Green Chimneys Well #1 - Annual Drinking Water Quality Report for 2023

Public Water Supply # 3921720

Green Chimneys, 400 Doansburg Road, Brewster, NY 10509

INTRODUCTION

To comply with State and Federal regulations, Green Chimneys 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. Last year, your tap water met all State drinking water health standards for parameters sampled. 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:
John Muro II, President of Allied Pollution Control, Inc. at (845) 878-0007 or,
Cheryl Tricarico of Green Chimneys at (845) 279-2995 Ext. 160

If you want to learn more about your water supply, please contact Green Chimneys to attend a scheduled waterworks meeting.

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 groundwater drawn from a drilled well located within the property boundaries of the community. The water from well #1 is chlorinated and then sent to a standpipe style water storage tank. When the water pressure in the system reaches a pre-determined point, booster pumps draw water from the storage tank and re-pressurize it in pneumatic tanks. Once pressurized, the water is directed to the buildings on campus. Our water system serves approximately 350 consumers and 28 service connections.

The NYSDOH has completed a source water assessment for this system, based on available information. Possible and actual threats to the drinking water source were evaluated. The state source water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants can move through the subsurface to the wells. The susceptibility rating is an estimate of the potential for contamination of the source water, it does not mean that the water delivered to consumers is, or will become contaminated. See section "Are there contaminants in our drinking water?" for a list of the contaminants that have been detected. The source water assessments provide resource managers with additional information for protecting source waters into the future.

The drinking water is derived from one drilled well. The source water assessment has rated the well as having a medium to high susceptibility to microbials, nitrates, halogenated solvents, petroleum products, herbicides, pesticides, metals, and other industrial organics. These ratings are due primarily to the close proximity of septic systems, and permitted wastewater discharge facilities, and associated activity in the assessment area. The wells draw from fractured bedrock and the overlying soils are not known to provide adequate protection from potential contamination.

Please note that the drinking water is disinfected to ensure that he finished water delivered to you meets the New York State drinking water standards for microbial contamination.

County and state health departments will use this information to direct future source water protection activities. These may include water quality monitoring, resource management, planning, and education programs. A copy of the assessment, including a map of the assessment area, can be obtained by contacting your water supplier or the Putnam County Health Department.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants at the State's discretion 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.

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 Putnam County Health Department at (845) 808-1390.

TABLE OF DETECTED CONTAMINANTS

Contaminant	Violation Y/N	Sample Date	Level Detected	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Radioactive Contaminants							
Uranium	No	2/23/2023	5.7	ug/l	0	30	Erosion of natural deposits.
Disinfection Byproducts							
Haloacetic Acids							
Haloacetic Acids	No	7/19/2023	2.4	ug/l	N/A	60	By-product of drinking water chlorination needed to kill harmful organisms.
Trihalomethanes							
Total Trihalomethanes	No	7/19/2023	11.70	ug/l	N/A	80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
Inorganic Contaminants							
Copper *1	No	8/2021	0.038 (0.031-0.040)	mg/l	1.3	AL=1.3	Corrosion of household plumbing systems, erosion of natural deposits.
Lead *2	No	8/2021	<1 (<1 - <1)	ug/l	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits.
Barium	No	1/27/2022	0.161	mg/l	2	2	Erosion of natural deposits.
Chloride	No	1/27/2022	71.3	mg/l	N/A	250	Naturally occurring; road salt.
Manganese	No	1/27/2022	7	ug/l	N/A	300	Naturally occurring; indicative of landfill contamination.
Nitrate as Nitrogen	No	1/23/2023	0.69	mg/l	10	10	Runoff from fertilizer use; leaching from septic tanks, erosion of natural deposits.
Sodium *3	No	1/27/2022	16.0	mg/l	N/A	*see below	Naturally occurring; road salt, water softeners.
Sulfate	No	1/27/2022	26.3	mg/l	N/A	250	Naturally occurring.
Zinc	No	1/27/2022	0.006	mg/l	N/A	5	Naturally occurring.
Synthetic Organic Compounds *4 *5							
Perfluorooctanoic acid - (PFOA)	No	Quarterly 2023	3.06 (2.18-3.64)	ng/l	N/A	10	Released into the environment from widespread use in commercial and industrial applications.
Perfluorooctanesulfonic acid - (PFOS)	No	Quarterly 2023	7.23 (5.51-9.15)	ng/l	N/A	10	Released into the environment from widespread use in commercial and industrial applications.

TABLE OF UNREGULATED DETECTED PERFLUOROALKYL SUBSTANCES							
Contaminant	**Violation Y/N**	**Sample Date**	**Level Detected**	**Unit Measurement**	**MCLG or Health Advisory Level*6**	**Regulatory Limit (MCL, TT or AL)**	**Likely Source of Contamination**
Unspecified Organic Compounds *7							
Perfluorobutanesulfuric acid - (PFBS)	No	Quarterly 2023	3.45 (3.01–4.30)	ng/l	2,000	N/A	Released into the environment from widespread use in commercial and industrial applications.
Perfluoroheptanoic acid- (PFHpA)	No	Quarterly 2023	0.33 (ND-1.31)	ng/l	N/A	N/A	Released into the environment from widespread use in commercial and industrial applications.
Perfluorohexanesulfonic acid- (PFHxA)	No	Quarterly 2023	1.42 (ND-1.87)	ng/l	N/A	N/A	Released into the environment from widespread use in commercial and industrial applications.
Perfluorobutanoic acid- (PFBA)	No	5/20/2021	2.00	ng/l	N/A	N/A	Released into the environment from widespread use in commercial and industrial applications.
Perfluoropentanoic acid- (PFPeA)	No	5/20/2021	1.80	ng/l	N/A	N/A	Released into the environment from widespread use in commercial and industrial applications.

