Annual Drinking Water Quality Report for 2022
CITY OF GENEVA
ONTARIO COUNTY, NY
Public Water Supply ID# NY3401156

INTRODUCTION

To comply with State regulations, the city of Geneva, 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. We are proud to report that our system did not violate a maximum contaminant level or any other water quality standard

If you have any questions about this report or concerning your drinking water, please contact the WTP at 315-789-5755. 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 the first Wednesday of every month at the Public Safety Building.

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 Seneca lake which is classified as surface water. Raw water is filtered through slow sand and micro filters. Chlorine, fluoride and corrosion control is then added to the filtered water. During 2022, our system did not experience any restriction of our water source. 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.

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 2022 was 642,271,000 gallons. The daily average of water treated and pumped into the distribution system was 1.76 million gallons per day. Our highest single day was 2.1 million gallons. The amount of water delivered to customers was 589,660,000 gallons. This leaves an unaccounted total of 52,611,000 gallons with a loss of approximately 8.19%. This water was used to flush mains, fight fires and leakage, accounts for the remaining 52,611,000 million gallons (8.19% of the total amount produced). In 2022, the estimated water/sewer charge per quarter for 39,000 gallons utilizing a 5/8 inch meter would result in a typical family of 4 average cost of $2.67 cents per day or $240.70 per quarter.

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, haloacetic acids, radiological and synthetic organic compounds. The table presented below 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.

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 Department of Health at 315-789-3030.

WHAT DOES THIS INFORMATION MEAN?

Our system had no violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below New York State requirements. It should be noted that the action level for lead was exceeded in one of the samples collected. We are required to present the following information on lead in drinking water:

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 Geneva DPW 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 315-789-3101. 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*.

The City of Geneva entered into an Administrative Order on Consent with the United States Environmental Protection Agency ("USEPA"), Docket No. SDWA-02-2022-8007 in July 2022, relating the City's compliance with the Lead and Copper Rule, and the City is in full compliance with the requirements set forth therein.

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 2016-2019, as part of our routine sampling, 24 samples of Seneca lake raw water source were collected and analyzed for Cryptosporidium oocysts. Of these samples, 1 was presumed positive. Therefore, our testing indicates the presumed 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. 23 additional raw filtered water samples were tested for Cryptosporidium oocysts and none were detected. 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. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

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 2016-2019, as part of our sampling, 24 samples of Seneca lake raw water were collected and analyzed for Giardia cysts. Of these samples, 2 were presumed confirmed positive. Therefore, our testing indicates the presumed 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. 22 additional raw filtered water samples were tested for Giardia cysts and none were detected. 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 or other settings where hand washing practices are poor.

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 FLUORIDE ADDITION

Our system is one of the many drinking water systems in New York State that provides drinking water with a controlled, low level of fluoride for consumer dental health protection of 0.8 mg/l. During 2022 monitoring showed that fluoride levels in your water were within 0.3 mg/l of the target level for **99%** of the time. None of the monitoring results showed fluoride at levels that approach the 2.2 mg/l MCL for fluoride.

INFORMATION FOR NON-ENGLISH SPEAKING RESIDENTS

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; 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 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

2022 Water Maintenance Distribution Improvements: 24 – water main line repairs. 7 – water service line replacements/installs. 5 – water service line repairs. 1 – water service line disconnect.
20 – partial lead water service lines replaced (from main line to city right away). 2 – water main line valves repaired. 1 – water main line valve replaced. 7 – fire hydrant rebuilds. 1 – fire hydrant replaced. 2 – automatic dead end fire hydrant flushers installed for 2022 summer season. Numerous service line water box/shut off's repaired and replaced. Installation of Approx. 3,700' of 8'' D.I.P. water main at 1115 Lochland Rd Site Project – including 5 new hydrants and 28 new valves – (but has not been put into service to date – (looking like sometime in spring of 2023)
2023 Water Maintenance Distribution Improvements: 3 – water main line repairs (to date). 1 – new water service line install (to date). Potential Castle St Reconstruction Project – from N. Main to Brook St – approx. 2,500' of 8'' D.I.P. or a relining of existing water main (including approx. 6 new fire hydrants and several main line valves). Partial lead service line replacements. Annual hydrant flushing program and valve exercise.

