

2022 Drinking Water Quality Report

Town of Seneca Falls – 130 Ovid St. Seneca Falls, NY 13148 (Town of Seneca Falls Public Water System ID# NY49011)

Town of Romulus – Rt 89 Water District - Romulus Water Department – NY4914588

INTRODUCTION:

The Rt 89 Water District purchases water from the Town of Seneca Falls via the Varick Water District.

To comply with State regulations, the Town of Seneca Falls, 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. Last year, your tap water met all State drinking water health standards. This report provides 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 State standards.

If you have any questions about this report or concerning your drinking water, please contact James Varricchio, Chief Operator at 315-257-7104. We want you to be informed about your drinking water. If you want to learn more, please attend any of our Town Board meetings. The meetings are held on the first Tuesday of each month at 7:00P.M. in the Town Meeting Room located at 130 Ovid St, Seneca Falls, New York. If you have any questions concerning the water supply after it passes through our meter station, please contact Romulus Water Department Superintendent Robert Stapleton at 607-869-9326 ext. 231. Also, you are welcomed and encouraged to attend our regular Romulus Town Board meetings on the third Wednesday of each month, 6pm at the Romulus Town Hall. Or you may visit us on the World Wide Web at: www.romulustown.com

WHERE DOES OUR WATER COME FROM?

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 the EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The State Health Department, and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health. Our water source is surface water drawn from Cayuga Lake. During 2022, our system did not experience any restriction of our water source. The treatment plants water intake is located 1,850 feet from the western shore of Cayuga Lake and is in 25 feet of water.



DESCRIPTION OF THE TREATMENT PROCESS

Raw water is drawn into the treatment plant through a 30" diameter intake line. As the raw water enters the treatment plant, a coagulant is added to assist in the settling of particles that may be in the water prior to filtration. The coagulant currently being used is PAC (poly-aluminum chloride). This chemical causes the particles to attract each other and become dense enough to settle by gravity. The treatment plant also has the ability to add activated carbon for taste and odor control. After settling takes place, the water enters one of the five filters located in the main building of the plant. The water passes through a layer of anthracite coal, GAC (granular activated carbon) and several layers of sand to remove any remaining particles larger than 0.3 NTU¹. After filtration, the water enters a 450,000-gallon clear well tank that is located beneath the main filter building. This filtered water then passes through an ultra-violet light unit for disinfection. Gaseous chlorine is then added to the filtered/treated water to establish a free chlorine residual prevents any bacteria growth in the distribution system. The now potable water is then pumped through a 20" diameter transmission main to the distribution system to supply the users and maintain the level of the storage towers.

Information regarding the Cayuga Lake watershed can be found on the Internet at www.cayugawatershed.org or by contacting the Genesee/Finger Lakes Regional Planning Council, 1427 Monroe Avenue, Rochester, NY 14618, 585-442-3770. This website is an excellent source of information regarding the characterization of the entire watershed.

FACTS AND FIGURES

The Seneca Falls Water Treatment plant is rated to produce 3,500,000 gallons of water per day, and our water system serves approximately 9,000 people with 4,450 service connections. This number includes residential as well as commercial and industrial users. The total potable water produced in 2022 was

387,968,000 total gallons for an average daily production of 1,062,926 gallons per day. Our highest single day of production was 1,771,000 gallons, which occurred on 09/16/2022. The cost for this amount of

water to a Town customer is \$61.75/quarter. This amount covers 1,200 cubic feet or about 8976 gallons of water; water usage exceeding 1,200 gallons is charged 0.0468 ¢ per cubic foot.

In the Town of Fayette, Cayuga Lake Water District #3, the Town supplied 13,275,470 gallons of water (1,774,795 cu Ft) to its customers during 2022 at a rate of 3.00/1000 gallons. ALL customers of this district should contact the Town of Fayette at 315-585-6282 regarding any billing and/or service questions. The Town of Seneca Falls billed and supplied Fayette Water District #7 customers for 4,937,697 gallons (660,120 cu Ft).

