

**City of Mechanicville**  
**Annual Drinking Water Quality Report for 2022**

36 North Main Street, Mechanicville, NY 12118  
(Public Water Supply Identification Number NY4500166)

**INTRODUCTION**

To comply with State regulations, the City of Mechanicville, will be annually issuing a report describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. We are very pleased to provide you with this year's Annual Water Quality Report. Last year, we conducted tests for over 80 contaminants. We detected 2 of those contaminants at a level higher than the State allows. As we told you at the time, our water temporarily exceeded a drinking water standard and we modified our distribution process to rectify this problem. This report is an overview of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to New York State standards. Our constant goal is and always has been, to provide to you a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and to protect our water resources. If you have any questions concerning this report or concerning your drinking water please contact: *Mr. Jim Horner; Water Treatment Plant Supervisor, City of Mechanicville Water Department, 33 George Thompson Road, Mechanicville, NY 12118; Telephone (518) 664-3751, Monday – Friday between the hours of 6:00 AM and 2:00 PM.* We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the 2<sup>nd</sup> Wednesday of each month, 7:00 PM at the Mechanicville Senior Citizen Center, 180 North Main Street, Mechanicville, NY 12118; telephone number (518) 664-9884.

**WHERE DOES OUR WATER COME FROM?**

The City of Mechanicville operates a surface water filtration plant. Two reservoirs feed this system: The Mechanicville Reservoir, located in Luther Woods has a storage capacity of 65 million gallons and is the primary source of water; The Terminal Reservoir, located approximately one mile downstream at George Thompson Road; and the Treatment Plant has a 2.5-million-gallon storage capacity.

The Mechanicville Water Treatment Plant is a U.S. Filter Modular Aquarius (AQ-300B) which consists of flocculation, clarification and filtration for water treatment. The plant is manually controlled and packaged in (3) steel tanks producing 900 gallons/minute. The treatment process consists of coagulation using polyaluminum chloride to cause small particles to stick together when the water is mixed forming larger heavier particles. Sedimentation allows the newly formed larger particles to settle out naturally in inclined tube settlers. The mixed media filter bed consists of anthracite coal, silica sand and garnet sand which removes smaller particles by trapping them in the spaces between the sand grains. Also used in the treatment process is sodium permanganate which is used for taste and odor control, color reduction and iron and manganese oxidation. The filtered water from the treatment unit is fed into the clearwell. The water is then pumped out of the clearwell and chlorinated with liquid sodium hypochlorite. At this point the water flows into two (2) chlorine contact tanks. They are circular; epoxy coated steel bolted steel and concrete tanks with interior baffling and a storage capacity of 250,000 gallons each. The baffling in the tank provides increased detention time and adequate time for the water to be disinfected by the chlorine. Three (3) distribution water pumps operating in lead lag will draw the water from the two chlorine contact tanks into the distribution system and into two (2) steel storage tanks with a combined capacity of 2.5 million gallons to provide adequate fire protection.

Mechanicville has an interconnection with the Saratoga County Water Authority (SCWA) to purchase water. The SCWA water source is the Hudson River. Water treatment consists of addition of a coagulant and filtration through membrane filters. Caustic soda is added for pH adjustment and orthophosphate for corrosion control. Sodium hypochlorite is added for disinfection and to maintain a residual throughout the transmission system. There is a one-million gallon water storage tank at the water plant which provides contact time for proper disinfection of water and storage. A new carbon filtration system utilizing granular activated carbon has been added to the treatment process to reduce the levels of disinfection byproducts.

In general, 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 activities. Contaminants that may be present in source water include microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and EPA prescribe regulations, which limit the amount of certain contaminants in water, provided by public water systems. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

## **FACTS AND FIGURES**

Water is served through approximately 1,500 residential services to a population of approximately 5,200 persons. Water is also supplied to people in the Town of Schaghticoke. Our average daily demand is 770,000 gallons. Our single highest day was 1,200,000 gallons. The total water produced in 2022 was 275,985,216 gallons. The amount of water withdrawn was 281,301,142 gallons. The amount of water pumped into the distribution system was 225,584,000 gallons. Additionally, 55,730,920 gallons was purchased from SCWA. The amount of water delivered to customers was 146,154,255. The amount of water lost 129,930,961 gallons or 47%. All services are metered. The City of Mechanicville bills its customers semi-annually for the periods April through September and October through March. The residential water rate for those in the district is \$3.39 per 1000 gallons; outside districts, Town of Schaghticoke is \$4.58 per 1000 gallons. Commercial customers pay \$6.09 per 1000 gallons. The Pan Am Southern Railroad is billed \$6.09 per 1000 gallons.

