<b>ALUMINUM</b>	ug/L	NA	200	7.6	66 (30-140)
<b>BARIUM</b>	mg/L	2	2	0.016	0.020 (0.019-0.023)
<b>CALCIUM</b>	mg/L	NA	NA	26 (25-27)	33 (33-34)
<b>COPPER</b>	mg/L	1.3	1.3	0.006	ND
<b>CHLORIDE</b>	mg/L	250	250	38 (34-41)	29 (26-37)
<b>FLUORIDE</b>	mg/L	NA	2.2	0.77 (0.09 - 0.77)	0.73 (0.34-0.90)
<b>MAGNESIUM</b>	mg/L	NA	NA	6.3	9.0
<b>NITRATE</b>	mg/L	10	10	0.07 (<0.01-0.15)	0.28 (0.21-0.35)
<b>PERFLUOROCTANE-SULFONIC ACID (PFOS)</b>	ng/L	NA	10	ND	2.7 (2.4-2.8)
<b>PERFLUORO-OCTANOIC ACID (PFOA)</b>	ng/L	NA	10	ND	2.2 (2.1-2.3)
<b>PH</b>	SU	NA	NA	7.9 (7.4 - 8.1)	7.5 (7.1-7.8)
<b>POTASSIUM</b>	mg/L	NA	NA	1.6	1.3
<b>SILICA</b>	mg/L	NA	NA	NA	0.50 (0.36-0.67)
<b>SPECIFIC CONDUCTIVITY</b>	Umhos/cm	NA	NA	296 (227-350)	301 (290-310)
<b>SODIUM</b>	mg/L	NA	NA	19	16
<b>SULFATE</b>	mg/L	NA	250	13 (12-13)	27 (26-27)
<b>TOTAL DISSOLVED SOLIDS</b>	mg/L	NA	NA	180	170 (160-190)
<b>TOTAL HARDNESS</b>	mg/L	NA	NA	89	120



LIKELY SOURCE	MEETS EPA STANDARDS
Erosion of natural deposits	Yes
Naturally occurring	NA
Treatment Process	Yes
Erosion of natural deposits	Yes
Naturally occurring	NA
Erosion of natural deposits, corrosion of plumbing	Yes
Natural deposits, road salt, water treatment chemicals	Yes
Water treatment additive to promote dental health	Yes
Naturally occurring	NA
Fertilizers, erosion of natural deposits, septic tank leachate	Yes
Commercial and Industrial applications	Yes
Commercial and Industrial applications	Yes
Naturally occurring, treatment process	NA
Naturally occurring	NA
Naturally occurring	NA
Naturally occurring	NA
Natural deposits, road salt, water treatment chemicals	NA
Naturally occurring	Yes
Naturally occurring	NA
Naturally occurring	NA

## TABLE OF DETECTED CONTAMINANTS CONTINUED

### MICROBIOLOGICAL CONTAMINANTS - ENTRY POINT

SUBSTANCE	UNITS	MCLG	MCL	AVERAGE (ANNUAL RANGE)
Water Clarity Treatment Requirements (TT) - 95% of samples each month must be less than 0.3 NTU. Annual Range and lowest monthly percentage are listed below for entry				
<b>TURBIDITY-ENTRY POINT</b>	NTU	NA	95% < 0.3 NTU	0.05 (0.02 - 0.10) (100% < 0.3 NTU)
Disinfectant and Disinfectant By-products (DBPs) –Entry Point. Chlorine has a MDRL (Maximum Disinfectant Residual Level) and MDRLG (MDRL Goal) of 4 mg/L rather				
<b>CHLORINE (ENTRY POINT)</b>	mg/L	4	4	0.9 (0.5 -1.7)
<b>TOTAL ORGANIC CARBON</b>	mg/L	NA	TT	2.55 (2.27-2.70)
<b>UV254</b>	Abs/cm	NA	NA	0.038
<b>TOTAL THMS</b>	ug/L	NA	80	10
<b>HALOACETIC ACIDS</b>	ug/L	NA	60	10

### CITY OF ROCHESTER DISTRIBUTION SYSTEM

Microbiological Contaminants – The distribution system monthly maximum and annual average % positive for total coliform bacteria are listed below. Total Coliform is a group of bacteria used to indicate the general sanitary conditions in a water system. Most species of this group do not present a health concern, but one species, *E. coli* can be pathogenic. In 1993, the State Health Department granted the City a “biofilm” variance, or exception to the Total Coliform MCL. Biofilm is a layer of bacteria that

SUBSTANCE	UNITS	MCLG	MCL	HIGHEST % POSITIVE (MONTH)
<b>TOTAL COLIFORM</b>	% Positive	0	NA	1.2% (Oct) (0.2% Annual Av.)