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: total coliform, E. Coli, turbidity, chlorine, phosphorus, alkalinity, total organic carbon, 21 inorganic compounds, nitrate, 25 volatile organic compounds, total trihalomethanes, 52 synthetic organic compounds, PFOA/PFOS, 1,4 dioxane, microcystin (blue green algae) and metals. The



table included in this report depicts which compounds were detected in your drinking water. The State allows us to test for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, is more than one year old. Anyone interested in copies of the individual laboratory reports can contact the chief operator James Varricchio at 315-549-2508.

It should be noted that all drinking water, including bottled drinking water, might be reasonably 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 or the Seneca County Health Department at 315-539-1945.

Contaminant	Violatio	Date of	Level	Unit	MCL	Regulato	Likely Source
	n	Sample	Detecte	Measureme	G	ry Limit	of
	Yes/No		d	nt		(MCL,	Contaminant
			(Avg/Ma			TT or	
			x)			AL)	
			(Range)				
Turbidity		5/10/22	0.33 Avg	NTU	N/A	TT=<5	Soil Runoff
(Distribution		(Highes	24.2			NYU	
System) * See	NO	t)	Max				
Note 3			0.06-				
			24.2				
			Range				
Turbidity (Leaving	NO	9/23/22	0.08 Ave	NTU	N/A	1.0	Soil Runoff.
Treatment Plant)		(Highes	0.64				
*See Note 3		t)	Max				
		-	0.01-				
			0.64				
			Range				
Chlorine		10/03/2	1.68 Avg		N/A	4.0	Additive to
		2	2.9 Max				drinking
	NO	(Highes	1.0- 2.9	mg/L			water to
		t)	Range	-			control
		,	U U				microbes
	NO	9/22/22	0.56	mg/L	10	10	Runoff from
Nitrate				U			fertilizer use:
							leaching from
							septic tanks,
							sewage.
							erosion
Barium				mg/L	2	2	Naturally
	NO	9/22/22	0.026	J			occurring
	_						
Aluminum	NO	9/26/19	0.87	ma/l			
		0,20,10	0.01				
					1		

TABLE OF DETECTED CONTAMINANTS



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Sodium	NO	9/22/22	34	mg/L	(see health effect s)	N/A	Naturally occurring; Road salt; Water softeners; Animal waste
Total Trihalomethanes Disinfection By- Products	YES	1 sample per quarter @ 2 site	61 Avg 47-91 Range @ site #1	µg/L	80	N/A	By-products of drinking water chlorination needed to kill harmful organisms. TTHM's are formed when source water contains large amounts of organic matter.
(TTHM's – chloroform, bromodichlorometh an, dibromochlorometh an, and bromofrom)			49 Avg 31-84 Range @ Site #2				See response above
Total Trihalomethanes Disinfection By- Products Rt 89 Water District NY4914588	YES	8/3/22 1 sample per quarter @ 1 site	8/3/22 67.7- 92.53 Range 96.675 Highest Running Annual Average	µg/L	80	N/A	By-Products of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
Haloacetic Acid Disinfection By- Products	NO	1 sample per quarter @ 2 sites	18 Avg 14-21 Range @ Site #1 16 Avg 10-	g/L	60	N/A	A By- products of drinking water chlorination needed to kill



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			22 Range @ Site #2				harmful organisms.
Haloacetic Acid Disinfection By- Products Rt 89 Water District NY4914588	NO	1 sample per quarter @ 1 site	15-31 Range 29.25 Running Annual Average	µg/L	60	N/A	By-Products of drinking water chlorination needed to kill harmful organisms.
Copper *See Note 1	NO	12/16/2 0	0.035- 90% 0.001 – 0.36 (range	mg/L	1.3	AL= 1.3	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives
Lead (See Note 2)	NO	12/15/2 0	0.0012- 90% ND – 0.0024 (range)2	mg/L	1.3	AL = 0.015	Corrosion of household plumbing systems; Erosion of natural deposits.
Fluoride	NO	9/22/22	0.11	mg/L	N/A	2.23- MCL	Naturally occurring.
Nickel	NO	9/22/22	0.0014	mg/L	N/A	N/A	Discharge from stainless steel factories.
Total Organic Carbon	NO	6/02/22 (Highes t)	1.68 Avg 1.9 Max 1.5-1.9 Range	mg/L	N/A	TT	Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include



