Annual Drinking Water Quality Report for 2009 – Town of East Greenbush – General Water District
225 Columbia Tpke, East Greenbush, NY 12061 – Public Water Supply Identification Number 4100051

Introduction

We are very pleased to provide you with the 2009 Annual Water Quality Report. This report is 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 New York State standards. Our constant goal is and always has been, to provide to you a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and to protect our water resources. If you have any questions concerning this report or concerning your drinking water please contact: *Mr. Kenneth M. Harting, Water Foreman, Town of East Greenbush, General Water District , 69 Gilligan Road, East Greenbush, NY 12061; Telephone (518) 477-6103.* We want our valued customers to be informed about their water service. If you want to learn more, please attend any of our regularly scheduled Town Board meetings. They are held on the 2nd Wednesday of each month, 7:00 PM at the *Town Hall, 225 Columbia Turnpike, Telephone (518) 477-4775.*

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 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 initial source of our water supply is the Tomhannock Reservoir, northeast of the City of Troy. The City treatment plants provide the initial disinfection and chlorination of the water. The water purchased by East Greenbush is supplied from Troy and pumped to East Greenbush through the Cross Street Pump Station . A 36 inch water main along Route 4 through North Greenbush carries water to our 4 million gallon storage tank at the top of Grandview Terrance. This tank distributes water throughout the General Water District. This supply system is jointly owned with the City of Rensselaer.

Also, New York State Department of Health completed a Source Water Assessment for the Tomhannock Reservoir. For more information go to New York State Source Water Assessment Program Plan.

Facts and Figures

Currently, we serve a population of apx. 10,700 residential and commercial customers, with a total of 4,293 water services who are primarily within East Greenbush. However, we also serve a few customers in North Greenbush along Route 4 and in Schodack along Columbia Turnpike through contract agreements. Total gallons billed for metered customers for 2009 was 1,117,136,000. Percentage of unaccountable water loss was 5%. The average charge for water is $3.05/1000 gallons. The Town tests for lead and copper taking 31 samples at various locations within the Town. Lead values range from low of <0.001 to high of 0.017,which is within the regulatory limit of 0.015/mg/l. Copper values range from low of <0.02 to high of 0.13, which is within the regulatory limit of 1.30/mg/l., which is from household plumbing corrosion, erosion of natural deposits. Also monthly testing for Coliform at 12 locations and the results are within the regulatory limit of 5% which is naturally occurring. There were no violations occurring with lead, copper and coliform testing.

Are there contaminants in our drinking water?

In accordance with State regulations, the General Water District routinely monitors your drinking water for numerous contaminants. We test your drinking water for inorganic contaminants, radiological contaminants, lead and copper, nitrate, volatile organic contaminants, and synthetic organic contaminants. The table on the reverse indicates which analyses were completed. This shows the results of monitoring for the period January 1, 2009 to December 31, 2009. This information is provided to the Town by the City of Troy. In addition we take 11 monthly samples at various locations throughout the Town to check for coliform bacteria. For the monitoring period of January 1, 2009 to December 31, 2009 there were no violations.

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 pose 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 Rensselaer County Health Department (518) 270-2664).

What does this information mean?

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

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)

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

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.

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.

No Designated Limit (NDL) – No limit has been designated for this contaminant.

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.

Picocuries per liter (pCi/L) – a measurement of the radioactivity of water.

Millirems per year (mrem/yr) – measure of radiation absorbed by the body.

To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Is our water safe for everyone?

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 about drinking water 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 microbiological pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

Avoid water waste

- Minimize the use of outside lawn irrigation systems. Don't run them if it's raining!!!
- Only run dishwashers and clothes washer when there is a full load
- Use water saving devices throughout the home
- Check your toilets for leaks by adding food coloring to the tank. If the color seeps into the bowl, you have a leak. Fixing this can save 1000's of gallons.
- Use your meter to detect at leak. Turn all water taps & appliances off. Read the meter, then wait 15-30 minutes. If it moved, you have a leak.

Not only will these steps conserve precious water resources, they will reduce your water bills.

Capital Improvements

Upgrades of older water mains will continue on various streets.

Closing

Thank you for allowing us to continue providing your family with quality water this year. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future. Please call our office if you have questions.