Notes:

*1 – The level presented represents the 90th percentile of the 5 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 August 2021, 5 samples were collected at your water system and the 90th percentile value was the average of the two highest samples which equaled 0.038 mg/l. The action level for copper was not exceeded at any of the sites tested.

Copper (mg/l)	Site 1	Site 2	Site 3	Site 4	Site 5
August 2021	0.031	0.034	0.035	0.036	0.040

*2 – The level presented represents the 90th percentile of the 5 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 values detected at your water system. In August 2021, 5 samples were collected at your water system and the 90th percentile value was the average of the two highest samples which equaled <1 ppb. The action level for lead was not exceeded at any of the sites tested.

Lead (ppb.)	Site 1	Site 2	Site 3	Site 4	Site 5
August 2021	<1	<1	<1	<1	<1

*3 - 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.

*4 - PFOA and PFOS are part of a larger group of chemicals referred to as perfluoroalkyl substances (PFASs). PFAS are manmade chemicals that have been widely used in various consumer, commercial, and industrial products since the 1950s. These chemicals' unique properties make them resistant to heat, oil, stains, grease, and water and useful in a wide variety of everyday products. One of the PFAS' was widely used in fire-fighting foam. On August 26, 2020, New York State adopted new drinking water standards for public water systems that set maximum contaminant levels (MCLs) of 10 parts per trillion (10 ppt) each for perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS), and 1 part per billion (1 ppb) for 1,4-dioxane.

PFOA and PFOS have caused a wide range of health effects when studied in animals that were exposed to high levels. The most consistent findings in animals were effects on the liver and immune system and impaired fetal growth and development. PFOA and PFOS also cause cancer in laboratory animals exposed to high levels over their lifetimes. Additional studies of exposures PFOA and PFOS in people provide evidence that some of the health effects seen in animals may also occur in humans.

*5 - The level presented in the table above represents the annual locational rolling average as well as the range of detected values in 2023.

*6 - USEPA Health Advisory Levels identify the concentration of a contaminant in drinking water at which adverse health effects and/or aesthetic effects are not anticipated to occur over specific exposure durations. Health Advisory Levels are not to be construed as legally enforceable federal standards and are subject to change as new information becomes available.

*7 - All perfluoroalkyl substances, besides PFOA and PFOS, are considered Unspecified Organic Contaminants (UOC).

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

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had no violations. We have learned through our testing that contaminants were detected; however, they were below the level allowed by the State.

Although lead was detected below the action level, it was detected, therefore 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 Green Chimneys water supply 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 Green Chimneys. 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.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2023, our system was in compliance with all 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).

WHY SAVE WATER AND HOW TO AVOID WASTING IT?

Although our system has an adequate amount of water to meet present 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.

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 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 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.

CROSS CONNECTION CONTROL INFORMATION

Cross-connections are any linkage through which contaminants could possibly enter a water supply. The contaminant enters the water system typically by back siphonage when a loss in pressure in the water system siphons contaminants into the distribution system through a submerged inlet. While in a residential water system like ours, such contamination is relatively rare, it is important for all users to understand how cross-connections can occur, your obligation as users to avoid them, and how to prevent contamination from any cross-connections.

Some examples are useful to clarify the situations under which cross-connection contamination might occur. One example is someone using a hose to fill a container of pesticide or weed-killer who left the hose under the surface of the liquid. If a sufficient drop in water pressure from the supply line occurred, it is possible that the pesticide would travel back up the hose and into the house water supply. Another example is if antifreeze is put into the pipes while a house is vacant. If there was a drop in pressure outside the house, it is possible that the antifreeze would drain out of the house and into the public water lines. A private well connected to the plumbing system served by public water is another example of a cross-connection. Such a connection is not permitted unless the public system is protected by an appropriate backflow preventer. Other examples could involve other chemical pollutants, such as photography chemicals, and "used" water, such as bathtubs with a spigot (or a detachable spray handle) which is under the level of the water in the tub.

The first defense is knowledge and common sense. Once you know that cross-connection contamination can occur, you can prevent it. Always be very careful in your use of chemicals, and always have an air gap between a filler hose or spigot and the level of liquid in a container.

If you have cross-connections in your plumbing system, you must have a containment device between your house pipes and the water system. The EPA indicates that a dual check valve supplies reliable and inexpensive protection for individual residences. All hose bibs should have vacuum breakers. Installing these devices is the responsibility of the homeowners and would be done at their expense.

CLOSING

Thank you for allowing us to continue to provide you 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, our way of life and our children's future. Please call our office if you have questions.

This report was compiled and prepared by:

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