Annual Drinking Water Quality Report for 2017

Town of Seneca Falls

Town of Seneca Falls Water Department
130 Ovid St.
Seneca Falls, New York 13148

(Town of Seneca Falls Public Water Supply ID# - NY 4901198)

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 Dom Belle, 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 7:00 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. 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's 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 2016, our system did not experience any restriction of our water source. The treatment plants water intake is located 1,850 from the western shore of Cayuga Lake and is in 25 feet of water.

Basic 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 (polyaluminum 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 clearwell tank that is located beneath the main filter building. This filtered water then passes through a ultra-violet light unit for disinfection. A small amount of chlorine is added to the filtered/treated water to prevent any bacteria growth in the distribution system. The now potable water is then pumped through a 20" diameter transmission main and 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

Our water system serves approximately 9,000 people with 3,529 service connections. This number includes residential as well as commercial and industrial users. The total potable water produced in 2017 was 384,,000 total gallons for an average daily production of 1,038,450 gallons per day. Our highest single day of production was 1,788,000 gallons, which occurred on August 29th. 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 9,110,692 gallons of water (1,218,006.95cu Ft) to its customers during 2017 at a rate of 3.00/1000 gallons. ALL customers of this district should contact the Town of Fayette @ 315-585-6282 regarding any billing and/or service questions. The Town of Seneca Falls billed and supplied Fayette Water District #7 customers for 376,424 gallons (50,327.06 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, alkalinity, total organic carbon, 21 inorganic compounds, nitrate, 25 volatile organic compounds, total trihalomethanes, and 52 synthetic organic compounds. 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, are more than one year old. Anyone interested in copies of the individual laboratory reports can contact the Chief Operator @ 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 (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 Measure-ment	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Turbidity[1] (Distribution System)	NO	8/24/17	0.12 0.71 0.06-0.64	NTU	N/A	TT= < 5 NTU	Soil Runoff
Turbidity[1]	NO	7/22/17	0.07 0.15 0.03-0.13	NTU	N/A	1.0	Soil Runoff
Nitrate	NO	10/5/17	0.66	mg/L	10	10	Runoff from fertilizer use; Leaching from septic tanks; sewage; Erosion of natural deposits.
Barium	NO	10/5/17	.024	mg/L	2	2	Naturally occurring.
Fluoride	NO	12-6-12	0.11	mg/L	0.8-1.2	2.2	Naturally occuring
Cyanide	NO	12-12-2013	0.012	mg/L	0.2	0.2	Naturally occurring. Discharge from steel/metal factories; Discharge from plastic and fertilizer factories.
Sodium	NO	10/5/17	29	mg/L	(see Health Effects)	N/A	Naturally occurring; Road salt; Water softeners; Animal waste.
Total Trihalomethanes Disinfection By-Products (TTHM's –chloroform, bromodichloromethane, dibromochloromethane, and bromofrom)	NO	1 samples per quarter @ 2 sites	18.25 RAA 1.7-61 range @ site 1 16.9 RAA 3.4-29 range @ site 2	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.
Haloacetic Acid Disinfection By-Products	NO	1 sample per quarter @ 2 sites	11.2 RAA 1.7 - 58 range @ site 1 10.5 RAA 2.4-27 range @ site 2	µg/L	60	N/A	By-products of drinking water chlorination needed to kill harmful organisms.
Copper	NO	9/20/17	0.054- 90% ND – 0.12 (range)	mg/L	1.3	AL = 1.3	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.
Lead	NO	9/20/17	0.004[3-90%] ND – 0.16 (range)	mg/L	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits.

Chromium	NO	12-2-14	0.0017	mg/L	0.2	0.2	Discharge from steel and pulp mills; Erosion of natural deposits.
Nickel	NO	10/5/17	0.00099	mg/L	N/A	N/A	Discharge from stainless steel factories
Chromium	NO	10/5/17	2.1	ug/L	100	100	Discharge from steel and pulpmills erosion of natural deposits
Bis(2-Ethylhexyl)phthalate	NO	10/5/17	0.00083	mg/L	0.005	NA	Discharge from chemical factories.
Total Organic Carbon	NO	9/22/17	AVG 2.0 MAX 3.0 RANGE 1.6-3.0	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 trihalomethanes (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, or nervous system effects, and may lead to an increased risk of getting cancer.
Chlorine	NO	8/24/17	Avg 2.5 Max 3.0 Range 1.7-3.0	mg/L	N/A	4	Additive to drinking water to control microbes.
Chloramines	NO	8/24/17	Avg 2.6 Max 3.2 Range 2.0-3.2	mg/L	N/A	4	Additive to drinking water to control microbes.
Specific Ultraviolet Absorbance (SUVA)	NO	8-9-17	2.08	l/mg-m	N/A	N/A	

Notes:

1 – 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 8/15/16 (0.14 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.

2 – 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 the 18th value (0.0018 mg/l). The action level for copper was not exceeded at any of the sites tested.

3 – The level presented represents the 90th percentile of the 20 samples collected. The action level for lead was exceeded at one of the 20 sites tested. The 90th percentile value for lead is 0.027 mg/L.

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.

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had no MCL violations in 2016. We have learned through our testing that some contaminants have been detected.It should be noted that the action level for lead was exceeded in one of the samples collected. Based on this result we are required to present the following information on lead in drinking water:

Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. The Town of Seneca Falls is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or 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.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2017, our system was in compliance with applicable State drinking water operating and monitoring requirements.

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. 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 microbial pathogens are available from the Safe Drinking Water Hotline (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 fire fighting 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 201, the following work was completed:

- 2 Fire hydrants were replaced
- 4 new water services were installed.
- 4 water services were repaired.
- 6 water main breaks were repaired.

Major projects completed in 2017:

- **PAINTED EXTERIOR OF VANRENSARLEAR WATER TOWER**

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. Please call our office if you have questions.

WATER DEPARTMENT STAFF - 2017

Account Clerk- Sarah Wright
Account Clerk- Kassandra Gramling
Chief Plant Operator – Dominick Belle
Plant Operator – Mark Allen
Maintainer – Patrick "Rick" Russo
Maintainer - Fred Peterman
Maintainer- Tim Lotz