

# Annual Drinking Water Quality Report for 2016

## Village of Camden

57 Main Street - Camden, NY 13316  
(Public Water Supply ID# NY3202385)



### INTRODUCTION

To comply with State and Federal regulations, the Village of Camden will be annually issuing this 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 Ken Scherrieble, Camden Group at 315-245-4444. We want you to be informed about your drinking water. We are committed to providing you with information because informed customers are our best allies. If you want to learn more, please attend any of our regularly scheduled Water and Sewer Board meetings. The meetings are held on the second Wednesday of each month, at 6:00PM, in the Village Hall Meeting Room – 57 Main Street.

### 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 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 sources are drawn from three spring systems and if needed, an open reservoir (surface water) located in the hills northeast of the Village. Each spring system has two to four well basins and a collector junction box. We are fortunate, in that our water comes from the Tug Hill Aquifer, a 47-mile long crescent shaped deposit of sand and gravel that flanks the western and southwestern Tug Hill Plateau. The water is piped to the water treatment plant where it is filtered and disinfected with chlorine. If demand exceeds the capacity of our springs, we are able to add reservoir water after it has been filtered and disinfected. Last year we delivered nearly 130 million gallons of potable water.

### FACTS AND FIGURES

Our water system serves a population of 2,800 through 900 metered connections. The total water produced in 2016 was 129,621,000 gallons. The average amount of water pumped daily was 352,783 gallons with a high flow of 788,000 gallons (7/1/2016). The amount of water delivered to customers was 81,516,000 gallons. This leaves an unaccounted for total of around 48,538,004 gallons. This water (approximately 34.3% of the total amount produced) was used to flush mains, fight fires, street cleaning, and leakage. A large Main break in July 2016 contributed to unaccounted for totals. Water customers were billed at the following rates. The rate schedule for Village residents is as follows: the first 15,000 gallons \$35.00; the next 50,000

gallons \$2.10 per thousand; the next 50,000 gallons \$2.20 per thousand; 116,000 gallons and over \$2.88 per thousand. For outside users the rate schedule is as follows: first 15,000 gallons \$52.50; the next 50,000 gallons \$3.15 per thousand; the next 50,000 gallons \$3.30 gallons per thousand; 116,000 gallons and over \$3.45 per thousand.

### SOURCE WATER ASSESSMENT INFORMATION

A Source Water Assessment has been completed for the CAMDEN VILLAGE Water System. Possible and actual threats to drinking water source(s) 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 source(s). 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. The Source Water Assessment Program (SWAP) is designed to compile, organize and evaluate information to make better decisions regarding protecting sources of public drinking water. A copy of the assessment, including a map of the assessment area, can be obtained by contacting us, as noted above.

The land uses around the CAMDEN VILLAGE Water System sources were rated for their potential to cause contamination to the sources. All Camden sources were considered at a low risk for all contaminants related to land use. When combined with a low risk of contamination from discrete sources and a high natural sensitivity based on soils, contaminant history, surficial geology, aquifer information and bedrock geology, this created a medium high susceptibility for the source to contamination. When used, the Emmons Brook has a medium-high susceptibility rating for protozoa and enteric bacteria and viruses as it is a surface water source. This source is used on an emergency basis only. See section "Are there contaminants in our drinking water?" for a list of the contaminants that have been detected. The source water assessments provide resource managers with additional information for protecting source waters into the future.

Based upon the SWAP Report determinations, good judgment should be used and caution

should be exercised when determining placement of certain materials, actions and facilities, including septic systems, high-risk businesses or chemical storage near the source(s). We work hard to ensure that the source of water for our system is protected from contamination.

**GROUNDWATER UNDER THE DIRECT INFLUENCE OF SURFACE WATER (GWUDI) INFORMATION**

From 2003-2005, the Oneida County Health Department conducted a study of our water system to determine if our source was under the direct influence of surface water. Based upon the data collected (e.g. temperature, conductivity, and precipitation), geology, construction methods, and soils, the OCHD has determined that the water source for the water system demonstrates characteristics of a groundwater source that is under the direct influence of surface water (GWUDI). Therefore, we were required to take action to meet the water treatment standards established by the State. In 2010, with approval from the Oneida County Health Department and the New York State Department of Health, we began use of our new filtration treatment system. Therefore, we are currently in compliance with the Federal and State treatment requirements.

