Annual Drinking Water Quality Report for 2018
D.C.W.W.A. Greenbush Water System
Violet Ave., Hyde Park, NY, 12538
(Public Water Supply ID# 1330629)

INTRODUCTION

To comply with State regulations, the D.C.W.W.A.- Greenbush Water System, 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. 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 the Authority at 845-229-2524 and ask for Alain Petit, Jr.. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled Authority Board Meetings. The meetings are generally held the third Wednesday of every month at 1 LaGrange Ave., Poughkeepise, NY in the conference room beginning at 3:30 PM. Please contact our office at 845-486-3601 for agenda details and any last-minute meeting time, location, or date changes.

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 the Hudson River. The water is purchased from the Poughkeepsie Water Treatment Plant, which is located along the Hudson River within the Marist College Campus on Rt. 9. After the water has been treated, it is delivered to the Poughkeepsie Town Wide Water District, (PWS # NY 1302812), and then to the Greenbush Water District via a meter pit located on Colbey Terrace. A copy of the Poughkeepsie Water Treatment Facility Annual Water Quality Report is included with this mailing. During 2018, our system did not experience any restriction of our water source.

There were no spills in the Hudson River that placed the Hudson River as our source in jeopardy of meeting our demands. The local health department is in contact with plant operators whenever there is a spill event of any size or type in the Hudson River so we are not caught by any surprise events that could jeopardize water treatment.

FACTS AND FIGURES

Our water system serves approximately 805 persons thru 263 service connections. For more information about water usage and billing rates, please contact our office at 845-486-3601.

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 (1-800-426-4791) or the Dutchess County Department of Behavioral and Community Health at 845-486-3404.

A Summary of the Regulated Contaminants

Detected In Our Treated Water

Microbiological Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measure-ment	MCLG MRDLG	Regulatory Limit MCL, TT, AL MRDL	Likely Source of Contamination
Distribution Turbidity (1)	No	9/2018	(Max Avg.) 0.21	NTU	N/A	MCL > 5NTU	Soil runoff

Inorganic Contaminants

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measure-ment	MCLG MRDLG	Regulatory Limit MCL, TT, AL MRDL	Likely Source of Contamination
Copper (2)	No	6/26/18 - 8/24/18	0.067 (Range) 0.014 - 0.073	mg/l	N/A	AL = 1.3	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (3)	No	6/26/18 - 8/24/18	0.3 (Range) ND – 0.5	ug/l	N/A	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits

Disinfection Byproducts

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measure-ment	MCLG MRDLG	Regulatory Limit MCL, TT, AL MRDL	Likely Source of Contamination
Haloacetic Acids (HAA5) (4)	No	Qrtrly	(Avg.) 27.0 (Range) 15.5 – 44.8	ug/l	N/A	60	By-product of drinking water disinfection needed to kill harmful organisms
Total Trihalomethanes (TTHMs) (4)	No	Qrtrly	(Avg.) 70.0 (Range) 30.1 – 123.0	ug/l	N/A	80	By-product of drinking water disinfection needed to kill harmful organisms TTHMs are formed when source water contains large amounts of organic matter

Disinfection							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measure-ment	MCLG MRDLG	Regulatory Limit MCL, TT, AL MRDL	Likely Source of Contamination
Entry Point Chlorine Residual (5) & (6)	No	Cont.	(Avg.) 1.47 (Range) 0.91 – 2.03	mg/l	N/A	4.0	Water additive used to control microbes

1 – Distribution Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants. Our highest monthly average Distribution Turbidity measurements detected during the year, 0.21 NTU, occurred September 2018. The value is below the State's maximum contaminant level, 5 NTU.

2 – The level presented represents the 90th percentile of the 10 samples 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, 10 samples were collected from your water system in 2018. The 90th percentile value was 0.067 mg/l, which is below the Action Level of 1.3 mg/l.

3 – The level presented represents the 90th percentile of the 10 samples that were 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 in your water system. In this case, 10 samples were collected from your water system in 2018. The 90th percentile was 0.3 ug/l, which is below the Action Level of 15 ug/l.

4 – This level represents the annual quarterly average, and range, calculated from data collected.

5 – The value reported represents the Maximum Residual Disinfectant Level (MRDL), which is a level of disinfectant added for water treatment that may not be exceeded at the consumers tap without an unacceptable possibility of adverse health effects. MRDLs are currently not regulated, but in the future they will be enforceable in the same manner as MCLs.

6 – Chlorine residuals are monitored continuously on water treatment plant effluent.

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.
Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.
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).

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.

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. The D.C.W.W.A. 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 2018, 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 (1-800-426-4791).

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.

CLOSING

In closing, the Board Members and staff of the Dutchess County Water and Wastewater Authority wish to 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 and preserve our water sources, which are the heart of our community. Please call our office if you have questions.