

Annual Drinking Water Quality Report for 2019

Village of Horseheads

Public Water Supply ID# NY0701009

To comply with State and Federal regulations, the Village of Horseheads 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 applicable State drinking water standards. In 2018, we conducted tests for over 100 possible contaminants. 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 New York State standards. If you have any questions about this report or concerning your drinking water, please contact Don Gaylord at 739-5691. 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 the second and fourth Thursdays of each month at 7:00 P.M. at Horseheads Village Hall, 202 South Main Street. You may also call the Chemung County Health Department at 737-2019.

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 maximum amount of certain contaminants in water provided by public water systems. The State Health Department 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 ground water drawn from two fifty-foot-deep wells on Mill Street. We also operate a 70 foot-deep well and filter plant at Well 5 on Old Ithaca Road and maintain a nearby backup well. Our water is treated prior to distribution with chlorine for disinfection and fluoride to promote healthy teeth. In addition, we filter all water at Well 5 because nearby Newtown Creek can infiltrate the aquifer during extreme high water events.

Facts and Figures:

Our water system serves 15,000 people through 3656 service connections. The total water produced in 2019 was 481 million gallons. The amount of water delivered to customers was 302 million gallons. This leaves an un-accounted for total of 179 million gallons. This water is used to flush mains, test hydrants, fight fires, municipal use, and loss to leakage. The daily average of water pumped into our system is 1.3 million gallons. Our highest single day was 1.6 million gallons. In 2019, water customers were charged an average annual fee of \$288.00 in the Village of Horseheads and \$424.00 outside the Village for 60,000 gallons of water.

Are there contaminants in our drinking water? State regulations require we routinely test your drinking water for numerous contaminants. These contaminants include: total coliform, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds (gasoline and industrial solvents), total trihalomethanes, and synthetic organic compounds.

The Village of Horseheads conducts testing throughout the year. This includes 180 samples (fifteen per month) in various locations throughout our system for coliform bacteria, chlorine and turbidity. We check chlorine residual and fluoride at each operating well every day. We test for a variety of possible contaminants at the wellheads, and in the distribution system. It should be noted that all drinking water,

including bottled drinking 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 Chemung County Health Department at 737-2019.

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. The state requires that any detected contaminants be reported for a period of five years.

Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit	MCLG	Regulatory Limit (MCL, AL, MRDL, TT)	Likely Source of Contamination
Barium	No	11/2019	0.16	mg/L	2	2 MCL	naturally occurs
Chloride	No	4 samples 2019	Average 61 Range 42-103	mg/L	N/A	250 MCL	naturally occurs; use of road salt
Chlorine Residual at consumer taps	No	15 samples each month	Average 0.8 Range 0.3-1.3	mg/L	4.0 MRDLG	4.0 MRDL	disinfectant added to control microbial contaminants
Copper at consumer taps	No	7/2018 30 samples	90 th % = 0.1 Range .01-0.2	mg/L	1.3	1.3 AL <i>Note 1</i>	corrosion of household plumbing
Fluoride	No	Year round daily samples	Average 0.7 Range 0.1- 1.4	mg/L	N/A	2.2 MCL	Added by a provider to prevent tooth decay
Lead at consumer taps	No	7/2018 30 samples	90 th % = 3.8 Range ND – 7	ug/L	0	15 AL <i>Note 1</i>	corrosion of household plumbing
Nickel	No	11/19	1	ug/l	NA	NA	Corrosion of plumbing or naturally occurs
Nitrate	No	4 samples 2019	Average 0.4 Range 0.35-0.57	mg/L	10	10 MCL	runoff from fertilizer; leaching from septic tanks, sewers
Sodium	No	11/2019	23	mg/L	N/A	N/A <i>Note 2</i>	Naturally occurs; Use of road salt
Total coliform 15 samples each month	No	9/2019 1 sample <i>Note 3</i>	Present	Present or Absent	N/A	No MCL; if presence confirmed, system must be checked for problems	Naturally occurs in the environment
Total Haloacetic Acids (HAAs) 2 sample sites	No	Quarterly 8 samples total	highest annual average 5.5 Range 1-10	ug/L	N/A	60 MCL <i>Note 4</i>	By-product of drinking water chlorination
Total Trihalomethanes (THMs) 2 sample sites	No	Quarterly 8 samples total	highest annual average 12 Range 4-15	ug/L	N/A	80 MCL <i>Note 4</i>	By-product of drinking water chlorination
Well 5 Turbidity Measured every 4 hours at treatment plant	No	9/16/19 8/2/19	0.18 Max for year	NTU	N/A	TT Always less than 1.0 NTU <i>Note 5</i>	Soil runoff

Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit	MCLG	Regulatory Limit (MCL , AL, MRDL, TT)	Likely Source of Contamination
Well 5 Turbidity Measured every 4 hours at treatment plant	No	Highest monthly average	100% Less than 0.3	NTU	N/A	TT 95% of Samples less than 0.3 NTU <i>Note 4</i>	Soil Runoff
Turbidity at consumer taps 15 samples monthly	No	180 samples in 2019	Average 0.24 Range .05-2.9	NTU	N/A	5 MCL <i>Note 4</i>	Soil Runoff

Note 1 – The level presented represents the 90th percentile results of the 30 sites tested. It means 27 of the 30 samples were less than or equal to the level given. No samples exceeded the Action Levels for lead or copper.

Note 2 – An MCL for Sodium is not established. Water containing more than 20 mg/l of sodium should not be used for drinking by people 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.

Note 3 – One of 15 routine samples in September was reported to contain total coliform. As required, we collected three repeat samples and untreated well water samples. Because all repeat samples were negative, we did not exceed the coliform treatment standard.

Note 4 – The MCL is based on the running annual average at each sample site.

Note 5 – Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. We monitor turbidity in the distribution system because high turbidity can hinder effective disinfection.

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 level of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

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

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).

Not Detected (ND): Laboratory analysis indicates that the constituent is not present.

Not Applicable (N/A)

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

What does this information mean?

We have also learned through our testing that some contaminants have been detected; however, these contaminants were detected below the level allowed by the State. Additional information can be obtained by calling the safe drinking water hotline at (1-800-426-4791).

Compliance with other sanitary code requirements.

The Village was recently cited because chlorine dosage at our Well 5 filtration plant briefly fell below the minimum allowed by New York State. While not an emergency, we are required to report the incident and all possible health consequences.

What happened? For about 20 hours 12/16/2019, and for 12 hours on 1/1/2020, our chlorine levels were lower than normal so did not meet the State standard. Enough chlorine was added to destroy bacteria and viruses, but not enough to guarantee control of resistant parasites such as Giardia, should any be present in the well water. Please note that we have never detected Giardia or any other parasite in our untreated well water.

What was done? A cracked pipe on our chlorinator reduced the amount of chlorine fed to the treatment system. The pipe was replaced as soon as it was discovered. We also programmed our computer system to shut down the well if the chlorinator fails in the future. The Health Department approved the corrective action and has closed the violation.

What should I do? You do not need to boil your water or take other corrective actions. However, if you have specific health concerns, consult your doctor.

People with severely compromised immune systems, infants, and some elderly may be at increased risk. These people should seek advice about drinking water from their health care providers. General guidelines on ways to lessen the risk of infection by microbes are available from EPA's Safe Drinking Water Hotline at 1 (800) 426-4791.

What does this mean? This situation did not require that you take immediate action. Routine testing during this same time period showed our water to be free of bacteria. We are required to remind you that

Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

These symptoms, however, are not caused only by organisms in drinking water, but also by other factors. If you experience any of these symptoms and they persist, you may want to seek medical advice.

For more information, please contact the Horseheads Water Department at (607) 739-5691. You may also contact the Chemung County Health Department at (607) 737-2019.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

Do I need to take special precautions?

Although our drinking water generally 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).

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. The Village of Horseheads water department 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>. In addition, the Chemung County Health Department can assist you with lead testing.

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 daily to make sure that fluoride is maintained at a target level of 0.7 mg/l (parts per million). None of the monitoring results showed fluoride at levels that approach the 2.2 mg/l NYS limit for fluoride.

Source Water Assessment

The NYS DOH completed a source water assessment in 2004 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 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.

The source water assessment has rated our wells as having a high to very high susceptibility to microbials, nitrates, industrial solvents, and other industrial contaminants. These ratings are due primarily to the proximity of industrial/commercial facilities that discharge wastewater into the environment and are regulated by the state and/or federal government. There are also low intensity residential activities in the assessment area. While the source water assessment rates 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. A copy of the full assessment can be obtained by contacting us, as noted above.

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 many reasons why it is important to conserve water:

- ☛ Saving water saves energy and some of the costs associated with 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.
- ☛ Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it up and you can save almost 6000 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.
- ☛ 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.

In Closing: Thank you for allowing us to continue to provide your family with quality drinking water this year. We ask that all our customers help us protect our water sources, which are the heart of our community and our way

of life. Please call our office if you have questions (739-5691). Copies of our test reports may be viewed at the Horseheads Village Hall.