

*Annual Drinking Water Quality Report for 2016
Hopewell Glen Water System
Governors Blvd, Hopewell Junction, NY 12533
(Public Water Supply ID#1330699)*

INTRODUCTION

To comply with State regulations, Hopewell Glen 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, we conducted testing for many contaminants. Of those detected only one was at a level higher than the State allows. Our water temporarily exceeded the maximum allowable 12 month running average total trihalomethane standard during the first quarter of 2016 due to high levels in 2015. The Joint City/Town of Poughkeepsie water treatment facility was being upgraded at the time to remove disinfection by-product precursors. In the interim we have been flushing the distribution system at 6 strategic locations to reduce the potential for THM formation in the distribution system. 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 JCO Inc at 845-888-5755. We want you to be informed about your drinking water.

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 quantity of certain contaminants in water provided by public water systems. The State Health Department and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water source originates at the Poughkeepsie Water Treatment Facility (PWTF) (PWS # 1302774). The Sole source of water for the PWTF is the Hudson River (surface water). The plant is located along the Hudson River within the Marist College Campus on Rt. 9. The raw river water is drawn from the Hudson River adjacent to the PWTF, approximately 1000 feet from the shore at a depth of 48 feet below the mean river level. After the water has been treated, it is delivered to the Poughkeepsie Town wide Water District. (PWS # NY1302812), and then delivered to the Central Dutchess Water Transmission Line (CDWTL) customers. Hopewell Glen purchases their water from the Dutchess County Water/Wastewater Authority CDWTL. A constant pressure is provided by a series of booster pumps. The levels of chlorine and turbidity are continuously monitored at the Pump Station, located at 21 Page Park Drive, in Poughkeepsie. Chlorine is added at the Pump Station as needed to adjust the chlorine residuals to the required concentrations. Daily sampling and analysis for these parameters are also performed at the entry points to the Hopewell Glen Development. The Hopewell Glen Water District Facilities produced 20,385,000 gallons of water for distribution to a population of 300 via 73 service connections throughout the year with an average daily production of approximately 55,849 gallons. A copy of the Poughkeepsie Water Treatment Facility 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, lead and copper, total trihalomethanes, and haloacetic acids. 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, is 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 Health Department at (845) 486 3404.

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, AL or TT)	Likely source of Contamination
Chlorine Residual Entry Point	No	Yearly average	1.26 (0.50-1.77)	mg/L	N/A ¹	4.0	Chemical additive to control microbes
Turbidity Entry Point	No	Yearly Average	0.38 1.84	NTU ²	N/A	5.0	Soil Runoff
Copper ³	No	8/9/2016, 8/10/2016, 8/12/2016	11.9 (Range = ND – 11.9)	ug/L	0	AL=1300	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.

¹ N/A means not applicable.

² NTU- Nephelometric Turbidity Unit; a measure of particles in water.

³ 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 this case, 5 samples were collected at your water system and the 90th percentile value is the reported value. The action level for lead was not exceeded at any of the sites tested.

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, AL or TT)	Likely source of Contamination
Total Trihalomethanes Entry Point ⁴	No	1/6/2016 2/7/2016 3/15/2016 Qtr Avg	31 32 39 (34)	ug/L	0	80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
		4/12/2016 5/10/2016 6/7/2016 Qtr Avg	36 35 43 (38)				
		7/13/2016 8/2/2016 9/5/2016 Qtr Avg	88.6 126 134 (116.2)				
		10/11/2016 11/7/2016 12/13/2016 Qtr Avg	96.8 37.4 39.4 (57.86)				
		LRAA	(61.52)				
			(Range= 28-134)				

⁴ Although individual TTHM samples are higher than the MCL at times, compliance is based on the running annual average of four quarters (LRAA)

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, AL or TT)	Likely source of Contamination
Total Haloacetic Acids Entry Point	No	1/6/2016 2/7/2016 3/15/2016 Qtrr Avg	23.1 30.4 23.2 (25.56)	ug/L	0	60	By-product of drinking water disinfection needed to kill harmful organisms.
		4/12/2016 5/10/2016 6/7/2016 Qtrr Avg	26.9 23.4 36.32 (28.87)				
		7/13/2016 8/2/2016 9/5/2016 Qtrr Avg	27.36 33.55 43.71 (34.87)				
		10/11/2016 11/7/2016 12/13/2016 Qtrr Avg	27.5 17.51 32.42 (25.81)				
		LRAA	(28.78)				
			(Range= 22.28-43.71)				