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							trihalomethan es (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems
Microcystin From HABs (In Raw Water)	NO	9/15/22 (Highes t	1.03 Avg 2.60 Max 0.30- 2.60 Range	Ug/I	0	N/A	Harmful algae blooms

Notes:

1 – The level presented represents the 90th percentile of the 40 sites tested. 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 90th percentile is equal to or greater than 90% of the copper values detected at your water system. In this case, 40 samples were collected at your water system and the 90th percentile value was the 36th value (0.0035 mg/l). The action level for copper was not exceeded at any of the sites tested.

2 – The level presented represents the 90th percentile of the 40 samples collected. The action level for lead was not exceeded at any of the sites tested. The 90th percentile value for lead is 0.0012 mg/L.

3 – Turbidity is a measure of the cloudiness of the water. We test it because it is a good indicator of the effectiveness of our filtration system. Our highest single turbidity measurement for the year occurred on 9/23/22 (0.64 NTU). State regulations require that turbidity must always be below 5 NTU. The regulations require that 95% of the turbidity samples collected have measurements below 0.5 NTU.

Definitions:

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



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.

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

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

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

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 (µg/l): Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb). Pico curies per liter (pCi/L): A measure of the radioactivity in water.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that 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.

WHAT DOES THIS INFORMATION MEAN?

Although some contaminants were detected none reached the regulatory limit, therefore no violations are present. We will continue to monitor contaminants as required by the state and report any new information on the 2023 water quality report next year.

The table shows that our system uncovered some problems this year. The public water supply has levels of trihalomethanes above those specified by the New York State Department of Health. The district is required to sample water for trihalomethanes within the district's distribution system each quarter of the year, then average quarterly sample results are obtained within the past twelve months. This value is called the Running Annual Average (RAA). The New York State Department of Health has set the maximum contaminant level (MCL) for the Running Annual Average of trihalomethanes at 80 parts per billion. On 8/3/2022 (3rd quarter sample) the Romulus Route 89's Public Water System Running Annual Average was 96.675 parts per billion or 16.675 parts per billion above the allowable concentration. During the 4th quarter of 2022 the RAA dropped to 77.36 parts per billion which is below the MCL. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer. We are correcting this by increasing the frequency of flushing the water mains. Research has shown that the potential for the formation of trihalomethanes is the greatest the longer chlorine remains in contact with the organic matter in the water. Flushing reduces this "contact time" which reduces Trihalomethane formation.



SANITARY CODE VIOLATIONS

A sanitary survey was completed by the Seneca County health department in September of 2022. The system was found in compliance with sanitary code, and no violations were reported.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. Between January 1 st , 2021 and June 30th , 2022, we did not complete the required testing for synthetic organic contaminants (SOCs) and therefore cannot be sure of the quality of your drinking water during that time. SOC samples were collected on September 22, 2022, and all results were satisfactory.

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 Town of Romulus 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 Robert Stapleton at 607-869-9326 ext. 231. 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*.

HEALTH EFFECTS OF SODIUM IN WATER

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.

INFORMATION ON HARMFUL ALGAW BLOOMS (BLUE GREEN ALGAE)



The Town of Seneca Falls routinely monitors lake conditions to spot harmful algae blooms by our intake lines. During the HAB (Harmful Algae Bloom) season, we frequently sample microcystin in our raw and finished water. Levels of the toxin have been detected in the raw untreated water entering the facility, but our treatment process has been successful in removing all of the toxin to ensure your drinking water remains unaffected.