TABLE OF DETECTED CONTAMINANTS

Contaminant	Violation Yes/No	Date or Frequency of Sample	Level Detected: Value or Average	Level Detected: Range Low	Level Detected: Range High	Unit Measurement	MCLG / MRDLG	Regulatory Limit (MCL, TT, MRDL, AL)	Likely Source of Contamination
Physical and Chemical Analytes									
pH	No	Daily	8.76	7.57	9.17	-	-	NDL	Adjusted at WTP
Temperature	No	Daily	13.1	4.7	21.4	°C	n/a	NDL	-
Color	No	Daily	4	1	18	color units	n/a	15	Naturally occurring
Turbidity	No	Daily	0.31	0.10	0.80	NTU	n/a	5	Soil runoff
Chlorine	No	Daily	0.80	0.10	1.07	mg/l	4	4.0	Added disinfectant
Chlorine Dioxide	No	Daily	0.00	0.00	0.06	mg/l	0.8	0.8	Added disinfectant
Fluoride	No	Daily	0.97	0.09	1.07	mg/l	n/a	2.2	Adjusted at WTP
Alkalinity, as $CaCO_3$	No	Daily	43.7	23.6	51.6	mg/l	n/a	NDL	Naturally occurring
Hardness, as $CaCO_3$	No	Weekly	51	48	56	mg/l	n/a	NDL	Naturally occurring
Iron	No	Weekdays	0.03	0.00	0.30	mg/l	n/a	0.3	Naturally occurring
Manganese	No	Weekdays	0.01	0.00	0.08	mg/l	n/a	0.3	Naturally occurring
Disinfection By-Products									
Total Trihalomethanes	No	Quarterly	41.7	22.1	60.8	ug/l	n/a	80	Formed by reaction of chlorine and chlorine dioxide with naturally occurring organics.
Total Haloacetic acids	No	Quarterly	31.1	17.1	40.0	ug/l	n/a	60	
Chlorite	No	Daily	0.49	0.32	0.80	ug/l	n/a	1.00	
Lead and Copper									
Lead *	No	Annually	0.002	0.000	0.027	mg/l	0	(AL) 0.015	Household plumbing corrosion, erosion of natural deposits.
Copper	No	Annually	0.031	0.000	0.200	mg/l	1.30	(AL) 1.30	
Inorganic Chemicals									
Barium	No	7/8/2009	0.03	-	-	mg/l	2.0	2.0	Naturally occurring
Chloride	No	7/8/2009	19.0	-	-	mg/l	n/a	250.0	Naturally occurring or road salt
Nitrate-as N	No	7/8/2009	0.30	-	-	mg/l	10.0	10.0	Runoff from fertilizer
Sodium **	No	7/8/2009	8.4	-	-	mg/l	n/a	**	Naturally occurring
Sulfate	No	7/8/2009	17.0	-	-	mg/l	n/a	250.0	Naturally occurring
Zinc	No	7/8/2009	0.018	-	-	mg/l	n/a	5.0	Naturally occurring
Radiological									
Combined Radium 226/228	No	2009	0.59	4 quarterly samples taken every 6 years		pCi/l	0	5.0	Naturally occurring
Gross Alpha Particles	No	2009	0.38			pCi/l	0	15.0	Naturally occurring

TABLE OF NON-DETECTED CONTAMINANTS

Inorganic Chemicals			Organic Chemicals			
Antimony	Chromium	Selenium	2,4,5-TP (Silvex)	Aldicarb Sulfoxide	Heptachlor	PCB's
Asbestos	Cyanide	Silver	2,4-D	Atrazine	Hepachlor Epoxide	Pentachlorophenol
Arsenic	Mercury	Thallium	Alachlor	Carbofuran	Lindane	Toxaphene
Beryllium	Nickel		Aldicarb	Chlordane	Methoxychlor	Vinyl Chloride
Cadmium	Nitrite-as N		Aldicarb Sulfone	Endrin		

MICROBIOLOGICAL TABLE

Coliform	No	Weekdays	0.05%	-	-	%	0	5%	Naturally occurring
E.Coli ***	No	Weekdays	0	-	-	-	0	***	Human/animal fecal waste

* Lead and Copper are reported at 90th percentile, where 90% of samples collected are less than the average value. Two of the thirty lead samples collected were above the Action Level (AL) of 0.015 mg/l.

** 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.

*** A violation occurs when a total coliform positive sample is positive for E. coli or when a total coliform positive sample is negative for E. coli but a repeat total coliform sample is positive and the sample is also positive for E. coli.

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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 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 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 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 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): Corresponds to 0.037 disintegrations per second per liter. The average activity within the human body from Potassium-40 is 0.1 micro curies.