2008
Town of Geneva Annual Water Quality Report

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The Town of Geneva annually issues 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. 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 are interested in opportunities to become more involved with your water supply, the Town of Geneva holds regularly scheduled meetings at the Town Hall 3750 County Road 6 on the second Tuesday of each month at 7:00pm.

Where does my water come from, and how is it treated?

This report shows the water quality for the Town of Geneva Districts #5, #6, #7, #8, and #9. In sequence they are the Cresence Drive area, the County Road #6 area, the North Genesee Street area, the Carter & Gambee Road area and the Castle Road area. There are 860 residents (268 connections) in these areas supplied with top quality drinking water from the Town of Geneva Water Department. Our water source is supplied by the City of Geneva and is surface water from Seneca Lake.

The water is treated in a variety of ways prior to distribution. The water is filtered and then disinfected through the use of chlorine. Fluoride is added to the water for the promotion of healthy teeth and gums and orthophosphate is used for corrosion control purposes.

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 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.

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 amount 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, however it appears that the total amount of wastewater discharged to surface water in this assessment area is high enough to further 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 landfills.

Water Conservation

Water conservation helps the environment by preserving this natural resource. You can conserve water by:

~Checking for and repairing leaks inside and out.

~Replacing older fixtures with water saving showerheads, faucet aerators, toilet dams or low flush toilets.

~Using swimming pool covers to minimize evaporation.

~Watering lawns less frequently and preferably early in the morning or late in the evening.

~Turning off the tap when brushing your teeth.

~If you use an automatic dishwasher, waiting to run it until it is loaded to capacity.

SAVE WATER AND $$$

If your water usage is higher than you or the Department believes it should be, please check the following:

#1 Read the water meter the last thing in the evening, after all water usage for that evening is done, first thing in the morning, re-read your meter. If there is any change in the meter reading , this indicates a leak.

#2 Check all toilets for leaks by putting food coloring into the back of each toilet tank last thing before you go to sleep . If any coloring appears in the bowl the following morning this may indicate a leak. Call your plumber to make the needed repairs. Smaller repairs may be made by the homeowner.

#3 If your toilet does not have a leak, please check all faucets for leaks.

#4 If you have any out building or underground water lines that run to those buildings or any distant hose bibs shut them off and try to isolate those fixtures. Now, follow the instructions under # 1. By following the above steps you can isolate and pinpoint areas where leaks may occur and locate them with little difficulty.

Leak detection assistance!!

The department is more than willing to assist its customers in locating leaks. We will be glad to help you when we have personnel available. Please call the Department at 315- 789-6727 Monday through Friday 7am to 3:30pm.

Annual Water Usage & Cost

In 2008 our total water purchased from the city was 16,900,000 gallons. Of this total the Town successfully delivered 15,200,000 gallons to consumers. Our annual "unaccounted for" total was 1,700,000 gallons in 2008. This is approximately 10% of the total production for the year and is attributed to main flushing, fire fighting and main breaks.

For an average family water account (using 18,000 gallons per quarter), the cost of purchasing water was $348.80 annually for 2008, equating to an annual charge of $4.85 per 1,000 gallons used or about 97cents a day.

TESTING RESULTS FOR 2008 – TABLE OF DETECTED CONTAMINANTS

As you review the results keep in mind that all drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the 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 at 1-800-426-4791. According to State regulations, the Town of Geneva routinely monitors your drinking water for various contaminants. The contaminants detected in your drinking water are included in the following table. The State allows us to monitor for certain contaminants less than one per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Therefore, some of the data, though representative of the water quality, is more than one year old.

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit of Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Total Trihalomethanes (chloroform, bromoform, bromodichloromethane, dibromochloromethane)	No	quarterly 2008	45.9 (28.28-70.16)	ug/L	N/A	MCL= 80	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 2008	19.3 (15-27)	ug/L	N/A	MCL= 60	By-product of drinking water chlorination
fluoride	No	monthly 2008	0.83 (0.7-0.9)	mg/L	N/A	MCL=2.2	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
lead	No	8/2008	15* (ND-180)	ug/L	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits
copper	No	8/2008	0.350* (0.032-0.380)	mg/L	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
barium	No	5/2008	0.027	mg/L	2	MCL=2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
sodium	No	8/2004 11/2004	72 (71.6-72.3)	mg/l	N/A	***	Naturally occurring; road salt, water softeners ; animal waste
turbidity	No	10/2008	1.10	NTU	N/A	TT=5.0	Soil runoff
turbidity	No	2008	97% of samples <1.0 (daily averages)	NTU	N/A	TT=95% of samples <1.0	Soil runoff
Combined Radium 226 & 228	No	4/2007 7/2007	0.66 (0.4-0.92)	pCi/L	0	MCL=5	Erosion of natural deposits

* The level presented represents the 90th percentile of the 34 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-four samples were collected at your water system and the 90th percentile value was the third highest value. The action level for lead was exceeded at three of the sites tested. The action level for copper was not exceeded at any of the sites tested.
** 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 measurement (1.10NTU) for the year occurred during 10/25/08. State regulations require that turbidity must always be below 5 NTU. We had no measurements over 5 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 27– mg/l of sodium should not be used for drinking by people on moderately restricted sodium diets.

GLOSSARY

MCL (Maximum Contaminant Level)- The highest Level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLG as possible.
MCLG (Maximum Contaminant Level Goal)- 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.
MRDL (Maximum Residual Disinfectant Level) -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.
MRDLG (Maximum Residual Disinfectant Level Goal) -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.
ug/l (Micrograms per liter)- Corresponds to one part of liquid in a billion parts of liquid (parts per billion-ppb).
mg/l (Milligrams per liter)- Corresponds to one part of liquid in a million parts of liquid (parts per million-ppm)
N/A – Not Applicable.
ND – Not detected.
AL (Action Level)- The concentrations at which, if exceeded, triggers requirements which a water system must follow.
TT (Treatment Technique)- A required process intended to reduce the level of a contaminant in drinking water.
NTU - Nephelometric Turbidity Units.
Turbidity - a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

Discussion of Testing Results

As you can see by the table, our system had no violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below the level allowed by the state. During 2008, our system was in compliance with applicable state drinking water operating and reporting requirements.

The table reveals that the water's lead level exceeded the action level of 15 ug/L at three of the sites tested. 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. Infants and young children are typically more vulnerable to lead in drinking water than the general populations. 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. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and you should flush your tap for 30 seconds to 2 minutes before using your tap water. Additional information regarding lead in drinking water is available from the safe drinking water hotline at 1-800-426-4791.

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. According to the United States Centers for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at an optimal range from 0.8 to 1.2 mg/l (parts per million). To ensure that the fluoride supplement in your water provides optimal dental protection, the State Department of Health requires that the Town of Geneva monitor fluoride levels on a daily basis. During 2008 monitoring showed fluoride levels in your water were in the optimal range 100% of the time. None of the monitoring results showed fluoride at levels that approach the 2.2 mg/l MCL for fluoride.

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 1-800-426-4791.

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 are the heart of our community. If you have any questions about this report or concerning your water utility, please call Charles Bracko, Water Superintendent, (315)789-6727 or The NYS-DOH at (315)789-3030.