INFORMATION ON RADON

Radon is a naturally occurring radioactive gas found in soil and outdoor air that may also be found in drinking water and indoor air. Some people exposed to elevated radon levels over many years in drinking water may have an increased risk of getting cancer. The main risk is lung cancer from radon entering indoor air from soil under homes. For additional information call your state radon program (1-800-458-1158) or call EPA's Radon Hotline (1-800-SOS-Radon).

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Although our drinking water met or exceeded state and federal regulations, some people may be more vulnerable to disease causing microorganisms or pathogens in drinking water than the general population. Immunocompromised 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 microbial pathogens are available from the Safe Drinking Water Hotline (1-800-426-4791).

WHY SAVE WATER AND HOW TO AVOID WASTING IT?

Although our system has an adequate amount of water to meet present and future demands, there are a number of reasons why it is important to conserve water:

- Saving water saves energy and some of the costs associated with both of these necessities of life.
- Saving water reduces the cost of energy required to pump water and the need to construct costly new, pumping systems and water towers; and
- Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions so that essential firefighting needs are met.

You can play a role in conserving water by becoming conscious of the amount of water your household is using, and by looking for ways to use less whenever you can. It is not hard to conserve water.

Conservation tips include:

♦ Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So, get a run for your money and load it to capacity.

• Turn off the tap when brushing your teeth.



• Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it up, and you can save almost 6,000 gallons per year.

• Check your toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Fix it and you save more than 30,000 gallons a year.

• Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances, then check the meter after 15 minutes, if it moved, you have a leak.

SYSTEM IMPROVEMENTS

During 2022, the following work was completed:

Distribution System:

• 112 New water meters were installed.

• Our staff have been working to identify and replace hydrants around the system that are past their useful lifespan. Many date back to the 1900's.

• Radio reading equipment installed/updated at multiple locations. With this equipment water meters can be read remotely without physically going on the property. This can also provide real time data if a leak occurs at the residence.

• Staff have been identifying any possible lead service lines in our water system and creating an inventory of them per new guidelines.

• Multiple water main leak repairs. Our system is aging, and water main leaks do happen. They are repaired quickly by our staff whenever they occur.

Treatment Plant:

- Moving forward with the installation of a new CO2 injection system at the treatment plant. Currently we have no means of controlling the raw water pH that comes out of the lake. This system will now enable us to lower the pH of the raw water to better utilize chemicals and provide a better product to our customers.
- Along with the Co2 Injection system we are working on a caustic soda feed system. This system will allow us to increase the finish water pH before it enters the distribution system. Being able to control finish water pH will help to keep the water from corroding the pipes and helps with corrosion control.
- Installation of a new concrete spill containment pad. This makes sure a chemical spill is properly
 contained if an incident happens while unloading liquid chemicals from a delivery truck into our
 treatment plant.
- To keep the property secure, we are currently in the process of replacing sections of fencing that need repair. The security and camera systems were also upgraded.



• Both UV Reactors have been rebuilt and inspected by our staff for proper operation. These are crucial to our treatment process as UV light is our main source of disinfection.

IN CLOSING

Thank you for allowing us to continue to provide your family and/or business with quality drinking water this year. We ask that all our customers help us protect our water sources, which are the heart of our community. Look forward to seeing our staff working in the street during the 2023 construction season, as many projects are currently planned. Again, if you have any questions about our treatment processes or water sample results, please feel free to contact the Chief Operator James Varricchio at 315-257-7104. We look forward to serving our community for another year!

Town of Seneca Falls Water Department Staff – 2022 Superintendent- Joseph Tullo; Chief Operator-James Varricchio; Plant Operator- Brian DeVay; Plant Operator- Mason Hawker; Plant Operator- Edward Thurston; Plant Operator- Joshua Sahler; Maintainer- Fred Peterman; Maintainer- Joseph McLane; Maintainer- Timothy Pagano; Maintainer- Lewis Archer; Senior Account Clerk Sarah Wright

Town of Romulus Water Department Staff 2022 Superintendent- Robert "Hobie" Stapleton Water Laborer- Kevin Kaiser Town Secretary- Morgan McLoud