Camo POLLUTION CONTROL, INC.

*Operation of Water and Wastewater Treatment Systems*

1610 ROUTE 376
WAPPINGERS FALLS, NY 12590
(845) 463-7310
Fax (845) 463-7305

# *Annual Drinking Water Quality Report for 2019*
# *Brinkerhoff Water District*
# *Fishkill, New York 12524*
# *Public Water Supply ID# NY1302766*

## INTRODUCTION

To comply with State regulations, the Brinkerhoff Water District is issuing an annual 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. 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 CAMO Pollution Control, Inc. at (845) 463-7310. 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. The time and place of regularly scheduled Town Board meetings may be obtained from Becki Tompkins, Town Clerk, at (845) 831-7800 x3333.

## 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.

## FACTS AND FIGURES

Our water system serves 3,788 customers through 950 service connections. Our water source is groundwater drawn from three gravel wells. The three wells have submersible pumps that pump to a pneumatic tank in order to maintain system pressure. The supply of water fully met all demands in 2019.

The treatment of our water consists of disinfection with chlorine to destroy microorganisms. Well #3, our biggest well and the reserve well, has been deemed to be under the influence of surface water and until treatment is provided, we are not able to utilize this well. The New York State Health Department considers this a violation of 5-1.30 and 5-1.9 of Part 5 New York State Sanitary Code. It should be noted that Well #3 was isolated electrically and is not in a "ready" state in case of an emergency. In addition to Well #3, the Health Department requires that storage be added to the system. The Town Engineer has presented plans to remedy these storage concerns. The estimated hardness of your water is between 22-24 grains per gallon.

## SOURCE WATER ASSESSMENT

The New York State Department of Health 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, infected. See the section "What's In My 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 into the future.

The source water assessment has rated our water as having an elevated susceptibility to microbials, nitrates, industrial solvents, and other industrial contamination. These ratings are due primarily to the close proximity of the wells to permitted discharge facilities (industrial/commercial facilities that discharge wastewater into the environment and are regulated by the State or Federal government) and to residential land use and related activities in the assessment area. In addition, the wells draw from fractured bedrock, and the overlying soils may not provide adequate protection from potential contamination. While the source water assessment has rated our wells as being susceptible to microbials, please note that our water is disinfected to ensure that the finished water delivered into your home meets New York State's drinking water standards for microbial contamination.

The County and State health departments 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 can be obtained by contacting us at (845) 463-7310.

## 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, haloacetic acids, 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 Dutchess County Health Department at (845) 486-3404.

**Table of Detected Contaminants**

| Contaminant | Violation Yes/No | Date of Sample | Level Detected (Range) | Unit Measure-ment | MCLG | Regulatory Limit (MCL, TT or AL) | Likely Source of Contamination |
|---|---|---|---|---|---|---|---|
| **Inorganics** | | | | | | | |
| Antimony | No | 12/2018 | 0.005 | mg/l | N/A | 0.006 | Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder. |
| Barium | No | 12/2018 | 0.0330 | mg/l | 2 | 2 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits |
| Chloride<br>See footnote 4 | Yes | 2019 | 209.6 (188-228) | mg/l | NA | 250 | Naturally occurring or indicative of road salt contamination |
| Copper<br>See footnote 2 | No | 09/2017 | 0.16 (0.0141-0.191) | mg/l | 1.3 | 1.3 | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| Lead<br>See footnote 2 | No | 09/2017 | 0.003 (ND – 0.008) | mg/l | 0 | 0.015 | Corrosion of household plumbing systems; erosion of natural deposits |
| Nickel | No | 12/2018 | 0.0013 | mg/l | NA | N/A | Naturally occurring |
| Nitrate | No | 11/2019 | 2.37 | mg/l | 10 | 10 | Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits |
| Sodium<br>See footnote 1 | No | 2019 | 127.8 (102-152) | mg/l | NA | See footnote 1 | Naturally occurring; road salt; water softeners; animal waste |
| Color | No | 11/2019 | 5.0 | PT CO | NA | 15 PT CO | Large quantities of organic chemicals, inadequate treatment, high disinfectant demand and the potential for production of excess amounts of disinfectant by-products such as trihalomethanes, the presence of metals such as copper, iron and manganese; Natural color may be caused by decaying leaves, plants, and soil organic matter. |
| Odor | No | 11/2019 | 1 | T.O. N | NA | 3 T.O.N | Naturally occurring |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sulfate | No | 11/2019 | 33.8 | mg/l | NA | 250 | Naturally occurring |
| Zinc | No | 11/2019 | 0.0110 | mg/l | NA | 5 | Naturally occurring, mining waste |
| **Disinfection Byproducts** | | | | | | | |
| Haloacetic Acid\<br>1 Summit Court<br><br>Trustco Bank<br>See Footnote 3 | No<br><br>No | 08/2019<br><br>08/2019 | 4.4<br><br>8.1 | ug/l<br><br>ug/l | NA<br><br>NA | 60<br><br>60 | By-product of drinking water disinfection needed to kill harmful organisms. |
| Total Trihalomethanes<br><br>1 Summit Court<br><br>Trustco Bank<br>See Footnote 3 | No<br><br>No | 08/2019<br><br>08/2019 | 7.1<br><br>21.4 | ug/l<br><br>ug/l | NA<br><br>NA | 80<br><br>80 | By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter. |