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, AL or TT)	Likely source of Contamination
Total Trihalomethanes 62 Marcy	No	1/7/2016 2/8/2016 3/17/2016 Qtr Avg LRAA 4/13/2016 5/11/2016 6/9/2016 Qtr Avg LRAA 7/14/2016 8/3/2016 9/6/2016 Qtr Avg LRAA 10/12/2016 11/8/2016 12/14/2016 Qtr Avg LRAA	26.2 37 39 (34.06) 83 39 59 69.6 (55.86) 75 93.7 118 104 (105.23) 67 80.7 45.9 43.6 (56.73) 64 (Range= 22.28-43.71)	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.

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, AL or TT)	Likely source of Contamination
Total Haloacetic Acids 62 Marcy	No	1/7/2016 2/8/2016 3/17/2016 Qtrtr Avg	26.2 40.9 33.3 (25.56)	ug/L	0	60	By-product of drinking water disinfection needed to kill harmful organisms.
		4/13/2016 5/11/2016 6/9/2016 Qtrtr Avg	30 43.3 28.43 (28.87)				
		7/14/2016 8/3/2016 9/6/2016 Qtrtr Avg	32.03 32.27 32.52 (34.87)				
		10/12/2016 11/8/2016 12/14/2016 Qtrtr Avg	31.78 22.28 35.8 (29.95)				
		LRAA	(29.81) (Range= 22.28-43.71)				

Definitions:

LRAA- Means Locational Running Annual Average

N/A- Means not applicable

NTU- Nephelometric Turbidity Unit; a measure of particles in water,

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

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

WHAT DOES THIS INFORMATION MEAN?

The table shows that our system has had an issue with Total Trihalomethanes.

The table shows that our system continued to be in violation of the Stage 2 Disinfection Byproduct Rule during the first quarter of 2016; the total trihalomethane 12 month running average exceeded standards during the first quarter of 2016 due to high levels in 2015. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer. The Joint City/Town of Poughkeepsie water treatment facility was being upgraded at the time to remove disinfection by-product precursors. In the interim we have been flushing the distribution system at 6 strategic locations to reduce the potential for THM formation in the distribution system.

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. Hopewell Glen Water 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 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 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 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 provide your family with 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.

Annual Drinking Water Quality Report for 2016
Central Dutchess Water Transmission Line
21 Page Park Dr.
Poughkeepsie, NY 12603
(Public Water Supply ID#1330640)

INTRODUCTION

To comply with State regulations, the Central Dutchess Water Transmission Line (CDWTL), 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, we conducted tests for all required regulated contaminants. Of those contaminants, none were detected at a level above the respective MCL. There were no water quality MCL violations in 2016 in the CDWTL system. Our water no longer exceeds the drinking water standard for lead at the Hudson Valley Research Park. 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 Dutchess County Water and 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 board meetings. The meetings are generally held on the third Wednesday of each month. The meetings begin at 4:00 pm and take place on the second floor conference room at 27 High St., Poughkeepsie, NY. Please call our office at (845) 486-3601 or check the Dutchess County Water and Wastewater Authority website for agenda details and any last minute meeting date or time 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 system serves approximately 4500 people through 3 service connections. Our water source originates at the Poughkeepsie Water Treatment Facility (PWS # 1302774). A copy of their AWQR is attached for reference. The sole source of water for the Poughkeepsie Water Treatment Facility (PWTF) is the Hudson River (surface water) The plant is located along the Hudson River within the Marist College Campus on Route 9. The raw river water is drawn from the Hudson River adjacent to the PWTF, approximately 1000 feet from the shore at a depth of 48 feet below the mean river elevation. The PWTF utilizes a conventional filtration process. After filtration is completed, the water is aerated to improve taste. It is then disinfected using ultraviolet light and a carefully

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monitored chlorination process. Orthophosphate and Sodium Hydroxide are added to the water to reduce corrosion of customer piping and fixtures. After the water has been treated, it is delivered to the Poughkeepsie Townwide Water District (PWS # NY1302812), and then delivered to the CDWTL customers via the CDWTL. A constant pressure is provided by a series of booster pumps. The levels of chlorine and turbidity are continuously monitored at the Pump Station, located at 21 Page Park Drive, in Poughkeepsie. Chlorine is added at the Pump Station as needed to adjust the chlorine residuals to the required concentrations. Daily sampling and analysis for these parameters are also performed at the entry points to the Global Foundries site and the Hopewell Glen development.