## **ARE THERE CONTAMINANTS IN OUR DRINKING WATER?**

In accordance with State regulations, the City of Mechanicville routinely monitors your drinking water for numerous contaminants. We test your drinking water for inorganic contaminants, lead and copper, nitrate, volatile organic contaminants, synthetic organic contaminants and disinfection byproducts. In addition, we test two (9) samples in the distribution system for coliform bacteria each month. The table presented below depicts which contaminants were detected in your drinking water. 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. Some of the data, though representative of the water quality, is more than one year old and is noted. For a listing of the parameters we analyzed that were not detected along with the frequency of testing for compliance with the NYS Sanitary Code, see Appendix A.

It should be noted that all drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily pose a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791) or the New York State Department of Health Glens Falls District Office at (518) 793-3893.

## **WHAT DOES THIS INFORMATION MEAN?**

As you can see from the Tables on pages 4 and 5, we exceeded the MCL for the trihalomethanes as well as the MCL for haloacetic Acids in the 1<sup>st</sup> quarter of 2022 and are required to furnish the following information:

### Haloacetic Acids

*Some studies suggest that people who drink chlorinated water (which contains haloacetic acids) or water containing elevated levels of haloacetic acids for long periods of time may have an increased risk for certain health effects. For example, some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.*

### Trihalomethanes

*Some studies suggest that people who drink chlorinated water (which contains trihalomethanes) or water containing elevated levels of trihalomethanes for long periods of time may have an increased risk for certain health effects. For example, some studies of people who drank chlorinated drinking water for 20 to 30 years show that long term exposure to disinfection by-products (including trihalomethanes) is associated with an increased risk for certain types of cancer. A few studies of women who drank water containing trihalomethanes during pregnancy show an association between exposure to elevated levels of trihalomethanes and small increased risks for low birth weights, miscarriages and birth defects. However, in each of the studies, how long and how frequently people actually drank the water, as well as how much trihalomethanes the water contained is not known for certain. Therefore, we do not know for sure if the observed increases in risk for cancer and other health effects are due to trihalomethanes or some other factor. The individual trihalomethanes chloroform, bromodichloromethane and dibromochloromethane cause cancer in laboratory animals exposed to high levels over their lifetimes. Chloroform, bromodichloromethane and dibromochloromethane are also known to cause effects in laboratory animals after high levels of exposure, primarily on the liver, kidney, nervous system and on their ability to bear healthy offspring. Chemicals that cause adverse health effects in laboratory animals after high levels of exposure may pose a risk for adverse health effects in humans exposed to lower levels over long periods of time.*

## **IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?**

During 2022, our system was in compliance with applicable State drinking water operating and reporting requirements.

## **DO I NEED TO TAKE SPECIAL PRECAUTIONS?**

Some people may be more vulnerable to disease causing microorganisms or pathogens 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 system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, Giardia and other microbiological pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

#### **INFORMATION ON LEAD**

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 Mechanicville is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact Jim Horner at the Mechanicville Water Department (518) 664-3751. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead>.

#### **WHAT IS THE SOURCE WATER ASSESSMENT PROGRAM (SWAP)?**

To emphasize the protection of surface and ground water sources used for public drinking water, Congress amended the Safe Drinking Water Act (SDWA) in 1996. The amendments require that New York State Department of Health's Bureau of Public Water Supply Protection is responsible for ensuring that source water assessments are completed for all of New York's public water systems.

A source water assessment provides information on the potential contaminant threats to public drinking water sources:

- ◆ each source water assessment will: determine where water used for public drinking water comes from (delineate the source areas)
- ◆ Inventory potential sources of contamination that may impact public drinking water sources
- ◆ Assess the likelihood of a source water area becoming potential contaminated

A SWAP summary for our water supply has been completed by NYSDOH and attached to this report.

#### **WATER CONSERVATION TIPS**

The City of Mechanicville encourages water conservation. There are a lot of things you can do to conserve water in your own home. Conservation tips include:

- *Use water saving showerheads*
- *Repair all leaks in your plumbing system*
- *Water your lawn sparingly early morning or late evening*
- *Do only full loads of wash and dishes*
- *Wash your car with a bucket and hose with a nozzle*
- *Don't cut the lawn too short; longer grass saves water*

#### **CAPITAL IMPROVEMENTS**

The following capital improvements were made to the water system in 2022:

- ◆ New VFD blowers for air scour system.
- ◆ New filter media was put in.