Notes:

1 – This is the average of the 24 yearly samples. The test results show acceptable levels of sodium in the water. However, as operators we are concerned with maintaining these levels. Sodium does not have a maximum contaminant level. Sodium levels in the well water are at a level of 140 milligrams per liter. This level will be increased by a water softener, if you have one. Water containing more than 20 milligrams of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 milligrams per liter of sodium should not be used by people on moderately restricted sodium diets. It is the recommendation of the Town that you consult your physician regarding these levels if you are on sodium restricted diet.

2 – The levels reported for lead and copper represent the 90$^{th}$ percentile of the total number of 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 90$^{th}$ percentile is equal to or greater than 90% of the lead and copper values detected at your water system.

3 – Haloacetic Acid and Total Trihalomethanes are sampled at two locations.

4 -This is the average of the 24 yearly samples. The test results show, that none of the levels exceed the MCL for chlorides. As operators we are concerned with maintaining these levels as low as possible. The average chloride level in the water samples collected was 209 milligrams per liter. The presence of chloride ions in the drinking water above the maximum contaminant level of 250 milligrams per liter can result in two undesirable aesthetic effects. First, you may detect an objectionable taste of the water. Second, the higher level of chloride may cause corrosion of the pipes within the water system. Softener backwash into septic systems is contributing to the elevated levels of sodium and chlorides in the well water. All homeowners with softeners should check and adjust their softeners in order to limit the amount of brine solution discharged into septic systems and groundwater.

**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).

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

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

## WHAT DOES THIS INFORMATION MEAN?

Chloride is commonly found in the environment, most often in the form of rock salt (sodium chloride) or other salts. It can also be present in the environment as a result of human activity. For example, chloride can become elevated in drinking water from releases to the environment of road de-icing salts, inorganic fertilizers, landfill leachates, and industrial wastewater. Treatment of drinking water with chlorine or chloride can also increase the concentration of chloride in water.

Chloride is essential for good health. While exposure to high levels of certain chloride salts is associated with adverse health effects in humans, research has not conclusively demonstrated adverse effects in humans from exposure to chloride itself. For example, high dietary intake of sodium e presence of sodium. The New York standard for chloride is 250 milligrams per liter, and is based on effects of chloride on the taste, odor and appearance of the water.

As you can see by the table, our chloride yearly average is 209 mg/l which is under the regulatory of 250 and there were no individual results over 250 mg/l. However, as we were in violation in 2018 and the chloride levels decreased due to natural variations and not due to changes in treatment the

Dutchess County Department of Behavioral and Community Health has deemed that the levels could potentially exceed the MCL and considers our system still in violation of Part 5-1 of the New York Sanitary Code.

We are required to present the following information on lead in drinking water:

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|---|
| 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. **CAMO Pollution Control, Inc.** 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 2019 our water quality was in complete compliance with Health Department requirements. However, with Well #3not in operation the system fails to meet the Health Department requirements of being able to meet peak system demands with the largest well out of service.

In 2016 the Town of Fishkill enacted local law for cross-connection control. This law enabled the Town to implement a program to prevent possible contamination through distribution connections.

Currently there is no storage tank at this facility. The Health Department is requiring a storage tank be incorporated into the system, as the regulations call for it. The Town Engineer is currently designing various alternatives to provide storage.

In 2018 the Town underwent a meter change out program. This will insure accurate and fair billings done efficiently. You will be contacted as it is necessary to gain access to you home.

## 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 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 **CAMO Pollution Control, Inc. at (845) 463-7310** if you have questions.