CLOSING

The City of Geneva has continued to invest in the Water Plant during 2022. 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.

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.

WATER QUALITY SUMMARY TABLE							
Contaminant	Violation Yes/No	Date of Sample	Level Detected Range	Unit	MCLG	Regulatory Limit MCL & AL	Likely Source of Contamination
Microbiological Contaminants							
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
Turbidity 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-I-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 I.0 NTU. Throughout all of 2021 we had NO measurements exceeding 1.0 NTU.							
Turbidity (Distribution)	NO	Jun-22	1.51	NTU	Less than 5.0 NTU	5.0	Highest sample measured from the field. Heavy use / water main breaks.
-Micro-Filters finished water -Sand Filters finished water		2022	Highest 0.17 (100% of monthly samples met performance standards) Highest 0.24	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	9/8/2011	0 0 0.37	pCi/L	0	MCL=5	Erosion of natural deposits.
Disinfection By-Products THM/HAA5 levels represent the highest locational running annual average and the LRAA.							
Total Trihalomethanes (chloroform, bromoform, bromodichloromethane, dibromochloromethane)	NO	Quarterly 2022	Max LRAA= 61 40.00-90.00 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)	NO	Quarterly 2022	Max LRAA= 20.48 14.10 - 20.48	ug/l	N/A	MCL=60 Annual Avg.	By-product of drinking water chlorination

			Low-High				
WATER QUALITY SUMMARY TABLE							
Contaminant	Violation	Date of Sample	Level Detected	Unit	MCLG	Regulatory Limit MCL	Likely Source of Contaminations
Pfoa	NO	2022	3	ng/l	N/A	Action level 10 ppt or ng/l	Possibly the Seneca Army Depot
Pfos	NO	2022	0.82	ng/l	N/A	Action level 10 ppt or ng/l	Possibly the Seneca Army Depot
Inorganics							
Nitrate	NO	Feb-22	540	ug/l	10,000	MCL=10,000 ppb or ug/l	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Arsenic	NO	Feb-22	900	ng/l	N/A	MCL=10,000 ppt or ng/l	Discharge from erosion of natural deposits, Runoff from orchards, Runoff from glass and electronics production wastes
Nickel	NO	Feb-22	700	ng/l	100,000	MCL=100,000	Metal alloys; electroplating; batteries; chemical production
Fluoride	NO	Monthly 2022	0.87 monthly average	mg/l	N/A	MCL=2.2	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.
Barium	NO	Feb-22	26.7	ug/l	2,000	MCL=2,000 ppb or ug/l	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Sodium	NO	Feb-22	70.6	mg/l	N/A		Naturally occurring; road salt; water

