CITY OF GENEVA

ONTARIO COUNTY, NY

2021 ANNUAL WATER QUALITY REPORT

CITY OF GENEVA

PWS ID NUMBER NY3401156

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INTRODUCTION

To comply with State regulations, the City of Geneva will be annually issuing a report describing the quality of your drinking water. One of the purposes of this report is to raise your awareness of the need to protect our drinking water sources. Last year your tap water met all state drinking water health standards. We are proud to report that our system did not violate the maximum contaminant level or any other water quality 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. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled City council meetings. The meetings are held on the first Wednesday of each month. Exact meeting schedules, dates and times can also be reviewed by the public by visiting the City of Geneva Website at https://cityofgenevany.com or by calling City Hall at (315) 789-2603.

WHERE DOES OUR WATER COME FROM?

In general, all sources of drinking water (both tap water and bottled water) including rivers, lakes, streams, ponds, reservoirs, springs, and wells contain contaminants. 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 activity. Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, farming.

- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

- *Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-*products of industrial process and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

- Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminants monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

Our water source is surface water pumped from Seneca Lake. During 2021, our system did not experience any restriction of our water source. The water is stored in a city reservoir, which can hold 5,000,000 gallons. The water is treated prior to distribution. We use slow sand filtration and membrane

microfiltration to reduce turbidity. We treat the water with chlorine for disinfection and phosphate for corrosion control. For promotion of strong teeth, we add fluoride to our water.

The New York State Department of Health has completed a source water assessment. This assessment found an elevated susceptibility to contamination of this source of drinking water. The number of agricultural lands in the assessment area results in elevated potential for phosphorus, disinfection by-product precursors, and pesticide contamination. While there are some facilities present, permitted discharges do not likely represent an important threat to source water quality based on their density in the assessment area. There is also noteworthy contamination susceptibility associated with other discrete contaminant sources, and these facility types include landfills. Access to the source water assessment and unregulated contaminants are available by contacting the City of Geneva Water treatment Plant Supervisor at (315) 789-5755.

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, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, and synthetic organic compounds, haloacetic acids and radionuclides. The table presented on page 5 & 6 is a water quality summary of 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.

The city has available analytical lab results for all tests completed. These results are available for review upon written requests to customers of the City of Geneva Water Department. All requests must be made through the City Clerk located at 47 Castle Street, Geneva, NY 14456.

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 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 Geneva District Office of the NYS Health Department at (315) 789-3030.

FACTS AND FIGURES

Our water system serves approximately 12,762 city residents and about 2,000 town residents through 4,329 service connections. We maintain 82 miles of distribution piping, 755 valves and 534 hydrants in our system. The total water produced in 2021 was 617,645,000 gallons. The amount of water that we were able to meter this year was 573,322,186 gallons. This leaves an unaccounted total of 44,322,820 gallons with a loss of approximately 7.73%. Water loss can be attributed to things such as flushing of hydrants, water main breaks, washing and refilling of water plant filters, leaks, and fire department use. In 2021, the water charge for a family of four using 13,000 gallons per quarter with a 5/8 meter was $86.26, this equates to $.96 cents per day. The total hardness of our water is 150 mgCaCO3/liter or 8.7 grains per gallon.