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, lead and copper, volatile organic compounds, total trihalomethanes, and haloacetic acids. 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 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) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Turbidity							
Pump Station Influent (1)	No	Daily	0.12 (0.06 -0.31)	NTU	0	< 5.0	Soil runoff and Hydrant flushing
Global Foundries Entry Point (1)	No	Daily	0.16 (0.08- 0.62)	NTU	0	< 5.0	Soil runoff and Hydrant flushing
Free Chlorine							
Pump Station Influent	No	Daily	1.50 (0.67 – 2.50)	mg/l	N/A	< 4.0	Added for disinfection
Global Foundries Entry Point	No	Daily	1.20 (0.55-1.63)	mg/l	N/A	< 4.0	Added for disinfection
Disinfection Byproducts							
Haloacetic acids HAA5 (4)							
Global Foundries Entry Point	No	Quarterly	25.8 (25.1-27.0)	ug/l	0	60	Byproduct of disinfection
Total Trihalomethanes (TTHM) (4)							
IBM Entry Point	No	Quarterly	56.6 (50.6-60.5)	ug/l	0	80	Byproduct of disinfection

monitored chlorination process. Orthophosphate and Sodium Hydroxide are added to the water to reduce corrosion of customer piping and fixtures. After the water has been treated, it is delivered to the Poughkeepsie Townwide Water District (PWS # NY1302812), and then delivered to the CDWTL customers via the CDWTL. A constant pressure is provided by a series of booster pumps. The levels of chlorine and turbidity are continuously monitored at the Pump Station, located at 21 Page Park Drive, in Poughkeepsie. Chlorine is added at the Pump Station as needed to adjust the chlorine residuals to the required concentrations. Daily sampling and analysis for these parameters are also performed at the entry points to the Global Foundries site and the Hopewell Glen development.

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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

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Free Chlorine							
Pump Station Influent	No	Daily	1.50 (0.67 – 2.50)	mg/l	N/A	< 4.0	Added for disinfection
Global Foundries Entry Point	No	Daily	1.20 (0.55-1.63)	mg/l	N/A	< 4.0	Added for disinfection
Disinfection Byproducts							
Haloacetic acids HAA5 (4)							
Global Foundries Entry Point	No	Quarterly	25.8 (25.1-27.0)	ug/l	0	60	Byproduct of disinfection
Total Trihalomethanes (TTHM) (4)							
IBM Entry Point	No	Quarterly	56.6 (50.6-60.5)	ug/l	0	80	Byproduct of disinfection

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg) (Range)	Unit Measurement	MCLG	Regulatory Limit (AL)	Likely source of Contamination
Inorganic Contaminants							
Lead (3)	No	Nov. 2016	<1 (<1- 12)	ug/l	0	15	Erosion of natural deposits and corrosion of plumbing systems
Copper (2)	No	Nov. 2016	0.010 (<0.005 - .054)	mg/l	0	1.3	Erosion of natural deposits and corrosion of plumbing systems

1 – 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. State regulations require that turbidity must always be below 5 NTU.

2 – The level presented represents the 90th percentile of the 20 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 20 samples were collected at your water system and the 90th percentile value was 0.010 mg/l. The action level for copper was not exceeded at any of the sites tested.

3 – The level presented represents the 90th percentile of the 20 samples collected. In this case 20 samples were collected at your water system and the 90th percentile value was <1 ug/l. The action level for lead was not exceeded at any of the 20 sites tested.

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

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).

WHAT DOES THIS INFORMATION MEAN?

The table shows that our system continues to be successful in lowering the lead levels in you system. Lead levels were not above the Action Level in any of the 20 samples taken from the water system. We remain in compliance of the Action Level for lead in Drinking water. 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. . *Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure. Infants and young children are typically more vulnerable to lead in drinking water than the general population.* It is possible that lead levels where you work may be higher than at other workplaces in the community as a result of materials used in your workplace plumbing. Dutchess County Water and Wastewater Authority 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 2016 the CDWTL 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 most 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 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 you are using, and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:

- ◆ Check every faucet in your office 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.