The following capital improvements are planned for 2023:

- ◆ Dredging in the spring is planned
- ◆ New chemical pumps will be installed

#### **CLOSING**

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit our customers. You will be informed of system improvements in future Annual Water Quality Reports. We ask that all our customers help us protect our water sources, which are the heart of our community. Please call our office if you have questions.

**PWSID NY4500166**  
**AWQR SWAP Summary**

The NYS DOH has evaluated this Public Water System's (PWS) susceptibility to contamination under the Source Water Assessment Program (SWAP), and their findings are summarized in the paragraph below. It is important to stress that these assessments were created using available information and only estimate the potential for source water contamination. Elevated susceptibility ratings do not mean that source water contamination has or will occur for this PWS. This PWS provides treatment and regular monitoring to ensure the water delivered to consumers meets all applicable standards.

This assessment found an elevated susceptibility to contamination for this source of drinking water. The amount of agricultural lands in the assessment area results in elevated potential for protozoa and pesticides contamination. However, there is reason to believe that land cover data may over estimate the percentage of pasture in the assessment area. No permitted discharges are found in the assessment area.

There are no noteworthy contamination threats associated with other discrete contaminant sources. Finally, it should be noted that hydrologic characteristics (e.g. basin shape and flushing rates) generally make reservoirs highly sensitive to existing and new sources of phosphorus and microbial contamination.

A copy of the full Source Water Assessment, including a map of the assessment area, is available for review by contacting us at the number provided in this report.

<b>CITY OF MECHANICVILLE TABLE OF DETECTED CONTAMINANTS</b>							
<b>Public Water Supply Identification Number NY4500166</b>							
Contaminant	Violation Y/N	Date of Sample	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
<b>Microbiological Contaminants</b>							
Turbidity <sup>1</sup> (Highest Turbidity)	N	8/24/22	0.179 <sup>2</sup>	NTU	N/A	TT=1.0 NTU	Soil runoff
			100%			TT=95% samples < 0.3	
<b>Inorganic Contaminants</b>							
Barium	N	4/5/22	11.4	µg/l	2000	MCL=2000	Barium
Chloride	N	4/5/22	33.6	µg/l	N/A	MCL=250	Naturally occurring or indicative of road salt contamination.
Copper	N	8/19/20-8/24/20	0.241 <sup>3</sup>	mg/l	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Range of copper concentrations			0.0047-0.438				
Lead	N	8/19/20-8/24/20	3.2 <sup>4</sup>	µg/l	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Range of lead concentrations			ND-10				
Manganese average range	N	2/17/2022 4/5/2022 5/19/2022	6.1 2.2-10.0	µg/l	N/A	MCL=300	Naturally occurring
Nitrate	N	4/5/22	0.170	mg/l	10	MCL=10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Odor	N	4/5/22	1	units	N/A	MCL=3	Natural sources
pH	N	4/5/22	7.47	units		6.5-8.5	
Sodium <sup>5</sup>	N	4/5/22	15.9	mg/l	N/A	N/A	Geology; Road Salt
Sulfate	N	4/5/22	7.45	mg/l	N/A	MCL=250	Geology
<b>Disinfection Byproducts (Quarterly samples)</b>							
Stage 2 Haloacetic Acids (HAA5) (Average) <sup>6</sup> Range of values for HAA5	Y	2/17/22 5/19/22 8/18/22 11/17/22	LRAA1 29.8 9.89-32.1 LRAA2 <b>60.4</b> (29.8-45.1)	µg/l	N/A	MCL=60	By-product of drinking water chlorination
Stage 2 TTHM Total Trihalomethanes (Average) <sup>6</sup> Range of values for TTHM	Y	2/17/22 5/19/22 8/18/22 11/17/22	LRAA1 <b>82.5</b> (41-88) LRAA2 73.4 (33.7-82)	µg/l	0	MCL=80	By-product of drinking water chlorination
Chlorine Residual (average) range	N	Daily testing	0.94 0.61-1.28	mg/l	MRDLG N/A	MRDL MCL=4	Used in the treatment and disinfection of drinking water

Total Organic Carbon <sup>7</sup>								
Total Organic Carbon Monthly Compliance Ratio	N	Monthly 2022	1.20-1.83	N/A	Compliance ratio >=1	TT		Organic material both natural and man made; Organic pollutants, decaying vegetation.