SUBSTANCE	UNITS	MCLG	MCL	AVERAGE (RANGE)
<b>HETEROTROPHIC PLATE COUNT</b>	MPN/mL	NA	TT	<2 (<2-62)
<b>CRYPTOSPORIDIUM</b>	Oocysts/L	0	TT	<0.01 (0.00-0.02) (One oocyst was detected in one Jan 2021 sample at Highland Reservoir)

LIKELY SOURCE	MEETS EPA STANDARDS
point. Turbidity is a measure of water clarity and is used to gauge filtration process.	

Soil runoff	Yes
-------------	-----

**than an MCL and MCLG.**

Required treatment chemical	Yes
-----------------------------	-----

Naturally occurring	Yes
---------------------	-----

Naturally occurring	Yes
---------------------	-----

By-product of chlorination	Yes
By-product of chlorination	Yes

**can be found on almost all surfaces, including the inside wall of water pipes. The variance does not apply to *E. coli*. *Cryptosporidium* and *Giardia* samples are collected from the reservoir effluent prior to chlorination. Sample frequency for *cryptosporidium* or *giardia* increases from twice per month to weekly within a given month whenever an oocyst is detected.**

LIKELY SOURCE	MEETS EPA STANDARDS
Naturally Occurring	Yes

LIKELY SOURCE	MEETS EPA STANDARDS
Naturally Occurring	Yes

Naturally Occurring	Yes
---------------------	-----

## TABLE OF DETECTED CONTAMINANTS CONTINUED

### CITY OF ROCHESTER DISTRIBUTION SYSTEM

Water Clarity Treatment Requirements (TT) For the distribution system the highest monthly average and range are reported. Turbidity is a measure of water clarity

SUBSTANCE	UNITS	MCLG	MCL	AVERAGE (RANGE)
<b>TURBIDITY - DISTRIBUTION</b>	NTU	NA	5 NTU	0.10 (<0.01 - 0.85)

Disinfectant and Disinfectant By-products (DBPs) Distribution System – Average (Highest LRAA for Total THMs and Haloacetic Acids) and Range are listed below.

<b>FREE CHLORINE</b>	mg/L	4	4	0.8 (<0.1-1.9)
<b>TOTAL THMS</b>	ug/L	NA	80	46 (20-69)
<b>HALOACETIC ACIDS</b>	ug/L	NA	60	27 (6-47)

Lead and Copper (2021 Survey) –Test results for 90% of distribution system samples must be less than the Action Level (AL) The 90th percentile and the range of results

SUBSTANCE	UNITS	MCLG	AL	90TH PERCENTILE (RANGE)
<b>LEAD</b>	ug/L	0	15	9.0 (ND-33), (105 samples collected)
<b>COPPER</b>	ug/L	1300	1300	268 (8-660) (105 samples collected)

Distribution System Water Quality Parameters : Water Quality Parameter (WQP) samples were collected quarterly from 24 representative locations (approved coliform

SUBSTANCE	UNITS	MCLG	MCL	AVERAGE (RANGE)
<b>PH</b>	SU	NA	NA	7.81 (7.03-8.33)
<b>FREE CHLORINE</b>	mg/L	4	4	0.74 (0.04-1.44)
<b>TURBIDITY - DISTRIBUTION</b>	NTU	NA	5 NTU	0.09 (0.05-0.21)
<b>ALKALINITY</b>	mg/L	NA	NA	77 (57-101)
<b>CALCIUM</b>	mg/L	NA	NA	27 (25-34)
<b>CHLORIDE</b>	mg/L	250	250	37 (23-45)
<b>SULFATE</b>	mg/L	NA	250	12 (8-22)

and is used to gauge filtration process.

