

# *Annual Drinking Water Quality Report for 2009*

## *Village of Millbrook*

*Merritt Avenue*

*Millbrook, New York 12545*

*Public Water Supply ID# NY1302770*

### **INTRODUCTION**

To comply with State regulations, The Village of Millbrook, issues a report annually 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. 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.

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 or any other water quality standard.

If you have any questions about this report or concerning your drinking water, please contact VRI, the system operators, 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. 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 in and/or near the Village. The ground water infiltrates into the galleys and is gravity fed into the pump house where two pumps pump the water into a 500,000-gallon water storage tank which then gravity feeds the distribution system. The water is disinfected with chlorine. A Sequestering agent, isolates constituents of the water so they can not react with other elements to form scale and/or precipitates, is used and pH adjustments are made to control corrosion, providing quality water. No other chemicals are used in the disinfections process.

### **FACTS AND FIGURES**

Our water system serves 1400 people through 720 service connections. The total amount of water produced in 2009 was 67,025,000 gallons. The daily average of water treated and pumped into the distribution system was 183,630 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, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, radiologicals, and haloacetic acids and synthetic organic compounds. The table presented on the next page 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, might 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	Unit Measurement	MCLG	Regulatory Limit MCL	Likely Source of Contamination
Nitrate	No	3/2009	0.4	mg/l	10	10 mg/l	Runoff from fertilizer use; Leaching from septic tanks; Sewage; Erosion of natural deposits.
Copper**	No	9/11/2008	0.515	mg/l	1.3	1.3	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.
Lead**	No	9/11/2008	.002 mg/l	mg/l	0	.015 mg/l	Corrosion of household plumbing systems; Erosion of natural deposits.
POC's / MTBE	No	7/2009	ND	mg/l	n/a	0.005 mg/l	
SOC's	No	7/18/2007	ND	mg/l	n/a		
Total Trihalomethanes <i>Bromodichloromethane</i> <i>Chlorodibromomethane</i> <i>Chloroform</i>	No	8/2009	12.1 4.6 2.7 4.8	ug/l	n/a	80 ug/l	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 <i>Dichloroacetic</i> <i>Trichloroacetic</i>	No	8/2009	5.1 3.4 1.7	ug/l	n/a	60 ug/l	By-product of drinking water disinfections needed to kill harmful organisms.
Inorganic Chemicals <i>Barium</i> <i>Zinc</i>	No No	10/17/2007 Max value 8/2009	0.007 0.824	mg/l	0.15 5.0	0.15 5.0	Runoff from fertilizer use; Leaching from septic tanks, Sewage; Erosion of natural deposits.

\*\*Lead and Copper: The level represents the 90<sup>th</sup> percentile.

**Definitions:**

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible.

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health.

MCLGs allow for a margin of safety.

**Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

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

**Non-Detects (ND):** Laboratory analysis indicates that the constituent is not present.

**Milligrams per liter (mg/l):** Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).

**Micrograms per liter (ug/l):** Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).

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

**Picograms per liter (pg/l):** Corresponds to one part per of liquid to one quadrillion parts of liquid (parts per quadrillion - ppq).

**Picocuries per liter (pCi/L):** A measure of the radioactivity in 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.

**IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN**

## **OPERATIONS?**

During 2009 our system was issued two violations. The first violation was that the two older bunkers were in poor condition and needed to be repaired. It was agreed between the Village and the Health Department that the work on the bunkers will be preformed during dry weather and will be completed by September 30, 2010. The second violation was issued because the main meter pit had flooded. Corrective action was taken within 30 days by installing a sump pump.

## **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 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 10-15 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.
- ◆ Use low flow shower heads and faucets
- ◆ Water your lawn sparingly early morning or late evening
- ◆ Do only full loads of wash and dishes

## **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 questions.