

***Annual Drinking Water Quality Report for 2016***  
***Village of Chatham***  
***77 Main Street, Chatham, NY***  
***(Public Water Supply ID# 1000234 )***

## **INTRODUCTION**

To comply with State regulations, the Village of Chatham 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. Because of the PFOA contaminant levels found in other water sources in neighboring areas we also tested for that on our own. We are happy to report that none was found. 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 John Bartholomew, Water operator, 518-392-2525. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled village board meetings. The meetings are held on the 2<sup>nd</sup> Thursday of each month at 7:30 p.m. at the Tracy Memorial Village Hall, 77 Main St. Chatham, NY 12037.

## **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 Kline Kill well which is located on County Rte. 21, in the Town of Ghent. During the 2016, our system did not experience any restriction of our water source. The water is treated with Chlorine prior to distribution. We do not add Fluoride prior to distribution.

## **ASSESSMENT OF POTENTIAL CONTAMINATION SOURCES**

In order to assess the potential for contamination within the wellhead protection area, New York Rural Water Association and the Village of Chatham conducted a reconnaissance survey. A total of six potential point sources of contamination were detected and identified on Map 2. Location 1 is a small auto service shop, location 2 is a barn and apparent animal waste storage area, location 3 is the site of an apparent gasoline spill that was investigated at the Columbia County Department of Transportation Facility, location 4 is the Town of Ghent Highway Facility, location 5 is the site of a former leaking underground storage tank at the Town Hall, location 6 is an active gasoline station and carwash

facility. In addition to these potential point sources of contamination, other sources of contamination exist within the wellhead protection area such as on-site septic systems and agricultural fields.

#### Zone 1 and 2

Aside from crop lands at least 200 feet from the Kline Kill Well, no potential sources of contamination exist within the critical Zones 1 and 2. Although the potential for nitrate contamination exists from the spread of manure and liquid fertilizers on the fields, no such contamination has ever been found in the decades of use of the Kline Kill Well.

#### Zone 3

Contamination within Zone 3 is only likely to be significant to the Kline Kill Well if it appreciably affects the stream water quality. There are a number of potential sources for contamination within Zone 3. Most notable is the apparent storage of a large source of gas and diesel fuel at the Columbia County and Town of Ghent Highway Garages. If a spill did occur it is unlikely to reach the Kline Kill Well due to several factors, including the distance to the wellhead from the spill site, the absorptive capabilities of the aquifer to retard contaminant migration, and the vast dilution which would occur within the Kline Kill Creek itself.

A more significant threat to the quality of the well is through salt contamination. Chloride is more conservative and mobile in the hydrologic cycle than petroleum is. The potential exists for salt contamination of the well through runoff and infiltration of sand-salt piles at both highway garages. This threat has been greatly reduced since the building of their salt-sand storage barn.

Although agricultural runoff can contribute to elevated nitrate levels, there does not appear to be significant areas of crop lands adjacent to Zone 3.

#### Zone 4

Zone 4 doesn't appear to hold any significant threats to the quality of the Kline Kill or its aquifer.

Our water system serves 3250 people through 839 service connections. The total water produced in 2016 was 118,335,982 gallons. The daily average of water treated and pumped into the distribution system was 324,208 gallons per day. Our highest single day was 630,644 gallons, which was due to draining down the tower for inspection and refilling it. The amount of water delivered to customers was 72,631,382 gallons. We had a loss of 46,704,600 gallons of water. This was water lost from leaks in the reservoir and our water system, water used in the sewer plant, water used in highway work and fire prevention and in water theft. In 2016, water customers charged per 1000 gallons of water, were \$18.12.

## **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. None of the compounds we analyzed for were detected in your drinking water. 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 Columbia County Health Department at 518-828-3358.

For lead and copper we tested ten households in the village of Chatham and also the Kline Kill wells itself. Only one household was over the MCL limit for lead; none for copper. That household was informed. We also tested for PFOA's because of the many news reports of this chemical being in neighboring communities water supplies to the northeast. We are happy to report that these test came back negative. Copies of all these test reports will be at the end of this report.

1 – 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 ten samples were collected at your water system and the 90th percentile value was 0.41 mg/l. The action level for copper was not exceeded at any of the sites tested.

2– The level presented represents the 90th percentile of the ten lead samples collected was 0.0058mg/l. The action level for lead was exceeded at one of the 10 sites tested.

3– This level represents the highest locational running annual average calculated from data 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.

**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.

**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).

**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.

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

**Million Fibers per Liter (MFL)**: A measure of the presence of asbestos fibers that are longer than 10 micrometers.

## **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 New York State requirements. It should be noted that the action level for lead was exceeded at one household that was tested. 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. The Village of Chatham 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 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 firefighting 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.

## **SYSTEM IMPROVEMENTS**

In 2016 the Village of Chatham emptied and inspected the paint and relining of the the Edgewood acres water tower. Aside from some paint touchups all was satisfactory. The tower was refilled and put back into service. We also installed 1200 feet of new 8 inch ductile water main and 3 new fire hydrates on Woodbridge Ave. between Kinderhook Street and the rail road tracks. 57 new radio read water meters were also installed last year. This year (2017) we hope to start the replacement of the old reservoir with a new water tower and finish the south end of Woodbridge Ave. with new 8 inch ductile water main replacing the 6 inch cast iron pipe that's there now. Radio read meters will continue to be

Installed, replacing old and broken meters as needed. In our continuing efforts to maintain a safe and dependable water supply and to make these improvements in your system, these improvements will be reflected in the new rate structure that was sent out this year.

## **CLOSING**

Thank you for allowing us to continue to provide your family with quality drinking water this year and in the years to come. 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.

