

Annual Drinking Water Quality Report for 2016
The Village of Millbrook Water System
Merritt Avenue, Millbrook, New York 12545
(Public Water Supply ID# 1302770)

INTRODUCTION

To comply with State regulations, Village of Millbrook 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. We are proud to report that our system did not violate a maximum contaminant level. 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 VRI Environmental Services at (845) 677-3839. 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 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 supply consists of three infiltration galleries, located just outside the Village. The ground water infiltrates into the galleries and is gravity fed into the pump house. Here the water is disinfected with sodium hypochlorite. Zinc orthophosphate and sodium hydroxide are used for corrosion control and pH adjustment in the distribution system. No other chemicals are used in the treatment process. Alternating pumps then send water either directly into the distribution system or into a 500,000-gallon water storage tank depending on demand.

On July 16, 2013, the ground water source supplying The Village of Millbrook was determined to be "Ground Water Under the Direct Influence" of surface water. This means that the ground water source is receiving direct surface water recharge. Since a portion of the ground water recharge is from surface water, the ground water source is considered at risk of microbiological contamination. The Village of Millbrook is currently in the process of addressing the situation. The Village is working with their engineers and the local Health Department to resolve the issue.

FACTS AND FIGURES

Our water system serves 1400 people through 720 service connections. The total amount of water produced in 2016 was 72474,000 gallons. The daily average of water treated and pumped into the distribution system was 198,000 gallons per day. Our highest single day was 360,000 gallons.

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, lead and copper, volatile organic compounds, total trihalomethanes, total 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 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
Nitrate	No	1/6/2016 4/6/2016 7/13/2016 10/5/2016	0.87 0.60 0.20 0.22	mg/L	10	10	Runoff from fertilizer use; Leaching from septic tanks; Sewage; Erosion of natural deposits.
Copper *	No	9/10/2014 9/17/2014	0.833 (Range = 0.144 – 0.856)	mg/L	1.3	1.3	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.
Lead **	No	9/10/2014 9/17/2014	0.014 (Range = ND – 0.120)	mg/L	0	0.015	Corrosion of household plumbing systems; Erosion of natural deposits.
Total Trihalomethanes	No	8/2/2016	13.7	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.
Total Haloacetic Acids	No	8/2/2016	8.80	ug/L	n/a	60	By-product of drinking water disinfections needed to kill harmful organisms.
Calcium	No	9/2012	24.6	mg/L	n/a	n/a	Naturally occurring / mineral deposits
Hardness	No	9/2012	89.3	mg/L	n/a	n/a	Naturally occurring / mineral deposits
Magnesium	No	9/2012	6.78	mg/L	n/a	n/a	Naturally occurring / mineral deposits

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Zinc Laundry Mate	No	1/6/2016 7/13/2016	0.795 0.818	mg/L	n/a	5	Part of treatment.
Town Hall		4/6/2016	0.761				
8 Manor Drive		5/20/2016	0.669				
3267 Franklin Ave		10/5/2016	0.812				
Orthophosphate Sewer Plant Sink 164 Nine Partners Ln	No No	8/22/2013 8/29/2013	0.810 0.360	mg/L	n/a	n/a	Part of treatment.
Selenium	No	6/15/2016	0.8	ug/L	50	50	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Nickel	No	6/15/2016	0.9	ug/L	n/a	n/a	
Chromium	No	6/15/2016	3.3	ug/L	100	100	Discharge from steel and pulp mills; Erosion of natural deposits.
Radium 226	No	9/17/2013	0.16	pCi/L	0	5	Erosion of natural deposits

Footnotes:

* The level presented represents the 90th percentile of the 10 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, 10 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.

** The level presented represents the 90th percentile of the 10 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, 10 samples were collected at your water system and the 90th percentile value is the reported value. The action level for lead was exceeded once at sites tested.

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.

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. 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. Millbrook Village 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 (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?

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 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 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.