**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, radioactive contaminants, disinfection byproducts, volatile organic compounds, 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, may be 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 Oneida County Health Department at 315-798-5064.

<b>Table of Detected Contaminants</b>							
<b>Contaminant</b>	<b>Is System in Violation?</b>	<b>Date of Sample</b>	<b>Level Detected Average or Maximum (Range)</b>	<b>Unit Measurement</b>	<b>MCLG / MRDLG</b>	<b>Regulatory Limit (MCL, MRDL, TT or AL)</b>	<b>Likely Source of Contamination</b>
<b>Physical Parameters</b>							
Turbidity (EP) <sup>(1)</sup>	No	2/13/16	0.1 (highest single measurement)	NTU	N/A	TT = <1.0 NTU	Soil Runoff
Turbidity (EP) <sup>(1)</sup>		All months	100% ≤ 1.0 (lowest monthly percentage of samples meeting specified limits)			TT = 95% of samples <1.0 NTU	
Turbidity (Distribution) <sup>(1)</sup>	No	Daily / monthly	0.76 <sup>(2)</sup> (range = 0.01 – 0.76)	NTU	N/A	TT = <5 NTU	Soil Runoff.
<b>Inorganic Contaminants</b>							
Copper	No	8/15	0.15 <sup>(3)</sup> (range = 0.020 – 0.16)	mg/l	1.3	AL = 1.3	Corrosion of household plumbing systems; Erosion of natural deposits.
Lead	No	8/15	6.8 <sup>(4)</sup> (range = ND – 11)	ug/l	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits.
Nitrate	No	6/16 8/16	0.7 0.56	mg/l	10	MCL = 10	Runoff from fertilizer use; Erosion of natural deposits.
<b>Disinfectants</b>							
Chlorine Residual	No	Daily / Monthly	1.03 <sup>(5)</sup> (range = 0.8 – 1.4)	mg/l	N/A	MRDL = 4 <sup>(6)</sup>	Water additive used to control microbes.

## Table of Detected Contaminants

Contaminant	Is System in Violation?	Date of Sample	Level Detected Average or Maximum (Range)	Unit Measurement	MCLG / MRDLG	Regulatory Limit (MCL, MRDL, TT or AL)	Likely Source of Contamination
<b>Microbiological Contaminants</b>							
Total Coliform	No <sup>7</sup> n/a <sup>8</sup>	Monthly	2 samples were positive for Total Coliform in June 2016 35 Samples negative <sup>7,8</sup>	n/a	0	Any Positive Sample	Naturally Present in Environment.
E. Coli	Yes <sup>9</sup>	Monthly	2 sample were positive for e.colii in June 2016 35 Samples negative <sup>8</sup>	n/a	0	Any positive sample	Human and Animal Fecal Waste.
<b>Disinfection Byproducts</b>							
Haloacetic Acids (mono-, di-, and trichloroacetic acid, and mono- and dibromoacetic acid)	No	Quarterly	7.85 (range = 2.51 – 14.4)	ug/l	N/A	MCL = 60	By-product of drinking water disinfection needed to kill harmful organisms.
Total Trihalomethanes (TTHMs – chloroform, bromodichloromethane, dibromochloromethane and bromoform)	No	Quarterly	0.8 (range = ND – 2.59)	ug/l	N/A	MCL = 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 - Turbidity is a measure of the cloudiness of the water. Turbidity is measured on a regular basis in the distribution system. All levels recorded during 2014 were within the acceptable range allowed.
- 2 - This level represents the average and range of results of monthly sampling.
- 3 - The level presented represents the 90<sup>th</sup> percentile of the ten (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 90<sup>th</sup> percentile is equal to or greater than 90% of the copper values detected at your water system. In this case, ten (10) samples were collected at your water system and the 90<sup>th</sup> percentile value was the second highest value. The action level for copper was not exceeded at any of the sites tested.
- 4 - The level presented represents the 90<sup>th</sup> percentile of the ten (10) sites tested. The action level for lead was not exceeded at any of the sites tested.
- 5 - The values presented represent the average and range of the levels reported on the monthly microbiological sampling reports.
- 6 - Value presented represents the Maximum Residual Disinfectant Level (MRDL) which is a level of disinfectant added for water treatment that may not be exceeded at the consumer's tap without an unacceptable possibility of adverse health effects. MRDLs are currently not regulated but in the future they will be enforceable in the same manner as MCLs.
- 7- Prior to April 1, 2016, an MCL violation occurs at systems collecting 40 or more samples per month when more than 5% of the total coliform samples are positive or at systems collecting less than 40 samples per month when two or more samples are total coliform positive.
- 8- After March 31, 2016, the MCL for total coliforms is replaced by a treatment technique trigger. A Level 1 assessment is triggered at systems collecting 40 or more samples per month when more than 5% of the total coliform samples are positive or at systems collecting less than 40 samples per month when two or more samples are total coliform positive. A Level 1 assessment can also be triggered if the system fails to take every required repeat sample after any single total coliform-positive sample.
- .9-An E.Coli MCL violation was issued for the month of June 2016. Please see comments below under the section **'What does this information mean?'**

