

Annual Drinking Water Quality Report for 2016
Village of Portville
P. O. Box 436, Portville, N.Y. 14770
Public Water Supply ID# NY0400347

INTRODUCTION

To comply with State and Federal regulations, the Village of Portville, 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 **TJ Shaw at (716) 933-6199**. If you want to learn more, please attend any of our regularly scheduled village board meetings. The meetings are held the third Tuesday of each month at 6:00 PM in the Village Hall.

WHERE DOES OUR WATER COME FROM?

In general, the sources of drinking water (both tap and bottled) 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 humans activities. Contaminants that may be present in the water source 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 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 consist of two wells, one on Lillibridge Road and the other behind Portville Central School. The Lillibridge well is 320 feet deep in a bedrock aquifer and can produce 250 gallons per minute. The South well (school well) is 200 feet in a bedrock aquifer and can produce 105 gallons per minute. Our water is treated with ortho/polyphosphate, fluoride and disinfected with chlorine before it is distributed to customers. Also, in 2014 we started the process of getting the dormant Wellington Drive well running and approved for use. This well is 65 feet deep and can produce 250 gallons per minute. We intend to start using this well in 2017, once all treatment equipment is carefully adjusted, and new test results show optimal water quality. Our water system serves 1,040 people through 420 service connections. The ortho/polyphosphate treatment was added in 2011 to mitigate and inhibit the corrosion of the older cast iron mains within the Village distribution system, which was a source of increasing customer complaints.

In 2003, the NYS DOH completed a source water assessment for our water system, based on available information. Possible and actual threats to the drinking water sources were evaluated. The 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 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 IN MY 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.

As was mentioned before, our water is derived from wells. The source water assessment has rated the combined susceptibility to contamination for these wells as low from, enteric bacteria, halogenated solvents, herbicides/pesticides, metals, nitrates, other industrial organics, petroleum products, and protozoa. These ratings for the wells are due to their relative isolation from potential sources of contamination. While the assessment rates our sources as susceptible to enteric bacteria, 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.

A copy of this assessment, including a map of the assessment area, can be obtained by contacting us, as noted above.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: inorganic compounds, nitrate, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, radiological and synthetic organic compounds. In addition, we test for coliform bacteria semi-monthly, and chlorine and fluoride daily. The table presented depicts the contaminants that 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, is more than one year old.

It should be noted that all drinking water, including bottled water, might 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 Cattaraugus County Health Department at (716) 701-3386.

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Disinfectant							
Chlorine Residual	No	2016	Avg. = .26 (.18 – .49)	mg/l	N/A	MRDL = 4	Water additive used to control microbes.
Inorganic Contaminants							
Barium	No	1/21/15	High = 70 (55 – 70)	ug/l	2,000	MCL = 2,000	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Copper ¹	No	8/11/2016	131 (30 - 170)	ug/l	1,300	AL = 1,300	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Fluoride – treated	No	Daily	High = 1.0 (0.2 – 1.0)	mg/l	N/A	MCL = 2.2	Naturally occurring; water additive that promotes strong teeth.
Lead ²	No	8/11/16	< 1.0 (< 1.0 – 1.3)	ug/l	0	AL = 15	Corrosion of household plumbing; erosion of natural deposits.
Disinfection By-Products							
Haloacetic Acids	No	8/11/16	0.96	ug/l	N/A	MCL = 60	By-product of drinking water disinfection needed to kill harmful organisms.
Total Trihalomethanes	No	8/11/16	4.2	ug/l	N/A	MCL = 80	By-product of drinking water disinfection needed to kill harmful organisms. TTHMS are formed when source water contains large amounts of organic matter.

Notes:
 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 the second highest value, 131 ug/l. The action level for copper was not exceeded at any of the sites tested.
 2 – The 90th percentile level for lead was < 1.0 ug/l. None of the samples exceeded the action level of 15 ug/l.

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).

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 at values well below the level allowed by the State. Regardless, we are required to provide 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 Portville 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>.

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).

INFORMATION ON FLUORIDE ADDITION:

Our system is one of the many drinking water systems in New York State that provides drinking water with a controlled, low level of fluoride for consumer dental health protection. According to the United States Centers for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at a properly controlled level. To ensure that the fluoride supplement in your water provides optimal dental protection, we monitor fluoride levels on a daily basis. None of the monitoring results showed fluoride levels near the 2.2 mg/l MCL for fluoride.

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.
- ◆ 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.

Conservation tips include:

- ◆ 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 as much as 30,000 gallons a year.
- ◆ Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances, then check your meter, if it moved, you have a leak.

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 all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future. Please call our office if you have any questions.