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. Please call our office if you have questions.

Annual Drinking Water Quality Report for 2016 Poughkeepsies' Water Treatment Facility (PWS# 1302774)

The Poughkeepsies' Water Treatment Facility, which is owned and operated by the City and Town of Poughkeepsie, provides drinking water to 80,000 individuals within the City of Poughkeepsie, Town of Poughkeepsie, the Dutchess County Water Authority, and the Town of Hyde Park. To comply with State regulations, an annual report is issued describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water quality and increase awareness of the need to protect drinking water sources. 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 and Federal standards.

We want you to be informed about your drinking water. If you have any questions about this report or the source of your drinking water, please contact Randy Alstadt, Water Plant Administrator, Poughkeepsies' Water Treatment Facility at 451-4173 x2003 or Lee Felshin, Senior Engineer, Dutchess County Department of Behavioral & Community Health, 85 Civic Center Plaza, Suite 106, Poughkeepsie 12601 at 486-3404. For additional information you may want to visit EPA's drinking water web site (www.epa.gov/safewater/) and the New York State Department of Health's web site (www.health.state.ny.us). If you want to learn more, please attend any of our regularly scheduled Joint Water Board meetings. The meetings are held the first Tuesday of every month at the Water Treatment Facility. Minutes and information reviewed at those meetings are available on our web site www.pokwater.com.

We are proud to report that all tests performed on the Plant Effluent (the water which leaves the plant for consumption) verified our water met all State drinking water health standards and no Maximum Contaminant Level (MCL) violation occurred. In October 2016, we brought ozone treatment on-line. In October we failed to test for bromate which resulted in a monitoring violation. In November and December tests for bromate did not detect bromate in our treated water.

The tables in this report contain various water quality parameters and the concentration of contaminants detected along with the possible source. A copy of this report and the complete list and results of organic and inorganic contaminants tested throughout the 2015 year can be found on our web site at www.pokwater.com or obtained by contacting Water Plant Administrator, Randy Alstadt at 451-4173 x2003. We are pleased to present to you the 2015 Annual Water Quality Report.

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 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 and require monitoring for the contaminants. 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. 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 & Community Health at 486-3404.

Our water source is the Hudson River, which originates from the north in the Adirondacks at Lake Tear of the Clouds, located on the southwest shoulder of Mount Marcy; New York State's highest peak. The Hudson River Watershed is very expansive, covering nearly 12,500 square miles, of which the majority is within New York State, however, small portions are located in Vermont, Massachusetts, Connecticut and New Jersey. Raw water is taken from the Hudson River adjacent to our treatment plant, approximately 1,000 feet from shore at a depth of 48 feet below the mean river elevation. Water quality tests have shown the river to be of very high quality.

Facts and Figures

The Poughkeepsies' Water Treatment Facility, which is located along the Hudson River within the Marist College Campus on Route 9, was constructed in 1962 and upgraded in 2004 and 2016. The Facility is currently rated at a maximum production capacity of 19.3 million gallons per day (MGD).

In 2016, the treatment facility produced 3,435,175,000 gallons of potable water, approximately 9.39 MGD. Our 2016 maximum daily production was 13.94 MGD while our minimum day was 3.81 MGD. Total billed water to the City was 1,830,041,096 gallons while gallons billed to the Town of Poughkeepsie was 1,605,133,904. The City total includes 500,718,540 gallons that the City sold to Third Party Users. The cost of production in 2016 was \$1.09 per 1,000 gallons. This equates to 10 gallons of water for less than one penny!

Water Treatment

The Poughkeepsies' Water Treatment Facility utilizes conventional, state of the art, filtration process to treat the water supply. This process includes chemical application of polyaluminum chloride to stabilize the small particles in the raw water supply. Once stabilized the particles are combined with an organic polymer and previously settled solids then slowly mixed to form larger particles that are then removed through settling. Following the settling process the water is aerated filtered through a coal and sand media that polishes the final product. Disinfection, the process used to kill disease-producing organisms, is accomplished through application of ultraviolet light followed by a carefully monitored chlorination process.

