Annual Drinking Water Quality Report for 2016
Greenbush Water System
Violet Avenue, Hyde Park, NY 12538
(Public Water Supply ID# **1330629***)*

INTRODUCTION

To comply with State regulations, Greenbush Water, 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 except for Total Trihalomethanes. 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.

The Dutchess County Water and Wastewater Authority took operational responsibilities of the Greenbush Water System on February 19, 2016. If you have any questions or concerns about this report, or concerning your drinking water, or want to learn more, please contact **the Dutchess County Water & Wastewater Authority at (845) 486-3601**. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled meetings. The meetings are generally held on the third Wednesday of every month at 27 High Street, Poughkeepsie, NY in the second floor conference room beginning at 4:00 PM. Please call our office at 486-3601 for agenda details and any last minute meeting time 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 serves 805
people through 262 service connections. Our water source is the Town and City of Poughkeepsie water system. The water arrives to our District via Town of Poughkeepsie water mains. Their water comes from filtered Hudson River Water from a large water treatment plant near Marist College. The water is filtered and disinfected with sodium hypochlorite prior to distribution. A copy of the City of Poughkeepsie's Annual Water Quality Report is included in this mailing.

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, synthetic organic compounds, and radiologicals. 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 (800-426-4791) or the Dutchess County Department of Behavioral and Community Health at (845) 486-3404.

Table of Detected Contaminants							
Contaminant	**Violation Yes/No**	**Date of Sample**	**Level Detected (Avg/Max) (Range)**	**Unit Measure-ment**	**MCLG**	**Regulatory Limit (MCL, AL or TT)**	**Likely Source of Contamination**
Nitrate	No	1/30/2013	0.59	mg/L	10	10	Runoff from fertilizer use; Leaching from septic tanks,sewage; Erosion of natural deposits
Copper (1)	No	June 2015	0.101 (Range = 0.011 – 0.165)	mg/L	1.3	1.3	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.
Lead (2)	No	June 2015	7 (Range = ND – 12)	ug/L	0	15	Corrosion of household plumbing systems; Erosion of natural deposits.
Total Trihalomethanes (3)(4)	Yes	2016 Quarterly	74.6 (Range = 55.9-88.1)	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.
Haloacetic Acids (4)	No	2016 Quarterly	31.1 (Range = 27.55 – 34.5)	ug/L	n/a	60	By-product of drinking water disinfection needed to kill harmful organisms.
Turbidity (5)	No	5 week	0.27 (Range = 0.06 – 0.60)	NTU	n/a	5	Soil runoff.
Chlorine residual	No	Daily In 2016	1.43 (Range = 0.8-1.87)	mg/l	n/a	4	Water additive used to control microbes

Footnotes:

(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 this case, 5 samples were collected at your water system and the 90th percentile value is the reported value. The action level for copper was not exceeded at any of the sites tested.

(2) The level presented represents the 90th percentile of the 5 samples collected. The action level for lead was not exceeded at any of the sites tested

(3) The MCL for Total Trihalomethanes was exceeded in the 4th quarter of 2016. A water advisory was issued. The cause is believed to be the new treatment process and upgrades undertaken by the Poughkeepsies' Water Treatment Facility. The first quarterly sampling in 2017 indicates that the issues have been successfully addressed.

(4) The results for the Total Trihalomethanes and the Haloacetic acids are expressed as the Locational Running Annual Averages. (LRAA). The LRAA for each quarter reflects average of the current results and the results of the previous three quarters.

.

(5) Turbidity is a measure of the cloudiness of the water. We test it because it is a good indicator of the effectiveness of the filtration system. Our highest single turbidity measurement for the year occurred on (May 2015) (0.60 NTU).

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).

Action Level (AL) - The concentrations of a contaminant, which, if exceeded, triggers treatment, or other requirements, which a water system must follow.

Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's 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. MCLG's 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

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.

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, the quarterly rolling average of our system for TTHMs was above the MCL for the fourth quarter of 2016. The upgrade of the treatment systems at the Poughkeepsie's Water Treatment Facility has been completed, and TTHM levels are expected to continue to be below the MCL in the future.

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 higher than at other homes in the community as a result of materials used in your home's plumbing. Arbors Condominiums Water is responsible for providing high quality drinking water, but can not 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 the 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 2016, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

Do I Need to Take Special Precautions?

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 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 up 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.

Closing

Thank you for allowing us to continue to provide your family with quality drinking water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. We ask that all our customers help us protect our water sources, which are the heart of our community. Please call our office if you have any questions.