2024 ANNUAL DRINKING WATER QUALITY REPORT

Town of Seneca Falls
Public Water System
PWSID: NY490011

INTRODUCTION

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 315-549-2508. 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 6:00 P.M. in the Town Meeting Room located at 130 Ovid St, Seneca Falls, New York.

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.

To ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the number 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 2024, 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 25 feet below the surface.

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 to 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 NTU[1]. 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. This 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.

SUMMARY OF THE SWAP (SOURCE WATER ASSESSMENT PROGRAM):

The NYS DOH has evaluated this PWS’s (Public Water System’s) susceptibility to contamination under the Source Water Assessment Program (SWAP), and their findings are summarized in the paragraph(s) 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 phosphorus, DBP precursors, and pesticide contamination. While there is not a great density of permitted discharges in assessment area, the total amount of wastewater discharged from these facilities is high enough to raise the potential for contamination (particularly for protozoa). There is also noteworthy contamination susceptibility associated with other discrete contaminant sources, and these facility types include: PCBS and landfills.

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 2024 was 348,770,000 total gallons for an average daily production of 955,553 gallons per day. Eleven percent of the water produced in 2024 was not billed to customers and was lost due to fires, system leakage, or faulty water meters. Our highest single day of production was 1,506,000 gallons, which occurred on 02/14/2024. 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 15,061,701 gallons of water (2,013,596 ft3) to its customers during 2024 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 also billed and supplied Fayette Water District #7 customers for 4,774,850 gallons. (638,349 ft3)

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, a full suite of PFOA/PFOS compounds, 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. In 2024 we were also required to collect and analyze drinking water samples for the following unregulated contaminants: EPA Method 533 for perfluorinated and polyfluorinated alkyl substances in drinking water. Anyone interested in copies of the individual laboratory reports can contact the Chief Operator, James Varricchio at 315-549-2508.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER? (cont.)

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.

TABLE OF DETECTED CONTAMINANTS

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg./Max) (Range)	Unit of Measure	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Turbidity (Distribution System) (See Note 3)	NO	7/10/24 (Highest)	0.20 Avg 3.87 Max 0.06-3.87 Range	NTU	N/A	TT= > 5 NTU	Soil Runoff.
Turbidity (Leaving Treatment Plant) (See Note 3)	NO	8/7/24 (Highest)	0.08 Avg 0.17 Max 0.03-0.17 Range	NTU	0.30	1.0	Soil Runoff.
Chlorine	NO	7/20/24 (Highest)	1.55 Avg 2.20 Max 1.20-2.20 Range	mg/L	N/A	4.0	Additive to drinking water to control microbes.
Nitrate	NO	8/22/24	0.884	mg/L	10	10	Runoff from fertilizer use; Leaching from septic tanks; sewage; Erosion of natural deposits.
Barium	NO	8/22/24	0.026	mg/L	2.0	2.0	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Nickel	NO	8/22/24	0.0007	mg/L	N/A	N/A	Naturally occurring.
Sodium	NO	8/22/24	31.9	mg/L	(see Health Effects)	N/A	Naturally occurring; Road salt; Water softeners; Animal waste.
Total Trihalomethanes Disinfection By-Products	NO	1 sample per quarter @ 2 sites	35.5 Avg 19-47 Range @ Site #1 47 Avg 29-56 Range @ Site #2	µg/L	N/A	80	By-products of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains organic matter.
Haloacetic Acid Disinfection By-Products	NO	1 sample per quarter @ 2 sites	18 Avg 15-22 Range @ Site #1 19 Avg 12-26 Range @ Site #2	µg/L	N/A	60	By-products of drinking water chlorination needed to kill harmful organisms.
Copper (See Note 1)	NO	7/06/23 (Highest)	0.047-90th% 0.0017 – 0.11 (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	7/06/23 (Highest)	<1-90th% <1 – 1.1 (range)[2]	µg/L	15	AL = 15	Corrosion of household plumbing systems and service lines connecting building to water mains; Erosion of natural deposits.
Bromodichloromethane	NO	8/22/24	8.61	ug/ L	70	80	Reaction of chlorine with organics
Chlorodibromomethane	NO	8/22/24	5.59	ug/ L	70	80	Reaction of chlorine with organics
Chloroform	NO	8/22/24	7.35	ug/L	70	80	Reaction of chlorine with organics
Total Organic Carbon	NO	12/5/24 (Highest)	1.80 Avg 2.3 Max 1.4-2.3 Range	mg/ L	N/A	N/A	Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts.
Perfluorobutanoic acid (PFBA) **Perfluoropentanoic acid (PFPeA)** **(See Note 4)**	NO NO	2/07/24 2/07/24	1.95 2.08	ng/l ng/l	50000 50000	N/A	PFAS are used in stain-resistant fabrics, paper food packaging, photographic film, and carpets.
Microcystin From HABs (In Raw Water)	NO	10/10/24 (Highest)	1.22 Avg Range <0.3-2.60	µg/L	0	N/A	Harmful algae blooms.

