

Annual Drinking Water Quality Report for 2016
Arbor Hills Water Works
Lewisboro, New York 10590
Public Water Supply ID # NY5922910

INTRODUCTION

To comply with State regulations, **Arbor Hills Water Works** 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 or any other water quality standard. 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 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 over 272 people through 68 connections. Our water source is 4-drilled wells. 3 are located on the right near the entrance and 1 is located in the wooded area behind #38 Brundige. The water is disinfected with liquid sodium hypochlorite prior to distribution.

The NYS DOH has completed a source water assessment for this system, based on available information. Possible and actual threats to this drinking water source were evaluated. The state source water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants can move through the subsurface to the wells. The susceptibility rating is an estimate of the potential for contamination of the source water, it does not mean that the water delivered to consumers is, or will become contaminated. See section "Are there contaminants our drinking water?" for a list of the contaminants that have been detected, if any. The source water assessments provide resource managers with additional information for protecting source waters in the future. Our water is derived from 4-drilled wells. The source water assessment has rated one of the wells as having a medium-high susceptibility to microbial contamination and nitrates. These ratings are due to the close proximity of a permitted discharge facility (industrial/commercial facilities that discharge wastewater into the environment and are regulated by the state and/or federal government) to the well. In addition all wells draw from an unconfined aquifer of unknown hydraulic conductivity. While the source water assessment rates as well as being susceptible to microbial, please note that our water is disinfected to ensure that the finished water delivered to your home meet's New York State's drinking water standards for microbial contamination. A copy of the assessment, including a map of the assessment area can be obtained by contacting Arbor Hills Water (914) 720-1822.

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, inorganic compounds, nitrate, nitrite, lead and copper, principal organic contaminants, total trihalomethanes, 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 Westchester County Health Department at (914) 813-5000.

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, MRDL or AL)	Likely Source of Contamination
Nitrate	NO	6/8/16	0.56	mg/l	10	MCL = 10	Erosion of natural deposits Leaching from septic tanks Run off from fertilizer use.
Trihalomethanes	NO	8/10/16	5.6 - 78.8	ug/l	N/A	MCL = 80 ug/l	By-product of drinking water chlorination needed to kill harmful organisms. TTHM's are formed when source water contain large amounts of organic matter.
Haloacetic Acids	NO	8/10/16	ND – 15.5	ug/l	N/A	MCL = 60 ug/l	By-product of drinking water chlorination needed to kill harmful organisms.
Chloride	NO	6/8/16	58.4	mg/l	N/A	MCL = 250	Naturally occurring, road salt contamination.
Sodium	NO	6/8/16	27.1	mg/l	N/A	See Health Effects (Note 1)	Naturally occurring, road salt contamination, water softeners, animal waste.
Chlorine Residual	NO	Daily	Average 1.41 Range (0.50 – 2.30)	mg/l	N/A	MRDL=4	Water additive used to control microbes
Lead (Footnote 3)	NO	6/23-6/25/14	7.5 Range (<1 -12)	ug/l	0	AL = 15 ug/l	Erosion of natural deposits and Corrosion of plumbing.
Copper (Footnote 2)	NO	6/23-6/25/14	203 Range (94-208)	ug/l	1300	AL= 1300 ug/l	Corrosion of household plumbing. Erosion of natural deposits.
Combined Radium 226/228	NO	2016 Entry Point 2016 Well 1 2016 Well 2 2016 Well 3 2016 Well 4	2.93 ND - 6.45 0.77 ND - 1.60 0.62 ND – 2.49 1.74 ND – 4.95 4.76 2.61 – 6.29	pCi/l	0	MCL = 5 pCi/l (Footnote 4)	Erosion of natural deposits.
Total Coliform Bacteria	NO	8/5/16	<u>PRESENT1 positive sample</u>	<u>#/100mL n/a</u>	0	<u>Absent or Present2 or more positive samples</u>	Naturally present in the environment.

Gross Alpha	NO	2016 Entry Point 2016 Well 1 2016 Well 2 2016 Well 3 2016 Well 4	<u>Range</u> 7.75 ND - 10.5 4.68 ND - 12.7 3.75 ND - 6.04 16.48 3.63 - 24.5 14.42 6.86 - 21.7	pCi/l	0	MCL = 15 pCi/l (Footnote 4)	Erosion of natural deposits.
Gross Beta	NO	2016 Entry Point 2016 Well 1 2016 Well 2 2016 Well 3 2016 Well 4	<u>Range</u> 5.11 ND - 9.5 1.25 ND - 5.01 2.90 ND - 6.28 8.89 5.02 - 12.6 8.88 6.36 - 12.2	pCi/l	0	**MCL = 50 pCi/l (Footnote 5)	Decay of natural deposits, Man-made emissions.
Uranium	NO	2016 Entry Point 2016 Well 1 2016 Well 2 2016 Well 3 2016 Well 4	<u>Range</u> 7.93 7.41 - 8.44 4.65 1.86 - 8.11 5.01 3.21 - 6.16 18.50 3.69 - 25.0 4.56 4.39 - 4.75	ug/l	0	MCL = 30ug/l (Footnote 4)	Erosion of natural deposits.
Barium	NO	6/8/2016	0.121	mg/l	2	MCL = 2	Natural deposits, metal refineries, drilling waste
Iron	NO	6/8/2016	0.01	mg/l	N/A	MCL = 0.3	Naturally occurring
Zinc	NO	6/8/2016	0.035	mg/l	N/A	MCL = 5	Naturally occurring Mining.waste
Sulfate	NO	6/8/2016	17.9	mg/l	N/A	MCL = 250	Naturally occurring.
Nickel	NO	6/8/2016	0.001	ug/l	N/A	No Designated Limits	Naturally Occurring

Manganese	NO	6/8/2016	0.003	mg/l	N/A	MCL = 0.3	Naturally occurring
-----------	----	----------	-------	------	-----	-----------	---------------------

Notes:

1--Those on severely to moderately restricted sodium diets should take note of sodium levels in their drinking water. Water containing more than 20 mg/l of sodium should not be used for drinking by those on severely restricted sodium diets. Water containing more than 270 mg/l of sodium should not be used for drinking by people on moderately restricted sodium diets.

2--The level presented represents the 90th percentile of the 5 sites tested. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the copper values detected at your water system. In this case 5 samples were collected at your water system and the 90 percentile value was 203umg/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 5 samples collected. The action level for lead was not exceeded at any of the sites tested. The 90th percentile for lead was 7.5 ug/l.

4—Radiological results show the range of quarterly results and annual average for each well and the entry point. MCL compliance is determined by the annual average at the Entry Point Only.

5—The state considers 50 pCi/l to be the level of concern for beta particles.

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 contaminants.

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).

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

Millirems per year (mrem/yr): A measure of radiation absorbed by the body.

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 2016, our system was in compliance with State drinking water operating, and reporting requirements. We had one monitoring violation due to a missed Total Coliform sample in the month of February 2016. We are required to sample for Total Coliform once per month and did not take the February 2016 sample.

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. Immune-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).

INFORMATION FOR NON-ENGLISH SPEAKING RESIDENTS

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

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 questions.