WATER QUALITY SUMMARY TABLE

Contaminant	Violation Yes/No	Date of Sample	Level Detected Range	Unit	MCLG	Regulatory Limit MCL & AL	Likely Source of Contamination
E-Coli	NO	Monthly	NONE	N/A	0	N/A	Natural organic material
Total Coliform	NO	Monthly	NONE	N/A	0	N/A	Natural organic material
Microbiological Contaminants							
Turbidity (Distribution) (** Footnote)	NO	Jul-21	2.47	NTU	<5.0 NTU	>5.0**	Highest sample measured from the field. Heavy use / water main breaks.
-Micro-Filters finished water -Sand Filters finished water	NO	2021	0.02- 0.38 0.02- 0.26	NTU	<1.0 NTU	95% of samples <1.0**	Samples taken at the Water Plant. Soil runoff
Radionuclides							
Radium 226 Radium 228 Gross Alpha	NO	9/1/2013	-0.0523+/-0.4 -1.819+/-.868 0.371+/-.496	pCi/L	0	MCL=5	Erosion of natural deposits.
Inorganics							
Total Trihalomethanes (chloroform, bromoform, bromodichloromethane, dibromochloromethane) (**** Footnote)	NO	Quarterly 2021	64.36 averaged over *4 quarters in 2021.* Max LLRA= 69 (18.5-95.60) Low-High	ug/l	N/A	MCL=80 Annual Avg.	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter
Haloacetic acids (mono-, di-, and trichloroacetic acid, and mono-and di-bromoacetic acid) (**** Footnote)	NO	Quarterly 2021	20.73 averaged over 4 quarters in 2021. Max LLRA=22.23 (13.90-29.2) Low-High	ug/l	N/A	MCL=60 Annual Avg.	By-product of drinking water chlorination
HABS	NO	Aug-Oct	< 0.3	ug/l	N/A	1.6 µg/L for microcystins	Blue/Green algae formation at raw water intake.
Pfoa/Pfos	NO	Quarterly 2021	< 2.1	ng/l	N/A	Action level 10 ng/l	Possibly the Seneca Army Depot
nitrate	NO	Feb-21	0.48	mg/l	10	MCL=10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
antimony	NO	Feb-21	0.0006	mg/l	50	MCL=50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
nickel	NO	Feb-21	0.0007	mg/l	0.1	MCL=0.100	Metal alloys; electroplating; batteries; chemical production

fluoride	NO	Monthly 2021	0.84	mg/l	N/A	MCL=2.2	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.
Arsenic	NO	21-Feb	0.0008	mg/l	N/A	MCL=0.010	Naturally occuring
Solenium	NO	21-Feb	0.0007	mg/l	N/A	MCL=0.05	Naturally occuring
1/4 Dioxane	NO	Quarterly	Non Detect	ug/l	N/A	MCL=1 ug/l	Textile sources
Contaminant	Violation Yes/No	Date of Sample	Level Detected Range	Unit	MCLG	Regulatory Limit MCL & AL	Likely Source of Contamination
barium	NO	Feb-21	0.0262	mg/l	2	MCL=2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Sodium (*** Footnote)	NO	Feb-21	75.7	mg/l	N/A	***	Naturally occurring; road salt; water softeners; animal waste
Lead (* Footnote)	NO	Oct-21	5.3 (0.0-17.5)	ug/l	N/A	AL=15	Corrosion of household plumbing systems; erosion of natural deposits
copper	NO	Oct-21	0.37 (0.022-0.814)	mg/l	1.3	AL=1.3	Corrosion of household plumbing deposits; leaching from wood preservatives

Compounds tested but not detected can be found online under the NYSDOH subpart 5-1.52 Tables 8B,9A,B and C.

*The level presented represents the 90th percentile of the 30 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 lead or copper values detected at your water system. In this case, thirty samples were collected at your water system and the 90th percentile value was the third highest value. The action level for Lead and Copper was not exceeded.

** 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 daily turbidity in the distribution system was (2.47 NTU) and occurred on 7-1-2021. State regulations require that turbidity monthly averages always be below 5 NTU in the distribution system. The regulations require that 95% of the filter's turbidity samples collected have measurements below 1.0 NTU. Throughout all of 2021 we had NO measurements exceeding 1.0 NTU.

***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.

****THM/HAA5 levels represent the highest locational running annual average and the LRAA.

Definitions

- LRAA- Location running annual average.

- 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.

- 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.

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

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

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

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

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

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

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

- Picograms per liter (pg/l): Corresponds to one part per of liquid to one quadrillion parts of liquid (parts per quadrillion – ppq).

- Picocuries per liter (pCi/L): A measure of the radioactivity in water.

