Annual Drinking Water Quality Report for 2009
Town of Geneva
3750 County Rd 6 Geneva, NY

(Public Water Supply ID# 3404507,3411902,3420915,3422723,3430003)

INTRODUCTION

To comply with State regulations, The Town 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. 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 Charlie Bracko at the Town of Geneva water plant at (315) 789-6727. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled town board meetings. The meetings are held on the second tuesday of every month at the town hall.

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 supplied by the City of Geneva. During 2009, the system did not experience any restriction of the water source. The water is stored in a City reservoir which can hold 5,000,000 gallons. The water is treated prior to distribution. The City of Geneva uses slow sand and diatomaceous earth filtration to reduce turbidity. The water is chlorinated for disinfection and phosphate is added for corrosion control. Flouride is added to the water for promotion of strong teeth. During 2009, 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 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. A copy of the source water assessment is on file at the City of Geneva Water Plant.

FACTS AND FIGURES

This report shows the water quality for the Town of Geneva districts # 5, 6,7,8,9. In sequence they are Cresence drive area, County Rd #6 area, the North Genesee St area, the Carter and Gambee Rd area, and the Castle Rd area. There are 860 residents (275 connections) in these areas supplied with top quality drinking water from the Town of Geneva Water Deptartment.

In 2009 our total water purchase from the city was 15,500,000 gallons. Of this total the town succsesfully delivered 14,800,000 gallons to consumers. Are annual "unnacounted for" total was 700,000 gallons in 2009. This is appoximately 5% 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 2009, equating to an annual charge of $4.85 per 1000 gallons used or about $.97 cents a day.

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.

The table presented below depicts which compound 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 District Office of the NYS Health Department at (315)789-3030.

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. None of the compounds we analyzed for were detected in your drinking water.

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
THM's (trihalomethanes)	No	Quarterly 2009 Stage 1	55.58 (30.79-92.4)	ug/l	N/A	MCL=80	By-product of drinking water chlorination needed to kill harmful organism. TTHMs are formed when source water contains amounts of organic matter
HAA5 (haloacetic acids)	No	Quarterly 2009 Stage 1	14.15 (9.93-19.4)	ug/l	N/A	MCL=60	by-product of drinking water chlorination
THM's	No	Bimonthly	62.94	ug/l	N/A	MCL=80	By-product of drinking water chlorination needed to kill harmful

(trihalomethanes)		Feb-Aug 2009 Stage 2	(24.4-99.2)				organism. TTHMs are formed when source water contains amounts of organic matter
HAA5 (haloacetic acids)	No	Bimonthly Feb-Aug 2009 Stage 2	15.99 (7.2-28.2)	ug/l	N/A	MCL=60	by-product of drinking water chlorination
nitrate	No	3/2009	0.51	mg/l	10	MCL=10	Runnoff from fertilizer use; leaching from septic tanks,sewage; erosion of natural deposits
selenium	No	5/2009	Less than 2.0	ug/l	50	MCL=50	discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
nickel	No	5/2009	1.4	ug/l	100	MCL=100	Metal alloys;electroplating;batteries;chemical production
flouride	No	monthly 2009	0.88 (0.8-1.0)	mg/l	N/A	MCL=2.2	erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aliminum factories
lead	No	8/2008	15* ND-180	ug/l	0	AL=15	corrosion of household plumbimg systems, erosion of natural deposits
copper	No	8/2008	0.350* 0.032-0.380	ug/l	1.3	AL=1.3	corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
barium	No	5/2009	0.027	mg/l	2	MCL=2	discharge of drilling waste; discharge from metal refineries; erosion of natural deposits
sodium	No	08/2004 11/2004	72 71.6-72.3	mg/l	N/A	***	Naturally occurring; road salt; water softeners;animal waste
turbidity	No	5/4/2009	3.26	NTU	N/A	TT=5.0**	soil runoff
turbidity	No	Jan-Dec 2009	99.25% of samples <1.0	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 natrual deposits

* The level presented represents the 90th percentile of the 32 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, (include number of samples, e.g. ten samples) samples were collected at your water system and the 90th percentile value was the (include what sample had the highest value, e.g. second highest value) value (include level detected e.g. 1.1 mg/l). The action level for copper was not exceeded at any of the sites tested. The action level for lead was exceeded at 3 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 (3.26 NTU) for the year occured on 5/4/2009. State regulations require that turbidity must always be below 5 NTU. We had no measurements over 5 NTU. The regulations require that 95% of the turbidity sample collected have measurements below 1NTU . Although October 2009 was the month when we had the fewest measurements meeting the treatment technique for turbidity (99.25%) the levels recorded were within the acceptable range allowed and did not constitute a treatment technique violation .

*** Water containing more than 20 mg/l of sodium should be be used for drinking by people on severley 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.

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.

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).

Picocuries 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 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. It should be noted that the action level for lead was exceeded at three of the thirty-two sites tested. We are required to present the following information on lead in drinking water: 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. Town 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.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2009, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

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. 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 we monitor fluoride levels on a daily basis. During (2009) monitoring showed fluoride levels in your water were in the optimal range 91.5 % of the time. None of the monitoring results showed fluoride at levels that approach the 2.2 mg/l MCL for fluoride.

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 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 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.

CLOSING

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. For questions regarding the content of the report, please contact Charles Bracko at the Town of Geneva (315) 789-6727 or the NYSDOH at (315) 789-3030