Raw Water E. coli Testing Round 2 LT2ESESWTR <sup>8</sup> Monthly for January- July 2020								
Lower Reservoir 2.5 Million Gallons average range	N/A	1/1/20-7/31/20	104-34-308	N/A	E.coli/100 ml	Average >100 E.coli/100ml		Human & animal fecal contamination

**FOOTNOTES-**

1. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. Level detected represents the highest level detected. Distribution system turbidity performed 5 times a week with 0.78 NTU being highest level detected and 0.23 NTU being the average level detected
2. This number represents the weighted average of the 3-individual filter turbidimeters.
3. The level presented represents the 90<sup>th</sup> percentile of 20 test sites. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90<sup>th</sup> percentile is equal to or greater than 90% of the copper values detected at your water system. In this case, 20 samples were collected at your water system and the 90<sup>th</sup> percentile value was the 18<sup>th</sup> sample with 3<sup>rd</sup> highest value (level detected 0.271 mg/l). The Action Level for copper was not exceeded at any of the sites tested.
4. The level presented represents the 90<sup>th</sup> percentile of the 20 samples collected. . In this case, 20 samples were collected at your water system and the 90<sup>th</sup> percentile value was the 18<sup>th</sup> sample with the 3<sup>rd</sup> highest value (level detected 1.4 µg/l). The action level for lead was not exceeded at any of the sites tested.
5. Water containing more than 20 mg/l of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 mg/l of sodium should not be used for drinking by people on moderately restricted sodium diets.
6. The average is based on a Locational Running Annual Average (LRAA). The average result shown for each of the two sites is the highest LRAA that occurred during 2022. The range of results for each site are also shown. LRAA1 is 4 Industrial Park and LRAA2 is 147 Saratoga Ave. The highest locational running annual averages for Haloacetic acids for LRAA1 occurred during the 2<sup>nd</sup> quarter and at LRAA2 during the 1<sup>st</sup> quarter. For the Trihalomethanes the highest LRAA for site 1 and site 2 was during the 1<sup>st</sup> quarter of 2022.
7. The Interim Enhanced Surface Water Treatment Rule (IESWTR) requires monitoring of raw and finished water Total Organic Carbon (TOC). Depending on the raw water alkalinity value, proper water treatment should remove between 15% to 50% of the raw water TOC thus reducing the amount of disinfection byproducts produced.
8. Under the LT2 (Long Term Enhanced Surface Water Treatment Rule) we monitored for Cryptosporidium and Giardia for the Lower Reservoir monthly along with a monthly E. coli sample. We present the range of results for 2022 in the table.

**Glossary**

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

*Parts per million (ppm) or Milligrams per liter (mg/l)* - one part per million corresponds to one minute in two years or a single penny in \$10,000.

*Parts per billion (ppb) or Micrograms per liter (µg/l)* - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000. *Parts per trillion (ppt) or Nanograms per liter (nanograms/l)* - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000

*Picocuries per liter (pCi/L)* - picocuries per liter is a measure of the radioactivity in water.

*Nephelometric Turbidity Unit (NTU)* - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

*90<sup>th</sup> Percentile Value*- The values reported for lead and copper represent the 90<sup>th</sup> percentile. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90<sup>th</sup> percentile is equal to or greater than 90% of the lead and copper values detected at your water system.

*Action Level* - the concentration of a contaminant, which, if exceeded, triggers treatment, or other requirements, which a water system must follow.

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

*Maximum Contaminant Level* - The “Maximum Allowed” (MCL) is 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.

*Maximum Contaminant Level Goal* The “Goal” (MCLG) is 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.

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

*Locational Running Annual Average (LRAA)*: The LRAA is calculated by taking the average of the four most recent samples collected at each individual site