Post treatment includes the addition of phosphoric acid and sodium hydroxide. Phosphoric acid is added at 2.3 mg/L to reduce corrosion of customer's lead piping and fixtures. Sodium hydroxide is added when necessary to increase the treated water to a pH of 7.7 in effort to minimize corrosion of pipes within the distribution system and customers plumbing.

Between January 2015 and December 2015, the filter media was replaced with activated carbon and new sand. Ozone was added prior to filtration in September 2016. In January 2017 Carbon Dioxide was added prior to coagulation to enhance removal of organics. These upgrades have resulted in reduced disinfection byproducts.

Are There Contaminants in our Drinking Water?

To insure maximum water quality for our customers, the Poughkeepsies' Water Treatment Facility staff monitors source, treated and distribution water daily. In addition to continuous plant effluent monitoring for turbidity, chlorine residuals, and pH, approximately 50,350 water quality tests were conducted by the water plant staff in 2016. Operators at our facility analyzed chlorine residual, effluent turbidity and pH 12 times daily or combined or 13,140 analyses. In addition orthophosphate was analyzed 730 tests or twice daily. Additional analyses performed on raw water, plant effluent, and/or distribution system samples included inorganic compounds (metals), volatile organic compounds, total trihalomethanes, haloacetic acids, and synthetic organic compounds. Results of regulated contaminants found in our treated water supply and our plant effluent are presented in the enclosed Table.

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.

Salt Front

Our water is taken from the Hudson River Estuary, which is subject to increased chloride and sodium levels during low rainfall periods. In 2016, the facility did not experience a salt front episode (defined by USGS as chloride levels exceeding 100 mg/L). There is not a state or federal requirement to monitor sodium on regular basis; rather the use of the water's conductivity and chloride concentration was used as an indicator of sodium level increase. Our raw water was tested for sodium 10 times in 2016 with values from 14 mg/L to 28 mg/L and an average of 20 mg/L. If specific triggers were met, additional sodium analysis would take place. Last year the average raw water chloride concentration was 32 mg/L (range 24 mg/L-44 mg/L) which did not trigger additional sodium monitoring.

During normal water years the sodium level varies from 15 – 25 mg/L with higher levels occurring during periods of low rainfall. **Customers that are on a salt restricted diet should consult with their physician concerning salt in their drinking water.** Information concerning sodium levels in your water can be obtained at any time by contacting the Water Plant Administrator, Randy Alstadt at 451-4173 x 2003.

Hardness

The water obtained from the Hudson River is considered moderately hard. The average hardness of is 87 mg/L or 5.1 grains.

Annual Drinking Water Quality Report for 2016
Central Dutchess Water Transmission Line
21 Page Park Dr.
Poughkeepsie, NY 12603
(Public Water Supply ID#1330640)

INTRODUCTION

To comply with State regulations, the Central Dutchess Water Transmission Line (CDWTL), 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, we conducted tests for all required regulated contaminants. Of those contaminants, none were detected at a level above the respective MCL. There were no water quality MCL violations in 2016 in the CDWTL system. Our water no longer exceeds the drinking water standard for lead at the Hudson Valley Research Park. 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 Dutchess County Water and 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 board meetings. The meetings are generally held on the third Wednesday of each month. The meetings begin at 4:00 pm and take place on the second floor conference room at 27 High St., Poughkeepsie, NY. Please call our office at (845) 486-3601 or check the Dutchess County Water and Wastewater Authority website for agenda details and any last minute meeting date or time changes.

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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 system serves approximately 4500 people through 3 service connections. Our water source originates at the Poughkeepsie Water Treatment Facility (PWS # 1302774). A copy of their AWQR is attached for reference. The sole source of water for the Poughkeepsie Water Treatment Facility (PWTF) is the Hudson River (surface water) The plant is located along the Hudson River within the Marist College Campus on Route 9. The raw river water is drawn from the Hudson River adjacent to the PWTF, approximately 1000 feet from the shore at a depth of 48 feet below the mean river elevation. The PWTF utilizes a conventional filtration process. After filtration is completed, the water is aerated to improve taste. It is then disinfected using ultraviolet light and a carefully

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monitored chlorination process. Orthophosphate and Sodium Hydroxide are added to the water to reduce corrosion of customer piping and fixtures. After the water has been treated, it is delivered to the Poughkeepsie Townwide Water District (PWS # NY1302812), and then delivered to the CDWTL customers via the CDWTL. A constant pressure is provided by a series of booster pumps. The levels of chlorine and turbidity are continuously monitored at the Pump Station, located at 21 Page Park Drive, in Poughkeepsie. Chlorine is added at the Pump Station as needed to adjust the chlorine residuals to the required concentrations. Daily sampling and analysis for these parameters are also performed at the entry points to the Global Foundries site and the Hopewell Glen development.