**LIKELY SOURCE**

**MEETS EPA STANDARDS**

Soil Runoff, Corrosion of Plumbing

Yes

**Chlorine has a MDRL (Maximum Disinfectant Residual Level) and MDRLG (MDRL Goal) rather than an MCL and MCLG. LRAA=Locational Running Annual Average**

Required treatment chemical

Yes

By-product of chlorination

Yes

By-product of chlorination

Yes

**are listed below (90th percentile: 90% of samples were at, or below, the value reported).**

**LIKELY SOURCE**

**MEETS EPA STANDARDS**

Corrosion of plumbing

Yes

Corrosion of plumbing

Yes

**sampling sites) to comply with the lead and copper rule in 2021**

**LIKELY SOURCE MEETS EPA STANDARDS**

Naturally occurring, Treatment Process

Yes

Required Treatment Chemical

Yes

Soil Runoff, Corrosion of Plumbing

Yes

Naturally occurring

NA

Naturally occurring

NA

Natural deposits, road salt, water treatment chemicals

Yes

Naturally occurring

Yes

## TABLE OF DETECTED CONTAMINANTS CONTINUED

### CITY OF ROCHESTER DISTRIBUTION SYSTEM

SUBSTANCE	UNITS	MCLG	MCL	AVERAGE (RANGE)
SULFATE	mg/L	NA	250	12 (8-22)
TEMPERATURE	C°	NA	NA	16 (5-25)
TOC	mg/L	NA	TT	2.00 (2.00-3.00)
ALUMINUM	ug/L	NA	200	16 (9-46)
IRON	mg/L	NA	0.3	<0.02 (<0.02 - 0.02)
HPC	MPN/mL	NA	TT	<2

Unregulated Contaminant Monitoring Rule 4 – Once every 5 years the EPA requires public water systems to participate in unregulated contaminant monitoring. In 2016 the EPA established a list of no more than 30 unregulated contaminants referred to as UCMR4. The City began participation in UCMR4 in 2018 and will conclude sampling

SUBSTANCE	UNITS	MCLG	MCL	HEMLOCK DISTRIBUTION SYSTEM 2018-2019 RANGE
BROMIDE	ug/L	NA	NA	ND-22
TOTAL ORGANIC CARBON	ug/L	NA	NA	2180-2680
TOTAL HAA (5)	ug/L	NA	60	13-56
TOTAL HAA (6) BR	ug/L	NA	NA	6-10
TOTAL HAA (9)	ug/L	NA	NA	20-64
BROMOCHLORO-ACETIC ACID	ug/L	NA	NA	0.92-4.3
BROMODICHLOR-OACETIC ACID	ug/L	NA	NA	1.9-4.20
CHLORODIBROMOACETIC ACID	ug/L	NA	NA	ND-0.80
DIBROMOACETIC ACID	ug/L	NA	NA	ND-0.5
DICHLOROACETIC ACID	ug/L	NA	NA	3.7-27.5
MONOBROMOACETIC ACID	ug/L	NA	NA	ND-0.3
MONOCHLOROACETIC ACID	ug/L	NA	NA	ND
TRIBROMOACETIC ACID	ug/L	NA	NA	ND
TRICHLOROACETIC ACID	ug/L	NA	NA	7.4-25.4

LIKELY SOURCE	MEETS EPA STANDARDS
Naturally occurring	Yes
Naturally occurring	NA
Naturally occurring	Yes
Treatment Process	Yes
Corrosion of Plumbing	Yes
Naturally Occurring	Yes

**activities for this rule in the third quarter of 2019. The monitoring results provide the basis for future regulatory actions to protect public health. Detected Contaminants for the Hemlock and Lake Ontario Treatment Plants and the Distribution System are reported.**

LAKE ONTARIO SYSTEM 2018-2019 RANGE	MEETS EPA STANDARDS
36-37	NA
2000-2400	NA
0.74-31	NA
ND-12	NA
7.4-42	NA
ND-4.4	NA
ND-5.9	NA
ND-1.6	NA
ND-1.4	NA
0.74-15	NA
ND-15	NA
0.74-31	NA
ND-12	NA
7.4-42	NA