							softeners; animal waste
WATER QUALITY SUMMARY TABLE							
Contaminant	Violation	Date of Sample	Level Detected	Unit	MCLG	Regulatory Limit MCL	Likely Source of Contaminations
Lead	NO	Fall 2022	5.2 = 90th%, 1 site above action level. (0.0-17.5)	ug/l	N/A	AL=15 ppb (or ug/l) of the 90th%	Corrosion of household plumbing systems; erosion of natural deposits
The level presented represents the 90th percentile of the 60+ 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 90thpercentile is equal to or greater than 90°/o of the lead or copper values detected at your water system. In this case, 60+ 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.							
Copper	NO	Fall 2022	317 0 sites above action level, (18- 435)	ug/l	1300	AL=1300 ppb (or ug/l) of the 90th%	Corrosion of household plumbing deposits; leaching from wood preservatives
Alkalinity, Total as CaC03	no	Fall 2019	94	mg/l	N/A	N/A	Naturally occurring;
Bicarbonate Alkalinity as CaC03	no	Fall 2019	94	mg/l	N/A	N/A	Naturally occurring
Chloride	no	Fall 2019	114	mg/l	<250	250	Naturally occurring
Sulfate	no	Fall 2019	30.5	mg/l	<250	500	Naturally occurring
Calcium, Total	no	Fall 2019	36.9	mg/l	N/A	N/A	Naturally occurring;
Magnesium	no	Fall 2019	10.5	mg/l	<20	N/A	Naturally occurring
Hardness (CaC03+Mg2)	no	Fall 2015	~7.6	grains	N/A	N/A	Naturally occurring
TABLE OF UNREGULATED CONTAMINANTS MONITORING RULE 4							
Contaminant	Violation	date of sample	Level Detected	Unit	MCLG	Regulatory Limit MCL	Likely Source of Contaminant
Unregulated Contaminants	**UCMR4**						
MonoBromoAcetic Acid	N/A	Feb-19	1	ug/l	NA	NA	Chlorine Disinfection
DiChloroAcetic Acid	N/A	Feb-19	4.6	ug/l	NA	NA	"
TriChloroAcetic Acid	N/A	Feb-19	2.5	ug/l	NA	NA	"
BromoChloroAcetic Acid	N/A	Feb-19	6.4	ug/l	NA	NA	"
BromoDiChloroAcetic Acid	N/A	Feb-19	6.8	ug/l	NA	NA	"
DiBromoAcetic Acid	N/A	Feb-19	5.2	ug/l	NA	NA	"
ChloDiBromoAcetic Acid	N/A	Feb-19	7.4	ug/l	NA	NA	"
TriBromoAcetic Acid	N/A	Feb-19	2.1	ug/l	NA	NA	"
HAA5 Group	N/A	Feb-19	13.2	ug/l	NA	NA	"

HAA6BR Group	N/A	Feb-19	28.8	ug/l	NA	NA	"
HAA9 Group	N/A	Feb-19	35.5	ug/l	NA	NA	"
MonoChloroAcetic Acid	N/A	Feb-19	<2.0	ug/l	NA	NA	"

Contaminant	**Health Effects**
Total Coliform Bacteria	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution.
E. Coli	E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.
Turbidity	Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. Please pay special attention to the additional statement in this document regarding Cryptosporidium.
Gross alpha activity (including radium –226 but excluding radon and uranium)	Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.
Combined radium –226 and 228	Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.
Total Trihalomethanes (TTHMs chloroform, bromodichloromethane, dibromochloromethane, and bromoform)	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.
Haloacetic Acids (mono--, di--, and trichloroacetic acid, and mono and di bromoacetic acid)	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
Perfluorooctanoic acid (PFOA)	PFOA caused a range of health effects when studied in animals at high exposure levels. The most consistent findings were effects on the liver and immune system and impaired fetal growth and development. Studies of high level exposures to PFOA in people provide evidence that some of the health effects seen in animals may also occur in humans. The United States Environmental Protection Agency considers PFOA as having suggestive evidence for causing cancer based on studies of lifetime exposure to high levels of PFOA in animals.
Perfluorooctane sulfonic acid (PFOS)	PFOS caused a range of health effects when studied in animals at high exposure levels. The most consistent findings were effects on the liver and immune system and impaired fetal growth and development. Studies of high level exposures to PFOS in people provide evidence that some of the health effects seen in animals may also occur in humans. The United States Environmental Protection Agency

