

Annual Drinking Water Quality Report for 2015
Winebrook Hills Water District
PO Box 405, Newcomb NY 12852
(Public Water Supply ID# 1500305)

INTRODUCTION

To comply with State and Federal regulations, the Winebrook Hills Water District 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. 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 Wester Miga, Town Supervisor at 582-3211. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled town board meetings held on the second and fourth Tuesday of each month.

WHERE DOES OUR WATER COME FROM?

In general, the sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and in some cases radioactive material and can pick up substances resulting from the presence of animals or from human activities. Contaminants that may be present in source water include: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations, which limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health. Our water source is the Hudson River. The water is filtered by diatomaceous earth filters, disinfected with chlorine and treated with an orthophosphate for corrosion control prior to distribution. Our water system serves 250 people through 130 service connections.

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, disinfection byproducts, radiological and synthetic organic compounds. The table presented below depicts which compounds were detected in your drinking water. The State allows us to test for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

It should be noted that all drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791) or the New York State Health Department at (518) 891-1800.

Table of Detected Contaminants

Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Microbiological Contaminants							
Turbidity ¹	no	9/30/15	1.71	NTU	n/a	5 (TT)	Soil runoff
Turbidity ¹	no	2015	99%	NTU	n/a	95% of samples <1.0(TT)	Soil runoff
Inorganic Contaminants							
Barium	no	2015	0.005	mg/l	2	2(MCL)	Erosion of natural deposits
Copper	no	2014	0.18 ² .048 – 0.253 ³	mg/l	1.3	1.3 (AL)	Corrosion of household plumbing; Erosion of natural deposits
Lead	no	2014	0.002 ² ND – 0.002 ³	mg/l	0	.015 (AL)	Corrosion of household plumbing; Erosion of natural deposits
Nitrate	no	2015	0.48	mg/l	10	10 (MCL)	Erosion of natural deposits
Radioactive Contaminants							
Radium 228	no	2008	0	pCi/L	0	5 (MCL)	Erosion of natural deposits
Gross Alpha	no	2008	0	pCi/L	0	15 (MCL)	Erosion of natural deposits.
Gross Beta	no	2008	0	pCi/L	0	50 (MCL)	Decay of natural deposits and man-made emissions.
Disinfection Byproducts – Stage 2							
Trihalomethanes (TTHMs)	yes	2015	194 ⁵ 152 - 235 ⁶	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 (HAA5s)	yes	2015	85 ⁵ 21 - 152 ⁶	ug/l	n/a	60	By-product of drinking water chlorination

Notes:

1 – Turbidity is a measure of the cloudiness of the water. We test it because it is a good indicator of the effectiveness of our filtration system. Our highest single turbidity measurement for the year occurred on 9/30/15 (1.71 NTU). State regulations require that turbidity must always be below 5 NTU. The regulations require that 95% of the turbidity samples collected have measurements below 1.0 NTU. 100% of our turbidity measurements were within the acceptable range allowed and did not constitute a treatment technique violation.

2 – The level presented represents the 90th percentile of the 5 sites tested. The 90th percentile is equal to or greater than 90% of the lead and copper values detected at your water system. The 90th percentile is the average of the highest and second highest values of the 5 samples collected.

3 – The level presented represents the range of the five samples collected. The action level was not exceeded at any site for lead or copper

5 – This value represents the highest average of 4 consecutive samples.

6 – These values represent the range of samples 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.

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?

Last year the Winebrook Hills WD received violations for exceeding the MCLs for Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5). TTHM and HAA5 are disinfection byproducts. Compliance is based on a locational running annual average (LRAA). In other words, the sample result for the most recent calendar quarter is averaged with the three prior quarterly sample results for each sampling location. The LRAA is compared with the maximum contaminant level (MCL) allowed per regulations. A violation exists if the LRAA exceeds the MCL. The MCL for TTHM is 80 mcg/l (micrograms per liter). The MCL for HAA5 is 60 ug/l (micrograms per liter).

TTHM and HAA5 are formed in drinking water during treatment with chlorine, which reacts with certain acids that are in naturally-occurring organic material (e.g., decomposing vegetation such as tree leaves, algae or other aquatic plants) in surface water sources such as rivers and lakes. The amount of TTHM and HAA5 in drinking water can change from day to day, depending on the temperature, the amount of organic material in the water, the amount of chlorine added, and a variety of other factors. Drinking water is disinfected by public water suppliers to kill bacteria and viruses that could cause serious illnesses. Chlorine is the most commonly used disinfectant in New York State. For this reason, disinfection of drinking water by chlorination is beneficial to public health. Some studies of people who drank chlorinated drinking water for 20 to 30 years show that long term exposure to disinfection by-products (possibly including TTHM and HAA5) is associated with an increased risk for certain types of cancer. However, how long and how frequently people actually drank the water as well as how much TTHM and HAA5 the water contained is not known for certain. Therefore, we do not know for sure if the observed increased risk for cancer is due to TTHM and HAA5, other disinfection by-products, or some other factor. The individual disinfection byproducts cause cancer in laboratory animals exposed to high levels over their lifetimes. Some disinfection byproducts are also known to cause other effects in laboratory animals after high levels of exposure, primarily on the liver, kidney and nervous system and on their ability to bear healthy offspring. Chemicals that cause effects in animals after high levels of exposure may pose a risk to humans exposed to similar or lower levels over long periods of time.

Lead - If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Town of Newcomb 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 or at <http://www.epa.gov/safewater/lead>.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

Last year our system was in compliance with all monitoring and reporting requirements.

Source Water Assessment Summary

The NYS Dept. of Health completed a source water assessment for this system based on available information.

This assessment found no noteworthy risks to drinking water quality. While some potential contaminant sources were found, their density is low enough that impacts on water quality are unlikely. It should be noted that rivers in general are highly sensitive to microbial contaminants.

The health department will use this information to direct future source water protection activities. These may include water quality monitoring, resource management, planning, and education programs. A copy of the assessment, including a map of the assessment area, can be obtained by contacting us as noted below.

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 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

We are working on a project to replace our filtration plant and surface water source with a groundwater system, this will resolve all of our water quality violations. Our project will be complete in 2017.

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.