**NOTE: The following contaminants were tested for but not found in HWTP effluent:** Benzene, Bromobenzene, Bromochloromethane, Bromomethane, n-Butylbenzene, sec-Butylbenzene, tert-Butylbenzene, Carbon tetrachloride, Chlorobenzene, Chloroethane, Chloromethane, 2-Chlorotoluene, 4-Chlorotoluene, 1,2-Dibromo-3-chloropropane (DBCP), 1,2-Dibromoethane (EDB), 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Dichlorodifluoromethane, 1,1-Dichloroethane, 1,2-Dichloroethane, 1,1-Dichloroethylene, cis-1,2-Dichloroethylene, trans-1,2-Dichloroethylene, Dichloromethane, 1,2-Dichloropropane, 1,3-Dichloropropane, 2,2-Dichloropropane, 1,1-Dichloropropylene, cis-1,3-Dichloropropylene, trans-1,3-Dichloropropylene, Ethyl benzene, Hexachlorobutadiene, Isopropylbenzene, 4-Isopropyltoluene, Methyl-t-butyl ether (MTBE), Naphthalene, n-Propylbenzene, Styrene, 1,1,1,2-Tetrachloroethane, 1,1,2,2-Tetrachloroethane, Tetrachloroethylene, Toluene, 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, Trichloroethylene, Trichlorofluoromethane, 1,2,3-Trichloropropane, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, Vinyl chloride, o-Xylene, m,p-Xylene, Total Xylene, 2,3,7,8- Tetrachlorodibenzo-p-Dioxin, 1,2-Dibromo-3-Chloropropane (DBCP), 1,2-Dibromoethane (EDB), PCB Screen, Chlordane, Toxaphene, 2,4-D, Dacthal, Dalapon, Dicamba, Dinoseb, Pentachlorophenol, Picloram, 2,4,5-TP (Silvex), Alachlor, Aldrin, Atrazine, Benzo(a)pyrene, Gama-BHC (Lindane), Butachlor, Dieldrin, Di(2-ethylhexyl) adipate, Di(2-ethylhexyl) phthalate, Aldicarb, Aldicarb Sulfoxide, Bis(2-Ethylhexyl) phthalate, Endrin, Heptachlor, Heptachlor epoxide, Hexachlorobenzene, Hexachlorocyclopentadiene, Methoxychlor, Metolachlor, Metribuzin, Propachlor, Simazine, Aldicarb, Aldicarb sulfone, Aldicarb sulfoxide, Carbaryl, Carbofuran, 3-Hydroxycarbofuran, Methomyl, Oxamyl, Glyphosate, Endothall, Diquat, Gross Alpha, Total Uranium, Aluminum, Antimony, Beryllium, Cadmium, Total Cyanide, Iron, Manganese, Mercury, Nitrite, Selenium, Silver, Zinc, Foaming Agents (MBAS), Asbestos 1,4-Dioxane and Per- and poly-fluoroalkyl substances. Refer to the supplemental report for a comprehensive list of all detected and undetected contaminants that were tested for in 2021 and/or in prior years. The supplemental report also provides information on health effects associated with all detected contaminants.

**All tested contaminants not shown in the table were not detected. The complete list of contaminants tested is available at [www.cityofrochester.gov/waterquality](http://www.cityofrochester.gov/waterquality).**

## DEFINITION OF TERMS

**Abs/cm = The unit of measure for UV absorbance:** Absorbance per centimeter (abs/cm), referring to how much UV is absorbed at a specific wavelength

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLG as possible.

**Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG):** 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 contamination.

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

**Action Level (AL):** The concentration of a contaminant that, if exceeded, triggers treatment or other requirements which a water system must follow.

**Nephelometric Turbidity Unit (NTU):** A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**Milligrams per liter (mg/l):** Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).

**Micrograms per liter (ug/l):** Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).

**NA:** Not applicable

**Nanograms per liter (ng/L):** One part of liquid in 1 trillion parts of liquid (parts per trillion = ppt).

**pCi/L= picocurie/L:** A unit of measure for radioactivity.

**Non-Detects (ND):** Laboratory analysis indicates that the constituent is not present.

**Umhos/cm = The unit of measurement for conductivity:** Expressed as micromhos (umho/cm).