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, lead and copper, volatile organic compounds, total trihalomethanes, and haloacetic acids. 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 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) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Turbidity							
Pump Station Influent (1)	No	Daily	0.12 (0.06 -0.31)	NTU	0	< 5.0	Soil runoff and Hydrant flushing
Global Foundries Entry Point (1)	No	Daily	0.16 (0.08- 0.62)	NTU	0	< 5.0	Soil runoff and Hydrant flushing
Free Chlorine							
Pump Station Influent	No	Daily	1.50 (0.67 – 2.50)	mg/l	N/A	< 4.0	Added for disinfection
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Disinfection Byproducts							
Haloacetic acids HAA5 (4)							
Global Foundries Entry Point	No	Quarterly	25.8 (25.1-27.0)	ug/l	0	60	Byproduct of disinfection
Total Trihalomethanes (TTHM) (4)							
IBM Entry Point	No	Quarterly	56.6 (50.6-60.5)	ug/l	0	80	Byproduct of disinfection

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Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg) (Range)	Unit Measurement	MCLG	Regulatory Limit (AL)	Likely source of Contamination
Inorganic Contaminants							
Lead (3)	No	Nov. 2016	<1 (<1- 12)	ug/l	0	15	Erosion of natural deposits and corrosion of plumbing systems
Copper (2)	No	Nov. 2016	0.010 (<0.005 - .054)	mg/l	0	1.3	Erosion of natural deposits and corrosion of plumbing systems

1 – 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. State regulations require that turbidity must always be below 5 NTU.

2 – The level presented represents the 90th percentile of the 20 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 20 samples were collected at your water system and the 90th percentile value was 0.010 mg/l. The action level for copper was not exceeded at any of the sites tested.

3 – The level presented represents the 90th percentile of the 20 samples collected. In this case 20 samples were collected at your water system and the 90th percentile value was <1 ug/l. The action level for lead was not exceeded at any of the 20 sites tested.

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

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).

WHAT DOES THIS INFORMATION MEAN?

The table shows that our system continues to be successful in lowering the lead levels in you system. Lead levels were not above the Action Level in any of the 20 samples taken from the water system. We remain in compliance of the Action Level for lead in Drinking water. 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. . *Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure. Infants and young children are typically more vulnerable to lead in drinking water than the general population.* It is possible that lead levels where you work may be higher than at other workplaces in the community as a result of materials used in your workplace plumbing. Dutchess County Water and Wastewater Authority 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 2016 the CDWTL 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 most 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 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 you are using, and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:

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The Poughkeepsies' Water Treatment Facility utilizes conventional, state of the art, filtration process to treat the water supply. This process includes chemical application of polyaluminum chloride to stabilize the small particles in the raw water supply. Once stabilized the particles are combined with an organic polymer and previously settled solids then slowly mixed to form larger particles that are then removed through settling. Following the settling process the water is aerated filtered through a coal and sand media that polishes the final product. Disinfection, the process used to kill disease-producing organisms, is accomplished through application of ultraviolet light followed by a carefully monitored chlorination process.

Post treatment includes the addition of phosphoric acid and sodium hydroxide. Phosphoric acid is added at 2.3 mg/L to reduce corrosion of customer's lead piping and fixtures. Sodium hydroxide is added when necessary to increase the treated water to a pH of 7.7 in effort to minimize corrosion of pipes within the distribution system and customers plumbing.

Between January 2015 and December 2015, the filter media was replaced with activated carbon and new sand. Ozone was added prior to filtration in September 2016. In January 2017 Carbon Dioxide was added prior to coagulation to enhance removal of organics. These upgrades have resulted in reduced disinfection byproducts.

Are There Contaminants in our Drinking Water?