Notes:

1 – The level presented represents the 90th percentile of the 20 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, 20 samples were collected at your water system and the 90th percentile value was 0.047 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 20 samples collected. The action level for lead was not exceeded at any of the sites tested. The 90th percentile value for lead is <1 µg/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 8/7/24 (0.17 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.

4- All perfluoroalkyl substances, besides PFOA and PFOS, are considered Unspecified Organic Contaminants (UOC) which have an MCL = 0.05 mg/L = 50,000 ng/L. These contaminants are currently unregulated.

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).

Nanograms per liter (ng/l): Corresponds to one part of liquid in one trillion parts of a liquid (parts per trillion – ppt).

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 new information on the water quality report next year.

SANITARY CODE VIOLATIONS:

A sanitary survey was completed by the Seneca County health department in 2024. The system was found in compliance with sanitary code, and no violations were reported.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

Our water system completed all required sampling in 2024 and continues to meet all rules and regulations.

LEAD:

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. The Town of Seneca Falls is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formulas, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact James Varricchio, Chief Operator at 315-549-2508. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at *https://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 ALGAE 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 for 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).

INFORMATION ON LEAD SERVICE LINE INVENTORY:

A Lead Service Line (LSL) is defined as any portion of pipe that is made of lead which connects the water main to the building inlet. An LSL may be owned by the water system, owned by the property owner, or both. The inventory includes both potable and non-potable SLs within a system. In accordance with the federal Lead and Copper Rule Revisions (LCRR) our system has prepared a lead service line inventory and has made it publicly accessible by visiting our water department office in the Seneca Falls Municipal Building (130 Ovid Street, Seneca Falls NY).

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. Immuno- compromised people such as people with cancer undergoing chemotherapy, people 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 several 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 2024, the following work was completed:

Distribution System:

- 3600 new water meters installed along with a radio read system for accurate and real time meter reading, and leak detection.
- Staff have been identifying 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.
- Wash the inside and inspected the Auburn Rd water storage tank.
- Installed a new PAX mixer in the Van Renssalaer storage tank.

Treatment Plant:

- Completed the installation of a new Co2 injection system at the treatment plant. This system will now enable us to lower the pH of the raw water to better utilize chemicals and provide a better product for 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 the finished water pH will help to keep the water from corroding pipes in the distribution system.
- Replaced two of the 150HP variable frequency drives that power our high lift pumps, these were 20 years old and passed their useful life expectancy.
- Rebuilt high lift pump #1 with a new impeller, shaft, wear rings, and seals.
- Designed and installed two new waste pumps in the subbasement. These assist in the event of a water leak and help prevent flooding of the plant.
- Cleaned and inspected the 30” raw water intake line, bringing it back to full capacity.
- Divers entered the 450,000-gallon clearwell under the facility and inspected its condition.

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. 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 315-549-2508. We look forward to serving our community for another year!

WATER & SEWER DEPARTMENT STAFF - 2024

- **Superintendent:** Joseph Tullo
- **Chief Operator:** James Varricchio
- **Deputy Operator:** Joshua Sahler
- **Operator:** Lewis Archer
- **Operator:** Troy Pickard
- **Operator:** Ruairi Orlando
- **Mechanic:** Joseph Jacuzzo
- **Maintainer:** Fred Peterman
- **Maintainer:** Timothy Pagano
- **Maintainer:** Cole Marr
- **Maintainer:** Austin St. John
- **Senior Account Clerk:** Tom Dyson