<b>Definitions:</b>		
<b>ACTION LEVEL</b>	<b>AL</b>	The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.
<b>MAXIMUM CONTAMINANT LEVEL</b>	<b>MCL</b>	The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible.
<b>MAXIMUM CONTAMINANT LEVEL GOAL</b>	<b>MCLG</b>	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.
<b>MAXIMUM RESIDUAL DISINFECTANT LEVEL</b>	<b>MRDL</b>	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.
<b>MAXIMUM RESIDUAL DISINFECTANT LEVEL GOAL</b>	<b>MRDLG</b>	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.
<b>MILLIGRAMS PER LITER</b>	<b>mg/l</b>	Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).
<b>MICROGRAMS PER LITER</b>	<b>ug/l</b>	Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).
<b>NEPHELOMETRIC TURBIDITY UNIT</b>	<b>NTU</b>	A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
<b>NON-DETECTED</b>	<b>ND</b>	Laboratory analysis indicates that the constituent is not present.
<b>TREATMENT TECHNIQUE</b>	<b>TT</b>	A required process intended to reduce the level of a contaminant in drinking.

### **WHAT DOES THIS INFORMATION MEAN?**

We have learned through our testing that some contaminants have been detected; however, most of these contaminants were detected below New York State requirements.

As you can see by the table, our system had a violation<sup>9</sup> for exceeding the maximum contaminant level violation for E. Coli. One June 9, 2016, one routine water sample collected for microbiological analysis was found to contain total coliform and E. Coli. We collected 3 repeat samples on June 13, 2016, as required by the State Dept of Health, and the same sample location showed a repeated positive total coliform and E. Coli sample. The other two repeat samples collected at other locations on June 13 in the Village were negative for total coliform and E. Coli. the water system was required to perform a Level 2 assessment, which surveyed the water system components from well, storage facilities, distribution system components and the sampling location. It was determined the sample tap was likely the source of residual contamination. All other samples collected during the month of June and through the year were negative for total coliform and E. Coli. Water sample taps are commonly found to be the source of contamination as the sample taps can be externally contaminated and can also be contaminated during installation, maintenance of the aerator, leaking valve stems and the swivel type faucets

### **IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?**

Last year, our system was in general compliance with applicable State drinking water operating, monitoring and reporting requirements. We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During 2016, we did not monitor for Disinfection Byproducts during the 1<sup>st</sup> and 2<sup>nd</sup> Calendar Quarter (July – September) pursuant to our sampling plan. These samples were collected but were not collected on the established dates pursuant to an approved sampling plan by NYSDOH. Therefore, we cannot be sure of the quality of your drinking water during that time. This was an unintentional oversight.

### **WATER SYSTEM MAINTENANCE & IMPROVEMENTS**

The Village of Camden continually works to maintain and upgrade water system components and equipment to ensure continued service of high quality water to our customers. We conduct an annual leak detection program to locate and isolate leaks in the water system. We have found and repaired some significant leaks in our system using this program. We are regularly replacing out-dated water meters with newer versions. The Water Board continues to act proactively to protect our watershed. The Oneida County Health Department performs an annual inspection of the water system and has found the system is well operated and maintained.

### **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.

### **LEAD INFORMATION**

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. Our water system 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>.

### **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 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 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.
- 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.