	considers PFOS as having suggestive evidence for causing cancer based on studies of lifetime exposure to high levels of PFOS in animals.
Chlorine Residual	Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL (Maximum Residual Disinfectant Level) could experience stomach discomfort.
Contaminant	**Health Effects**
Nitrate	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
Arsenic	Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.
Fluoride	Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Children may get mottled teeth.
Barium	Some people who drink water containing barium in excess of the MCL over many years could experience vomiting, abdominal cramps, diarrhea, difficulties in breathing, increased or decreased blood pressure or numbness around the face and muscle weakness.
Sodium	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.
Lead	Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.
Copper	is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.
Chloride	Chloride is essential for maintaining good health. Research has not conclusively demonstrated that human exposure to chloride itself causes adverse health effects, although exposure to high levels of certain chloride salts has been associated with adverse health effects in humans. For example, high dietary intake of sodium chloride can be a contributing factor to high blood pressure, but this has been attributed mainly to the presence of sodium. The New York State standard for chloride is 250 milligrams per liter, and is based on chloride's effects on the taste and odor of the water.
Sulfate	Drinking water containing high concentrations of sulfate can cause short term intestinal effects in humans. The effects can range from a laxative effect (loose stools) to diarrhea (unusually frequent and liquid bowel movements). Diarrhea is of particular concern in infants, because it can lead to more serious effects such as dehydration. Travelers or new residents, who may change from drinking water with low sulfate concentrations to drinking water with high sulfate concentrations, may experience short term intestinal effects due to sulfate. The New York State standard for sulfate is 250 milligrams per liter, and is based on sulfate's effects on the taste and odor of the water.

NOTE: The following contaminants were tested for but not found in the City of Geneva WTP effluent:

Benzene, Bromobenzene, Bromochloromethane, Bromomethane, n-Butylbenzene, sec-Butylbenzene, tert-Butylbenzene, Carbon tetrachloride, Chlorobenzene, Chloroethane, Chloromethane,2-Chlorotoluene, 4-Chlorotoluene, 1,2-Dibromo-3-chloropropane (DBCP), 1,2-Dibromoethane (EDB), 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Dichlorodifluoromethane, 1,1-Dichloroethane, 1,2-Dichloroethane, 1,1-Dichloroethylene, cis-1,2-Dichloroethylene, trans-1,2-Dichloroethylene, Dichloromethane, 1,2-Dichloropropane, 1,3-Dichloropropane, 2,2-Dichloropropane, 1,1-Dichloropropylene, cis-1,3-Dichloroproylpene, trans-1,3-Dichloropropylene, Ethyl benzene, Hexachlorobutadiene, Isopropylbenzene, 4-Isopro-pyltoluene, Methyl-t-butyl ether (MTBE), Naphthalene, n-Propylbenzene, Styrene, 1,1,1,2-Tetra-chloroethane, 1,1,2,2-Tetrachloroethane, Tetrachloroethylene, Toluene, 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, Trichloroethylene, Trichlo-rofluoromethane, 1,2,3-Trichloropropane, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, Vinyl chloride, o-Xylene, m,p-Xylene, Total Xylene, , 1,2-Dibromoethane (EDB), Chlordane, Toxaphene, 2,4-D, Dalapon, Dicamba, Dinoseb, Pentachlorophenol, Picloram, 2,4,5-TP (Silvex), Alachlor, Aldrin, Atrazine, Benzo(a)pyrene, Gama-BHC (Lindane), Butachlor, Dieldrin, Di(2-eth-ylhexyl) adipate, Di(2-ethylhexyl) phthalate, Aldicarb, Bis(2-Ethylhexyl) phthalate, Endrin, Heptachlor, Heptachlor epoxide, Hexachlorobenzene, HABS (Harmful Algal Blooms) Hexachlorocyclopenta-diene, Methoxychlor, Metolachlor, Metribuzin, Propachlor, Simazine, Aldicarb, Aldicarb sulfone, Aldicarb sulfoxide, Carbaryl, Carbofuran, 3-Hydroxycarbofuran, Methomyl, Oxamyl, Glyphosate, Endothall, Diquat, Antimony, Beryllium, Cadmium, Total Cyanide, Mercury, Nitrite, Selenium, Asbestos 1,4-Dioxane
Please note that the contaminants listed above represent only a sample of those required to be were tested for in 2022 and/or in prior years.