- Millirems per year (mrem/yr): A measure of radiation absorbed by the body. Million Fibers per Liter (MFL): A measure of the presence of asbestos fibers that are longer than 10 micrometers.

WHAT DOES THIS INFORMATION MEAN?

The City of Geneva is 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. In 2021, EPA issued an off-site compliance monitoring report where it raised concerns regarding the sufficiency of evidence that the City's site selection met the required criteria for the lead and copper sampling, and, therefore, cannot be sure of the quality of the City of Geneva's drinking water during that time. The City of Geneva is reviewing its records regarding service line materials to select sites that meet the requirements for testing for lead and copper and will be increasing the number of approved sampling sites for future testing. The City of Geneva will be working with EPA and NYS Dept of Health to conduct the required standard monitoring on sixty (60) sites in 2022. The City of Geneva provided lead results to all customers involved in the lead and copper sampling in 2017 and 2020, however the documentation provided did not include all required content. The City of Geneva did include this content to all customers in the annual water quality report. The City will include the required content in future notices.

There is nothing you need to do at this time. 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 City of Geneva 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 The City of Geneva is working with EPA and the NYS Dept of Health to ensure compliance.

The New York State Department of Health also offers Free Lead Testing at:
https://health.ny.gov/environmental/water/drinking/lead/free_lead_testing_pilot_program.htm

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).

INFORMATION ON UNREGULATED CONTAMINANTS

Our system performed monitoring for the EPA Unregulated Contaminant Monitoring Regulation (UCMR3) and (UCMR4) for the Assessment Monitoring of Unregulated Contaminants. If you have any questions, about the Unregulated Contaminants, please contact EPA's Safe Drinking Water Hotline at 800-426-4791 for information on UCMR3 monitoring. This list of contaminants is not subject to any proposed or promulgated national primary drinking water regulation (NSDWRs), are known or anticipated to occur in public water systems, and may require regulations under the Safe Drinking Water Act (SDWA).

INFORMATION ON FLUORIDE ADDITION

Our system is one of the many drinking water systems in New York State that provides drinking water with a controlled level of fluoride for consumer dental health protection. Fluoride is added to your water by the City of Geneva. According to the United States Centers for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at properly controlled levels. To ensure that the fluoride supplement in your water provides optimal dental protection, the city monitors fluoride levels on a daily basis to make sure fluoride is maintained at an optimal range from 0.7 to 1.2 mg/l. During 2021 monthly average monitoring showed fluoride level in your water was in the optimum range 100% of the time.

INFORMATION FOR NON-ENGLISH SPEAKING RESIDENTS

This report contains important information about your drinking water. Translate it, or speak with someone who understands it.

Spanish : Este informe contiene información muy importante sobre su agua beber.
Tradúzcalo ó hable con alguien que lo entienda bien.

French : Ce rapport contient des informations importantes sur votre eau potable.
Traduisez-le ou parlez en avec quelqu'un qui le comprend bien.

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 wells, pumping systems and water towers.
- Saving water lessens the strain on the water system during a dry spell or drought and helps to avoid sever 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 these invisible toilet leaks. Fix it and you can 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, and then check the meter after 15 minutes. If it moved, you have a leak.

SYSTEM IMPROVEMENTS IN 2021

28 water main breaks occurred which were repaired. Additionally, the city replaced 5 fire hydrants. The city installed 3 water service taps. The Lafayette project replaced 900 LF of 8" DIP, 280 LF of 10" DIP, and 2270 of 6" DIP. 8 new fire hydrants were also installed. This project included all of Lafayette Ave from Genesee St to Hillcrest Ave.

IN CLOSING

The City of Geneva has continued to invest in the Water Plant during 2021. Currently the Water Plant is considered one of the most advanced facilities in the region and is poised for success well into the future. Thank you for allowing us to continue to provide your family with quality drinking water this year. We ask that all our customers help us protect our water sources, which is the heart of our community. For more information, please contact the Water Treatment Plant Supervisor at (315) 789-5755. Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.