*N/A-Not applicable*

Saratoga County Water Authority Water Supply Table of Detected Contaminants Public Water Supply Identification Number NY4530022							
Contaminant	Violation Y/N	Date of Sample	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
<b>Microbiological Contaminants</b>							
Turbidity <sup>1</sup> (Highest Turbidity)	Y	9/6/22	0.072	NTU	N/A	TT=1.0 NTU	Soil runoff
						100%	
<b>Inorganic Contaminants</b>							
Barium	N	1/19//22	5	µg/l	2000	MCL=2000	Barium
Chloride	N	4/8/20	11.3	µg/l	N/A	MCL=250	Naturally occurring or indicative of road salt contamination.
Manganese	N	4/8/20	2	µg/l	N/A	MCL=300	Naturally occurring
Nitrate	N	1/19//22	0.12	mg/l	10	MCL=10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium <sup>2</sup>	N	4/8/20	8.7	mg/l	N/A	N/A	Geology; Road Salt
Sulfate	N	4/5/22	7.45	mg/l	N/A	MCL=250	Geology
<b>Disinfection Byproducts (Quarterly samples)</b>							
Chlorine Residual (average) range	N	Daily testing	0.94 061-1.28	mg/l	MRDLG N/A	MRDL MCL=4	Used in the treatment and disinfection of drinking water
<b>Total Organic Carbon<sup>3</sup></b>							
Total Organic Carbon Monthly Compliance Ratio Raw (average) Treated (average)	N	Monthly 2022	4.19 1.67	N/A	Compliance ratio >=1	TT	Organic material both natural and man made; Organic pollutants, decaying vegetation.
<b>FOOTNOTES-</b>							
<p>1. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. Level detected represents the highest level detected. The standard for entry point is 1 NTU where 95% of the turbidity sample collected must have measurements below 0.3 NTU Distribution system turbidity performed 5 times a week with 0.190 NTU being highest level detected</p> <p>2. Water containing more than 20 mg/l of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 mg/l of sodium should not be used for drinking by people on moderately restricted sodium diets.</p> <p>3. The Interim Enhanced Surface Water Treatment Rule (IESWTR) requires monitoring of raw and finished water Total Organic Carbon (TOC). Depending on the raw water alkalinity value, proper water treatment should remove between 15% to 50% of the raw water TOC thus reducing the amount of disinfection byproducts produced.</p>							
<b>Glossary</b>							
<p><i>Non-Detects (ND)</i> - laboratory analysis indicates that the constituent is not present.</p> <p><i>Parts per million (ppm) or Milligrams per liter (mg/l)</i> - one part per million corresponds to one minute in two years or a single penny in \$10,000.</p> <p><i>Parts per billion (ppb) or Micrograms per liter (µg/l)</i> - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.</p> <p><i>Picocuries per liter (pCi/L)</i> - picocuries per liter is a measure of the radioactivity in water.</p> <p><i>Nephelometric Turbidity Unit (NTU)</i> - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.</p> <p><i>90<sup>th</sup> Percentile Value</i>- The values reported for lead and copper represent the 90<sup>th</sup> percentile. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90<sup>th</sup> percentile is equal to or greater than 90% of the lead and copper values detected at your water system.</p> <p><i>Action Level</i> - the concentration of a contaminant, which, if exceeded, triggers treatment, or other requirements, which a water system must follow.</p> <p><i>Treatment Technique (TT)</i> - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.</p> <p><i>Maximum Contaminant Level</i> - The "Maximum Allowed" (MCL) is 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.</p> <p><i>Maximum Contaminant Level Goal</i> The "Goal" (MCLG) is 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.</p> <p><i>Locational Running Annual Average (LRAA)</i>: The LRAA is calculated by taking the average of the four most recent samples collected at each individual site</p> <p><i>N/A-Not applicable</i></p>							

**Information on Cryptosporidium**

*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. During January 2020 through July 2020, as part of our sampling plan, Lower Reservoir twelve source water samples were collected and analyzed for *Cryptosporidium* oocysts. 3 samples of the 8 samples collected was presumed positive for *Cryptosporidium*, and was confirmed positive. Therefore, our monitoring indicates the presence of *Cryptosporidium* in our source water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of *Cryptosporidium* may cause cryptosporidiosis, a gastrointestinal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome disease within a few weeks. However, immuno-compromised people are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their health care provider regarding appropriate precautions to take to avoid infection.

**Information on Giardia**

*Giardia* is a microbial pathogen present in varying concentrations in many surface waters and groundwater under the influence of surface water. *Giardia* is removed/inactivated through a combination of filtration and disinfection or by disinfection. During January 2020 through July 2020, as part of our sampling plan, twelve samples of our Lower Reservoir source water samples were collected and analyzed for *Giardia* cysts. Of these samples 8 were confirmed positive for *Giardia* cysts. Therefore, our monitoring indicates the presence of *Giardia* in our source water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of *Giardia* may cause giardiasis, an intestinal illness. People exposed to *Giardia* may experience mild or severe diarrhea, or in some instances no symptoms at all. Fever is rarely present. Occasionally, some individuals will have chronic diarrhea over several weeks or a month, with significant weight loss. Giardiasis can be treated with anti-parasitic medication. Individuals with weakened immune systems should consult with their health care providers about what steps would best reduce their risks of becoming infected with Giardiasis. Individuals who think that they may have been exposed to Giardiasis should contact their health care providers immediately. The *Giardia* parasite is passed in the feces of an infected person or animal and may contaminate water or food. Person to person transmission may also occur in day care centers of other settings where handwashing practices are poor.