To insure maximum water quality for our customers, the Poughkeepsies' Water Treatment Facility staff monitors source, treated and distribution water daily. In addition to continuous plant effluent monitoring for turbidity, chlorine residuals, and pH, approximately 50,350 water quality tests were conducted by the water plant staff in 2016. Operators at our facility analyzed chlorine residual, effluent turbidity and pH 12 times daily or combined or 13,140 analyses. In addition orthophosphate was analyzed 730 tests or twice daily. Additional analyses performed on raw water, plant effluent, and/or distribution system samples included inorganic compounds (metals), volatile organic compounds, total trihalomethanes, haloacetic acids, and synthetic organic compounds. Results of regulated contaminants found in our treated water supply and our plant effluent are presented in the enclosed Table.

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.

Salt Front

Our water is taken from the Hudson River Estuary, which is subject to increased chloride and sodium levels during low rainfall periods. In 2016, the facility did not experience a salt front episode (defined by USGS as chloride levels exceeding 100 mg/L). There is not a state or federal requirement to monitor sodium on regular basis; rather the use of the water's conductivity and chloride concentration was used as an indicator of sodium level increase. Our raw water was tested for sodium 10 times in 2016 with values from 14 mg/L to 28 mg/L and an average of 20 mg/L. If specific triggers were met, additional sodium analysis would take place. Last year the average raw water chloride concentration was 32 mg/L (range 24 mg/L-44 mg/L) which did not trigger additional sodium monitoring.

During normal water years the sodium level varies from 15 – 25 mg/L with higher levels occurring during periods of low rainfall. **Customers that are on a salt restricted diet should consult with their physician concerning salt in their drinking water.** Information concerning sodium levels in your water can be obtained at any time by contacting the Water Plant Administrator, Randy Alstadt at 451-4173 x 2003.

Hardness

The water obtained from the Hudson River is considered moderately hard. The average hardness of is 87 mg/L or 5.1 grains.

**SUMMARY OF REGULATED CONTAMINANTS DETECTED IN
POUGHKEEPSIES' WATER TREATMENT FACILITY'S PLANT EFFLUENT (PWS # 1302774)**

Poughkeepsies' Water Treatment Facility
PWS # 1302774
3431 North Road
Poughkeepsie, NY 12601
Licensed Operator: Randy J. Alstadt, P.E.

Inorganic Contaminants							
CONTAMINANT	NYSDOH MCL	USEPA MCLG	VIOLATION YES/NO	# OF SAMPLES	RANGE	AVERAGE	SOURCE IN DRINKING WATER
<u>ALUMINUM</u>							
PLANT EFFLUENT	n/a	0.2 mg/L	NO	17	0.086 -0.011 mg/L	0.038 mg/L	Erosion of natural deposits; discharge of drilling wastes; discharge from metal refineries
<u>ARSENIC</u>							
PLANT EFFLUENT	0.010 mg/L		NO	1	0.0008 mg/L	n/a	Erosion of natural deposits, Runoff from orchards or industries
<u>BARIUM</u>							
PLANT EFFLUENT	2 mg/L	2 mg/L	NO	1	0.023 mg/L	n/a	Erosion of natural deposits; discharge of drilling wastes; discharge from metal refineries
<u>CHLORIDE</u>							
PLANT EFFLUENT	250 mg/L	250 mg/L	NO	1	44 mg/L	44 mg/L	Naturally occurring; run off
<u>CHROMIUM</u>							
PLANT EFFLUENT	0.1 mg/L	n/a	NO	1	0.0032 mg/L	n/a	Erosion of natural deposits, Discharge from steel and pulp mills
<u>MANGANESE</u>							
PLANT EFFLUENT	0.3 mg/L	n/a	NO	1	0.0014 mg/L	n/a	Erosion of natural deposits
<u>NITRATE</u>							
PLANT EFFLUENT	10 mg/L	10 mg/L	NO	1	0.41 mg/L	n/a	Runoff from fertilizer, Leaking septic tanks, sewage, erosion of natural deposits
<u>NICKEL</u>							
PLANT EFFLUENT	2 mg/L	2 mg/L	NO	1	0.0008 mg/L	n/a	Erosion of natural deposits; discharge of drilling wastes; discharge from metal refineries
<u>SELINIUM</u>							
PLANT EFFLUENT	0. mg/L	2 mg/L	NO	1	0.0024 mg/L	n/a	Discharge from petroleum refineries; erosion of natural deposits