**Appendix A**

New York State Sanitary Code Compliance Monitoring Requirements- Compounds Analyzed that were Below Limits of Detection

CITY OF MECHANICVILLE TEST RESULTS					
Public Water Supply Identification Number NY4500166					
CONTAMINANT	MONITORING FREQUENCY		CONTAMINANT	CONTAMINANT	MONITORING FREQUENCY
Asbestos	Every 9 years <b>Waiver from monitoring</b> No asbestos pipe		<b>POC's (Volatile Organic Compounds)</b>		Monitoring requirement is one sample annually.  Sample from 4/5/22  <b>Non-Detect</b>
			Benzene	Trans-1,3-Dichloropropene	
Antimony	Monitoring requirement is 1 sample annually  Sample from 4/5/22  <b>Non-Detect</b>		Bromobenzene		
Arsenic			Bromochloromethane	Ethylbenzene	
			Bromomethane	Hexachlorobutadiene	
Beryllium			N-Butylbenzene	Isopropylbenzene	
Cadmium			sec-Butylbenzene	p-Isopropyltoluene	
Chromium			Tert-Butylbenzene	Methylene Chloride	
Cyanide			Carbon Tetrachloride	n-Propylbenzene	
Mercury			2-Chlorotoluene	1,1,1,2-Tetrachloroethane	
Selenium			4-Chlorotoluene	1,1,2,2-Tetrachloroethane	
Silver			Dibromomethane	Tetrachloroethene	
Thallium			1,2-Dichlorobenzene	Toluene	
Fluoride			1,3-Dichlorobenzene	1,2,3-Trichlorobenzene	
Beryllium			1,4-Dichlorobenzene	1,2,4-Trichlorobenzene	
			Dichlorodifluoromethane	1,1,1-Trichloroethane	
			1,1-Dichloroethane	Trichloroethene	
Color	Monitoring requirement is at State discretion  Sample from 4/5/22  <b>Non-Detect</b>		1,2-Dichloroethane	Trichloroethene	
Zinc			1,1 Dichloroethene	Trichlorofluoromethane	
			cis-1,2 Dichloroethene	1,2,3-Trichloropropane	
Iron			Trans-1,2-Dichloroethene	1,2,4-Trimethylbenzene	
			1,2 Dichloropropane	1,3,5-Trimethylbenzene	
			1,3 Dichloropropane	m-Xylene	
			2,2 Dichloropropane	o- Xylene	
			1,1 Dichloropropene	p-Xylene	
			Cis-1,3-Dichloropropene	Vinyl Chloride	
		Total Coliform / E. coli		Monitoring is 9 samples/ month <b>Non-Detect</b>	
		<b>Radiological Parameters</b>			
Turbidity Entry Point	See test results table footnotes		Gross Alpha/Beta particle activity	Sample 12/22/20	Monitoring is one sample every 6-9 years 2/28/14  <b>Non-Detect</b>
Turbidity Distribution System	See test results table footnotes		Radium 226 & 228		
<b>Regulated &amp; Unregulated Synthetic Organic Chemicals</b>					
Synthetic Organic Chemicals (Group I)			Synthetic Organic Chemicals (Group II)		Monitoring requirement is every 18 months 4/5/22  <b>Non-Detect</b>  <b>*State waiver does not require monitoring these compounds</b>
Alachlor	Aldicarb		Aldrin	Benzo(a)pyrene	
Aldicarb Sulfoxide	Aldicarb Sulfone		Butachlor	Carbaryl	
Atrazine	Carbofuran		Dalapon	Di(2-ethylhexyl) adipate	
Chlordane	Dibromochloropropane		Di(2-ethylhexyl) pthalate	Dicamba	
2,4-D	Endrin		Dieldrin	Dinoseb	
Ethylene Dibromide	Heptachlor		Diquat*	Endothall*	
Lindane	Methoxyhlor		Glyphosate*	Hexachlorobenzene	
PCB's	Toxaphene		Hexachlorocyclopentadiene	3-Hydroxycarbofuran	
2,4,5-TP (Silvex)	1,4-Dioxane		Methomyl	Metolachlor	
PFOA	PFOS		Metribuzin	Oxamyl vydate	
			Pichloram	Propachlor	
			Simazine	2,3,7,8-TCDD (Dioxin)*	