SODIUM

PLANT EFFLUENT	n/a	n/a	n/a	1	28 mg/L	n/a	Naturally occurring; run off
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SULFATE

PLANT EFFLUENT	250 mg/L	N/A	NO	1	16 mg/L	n/a	Naturally occurring; run off
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Miscellaneous Water Quality Parameters

CONTAMINANT	NYSDOH MCL	USEPA MCLG	VIOLATION YES/NO	# OF SAMPLES	RANGE	AVERAGE	SOURCE IN DRINKING WATER
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TURBIDITY

PLANT EFFLUENT	95% OF SAMPLES < 0.3 NTU ¹	95% OF SAMPLES < 0.3 NTU ¹	NO	Continuous Monitoring	0.02 - 0.17 NTU	0.06 NTU	Soil runoff; flushing hydrants
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CHLORINE

PLANT EFFLUENT	4 mg/L	n/a	NO	Continuous Monitoring	1.72-3.89 mg/L	2.52 mg/L	Disinfectant Additive
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CONTAMINANT	NYSDOH MCL	USEPA MCLG	VIOLATION YES/NO	# OF SAMPLES	RANGE	AVERAGE	SOURCE IN DRINKING WATER
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HALOACETIC ACIDS (includes mono, di, & trichloroacetic acid; mono & dibromoacetic acid)

PLANT EFFLUENT	60	n/a	NO	4	5.8-10.0 µg/L	7.9 µg/L	Naturally occurring
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TOTAL TRIHALOMETHANES (THM includes chloroform, bromodichloromethane, dibromochloromethane & bromoform)

PLANT EFFLUENT	80	n/a	NO	4	15.2-36.0 µg/L	23.6 µg/L	Naturally occurring
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1. Turbidity is a measure of the cloudiness of the water. It is used as an indicator for overall water treatment. State and Federal regulations require that turbidity must always be less than 1.0 NTU leaving the treatment plant.
2. Only compounds detected are listed in this report. For a complete list of Synthetic and Volatile Organic Compounds tested for, please visit our website at www.pokwater.com.

Table Definitions

NYSDOH: New York State Department of Health

USEPA: United States Environmental Protection Agency

MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in the drinking water.

MCLG (Maximum Contaminant Level Goal): 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.

NTU (Nephelometric Turbidity Unit): A measure of the clarity of the water. Turbidity in excess of 5.0 NTU is just noticeable to the average person.

mg/L (milligrams per liter): Corresponds to one mass part in one million parts of another liquid (parts per million)

µg/L (micrograms per liter): Corresponds to one mass part in one billion parts of another liquid (parts per billion)

Lead in Your Drinking Water

The facility adds phosphoric acid at 2.3 mg/L to the treated water in order to protect lead plumbing in customer's homes. This program has resulted in significantly reducing lead levels in most homes.

Lead present at elevated levels 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 Poughkeepsies' Water Treatment Facility is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. Potential exposure to lead in drinking water can be minimized by running the water from the tap for

30 seconds to 2 minutes before using it for drinking or cooking, especially if it has been unused for several hours. 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 www.epa.gov/safewater/lead.

Administrative Order on Consent

The EPA granted the Poughkeepsies' Water Treatment Facility, City of Poughkeepsie and Town of Poughkeepsie an additional 24 months for capital improvements to comply with Stage 2 Disinfection Byproduct MCLs. The consent delayed the implementation of the Stage 2 monitoring regulations 1-year or the 4th (fourth) quarter of 2015. Upon substantial completion in September the EPA issued compliance to the order.

Disinfection Byproducts are formed when naturally-occurring organic and inorganic materials in the water react with chlorine that is applied to drinking water for disinfection. The amount of disinfection byproducts is variable depending upon time the water is in contact with chlorine and temperature. As a result, levels vary throughout the distribution system. The Stage 1 standard requires utilities to average the quarterly results throughout the distribution system then average four (4) continuous quarters. The Stage 2 regulation requires the quarterly average be calculated at each individual sample site. The MCL has not changed.

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 water source 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 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.
- ◆ 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.

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 and our way of life.