Annual Drinking Water Quality Report for 2016

Warrensburg Water District
Warrensburg, New York
Public Water Supply ID #NY5600112

INTRODUCTION

To comply with State and Federal regulations, Warrensburg Water District, 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. 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 Dexter Duell, Senior Water Operator, (518-623-4561). 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.

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 materials, 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 Departments 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 3 groundwater wells. The water from each well is disinfected with sodium hypochlorite prior to distribution. As a result of elevated lead, copper and iron levels phosphate is added for sequestration and corrosion control at a Horicon Well. There is also a 500,000-gallon storage tank, which serves as backup when there is a high demand on the water system. Additionally, we have a well located on Library Avenue, which was not used in 2016, but is available to be used should an emergency arise.

FACTS AND FIGURES

Our water system serves 3600 people through 1300 service connections. The total water produced in 2016 was 49,232,000 gallons, plus or minus a half million gallons lost on breaks or leaks. One million gallons was used for flushing and cleaning the storage tank. Residential and businesses are metered. The fee schedule is on file in the Town Clerk's Office.

SOURCE WATER ASSESSMENT

The NYS DOH 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 contaminated. See section "Are there contaminants in our drinking 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 source as having an elevated susceptibility to microbials, nitrates, and industrial solvents and other industrial contaminants. These ratings are due primarily to close proximity of the wells to permitted discharge facilities (industrial/commercial facilities that discharge wastewater into the environment and are regulated by the state and/or federal government) and the residential land use and associated activities in the assessment area. In addition, the wells draw from an unconfined aquifer, which is a shallow aquifer that occurs immediately below the ground surface and has no overlying protective layer for protection from potential sources of contamination. 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.

The state health department will use this information to direct future source water protection activities. These may include water quality monitoring, resource management, planning and education programs.

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, synthetic organic compounds, lead and copper, radiologicals, disinfection byproducts, and volatile 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 New York State Department of Health at (518) 793-3893.

Table of Detected Contaminants – Horicon Avenue Wells

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg./Max) (Range)	Unit of Measure	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Inorganic Contaminants							
Barium	No	9/15/16	County Home Well 16.2	µg/L	2000	MCL = 2000	Erosion of natural deposits
Chloride	No	8/9/13	Horicon Well 34.4	mg/L	N/A	MCL = 250	Naturally occurring or indicative of road salt contamination.
Chromium	No	9/15/16	County Home Wells 0.003	mg/L	N/A	MCL = 0.1	Discharge from steel and pulp mills; Erosion of natural deposits.
Fluoride	No	9/15/16	County Home Wells 0.087	mg/L	N/A	MCL = 2.2	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories.
Manganese	No	10/19/16	Town Hall 0.9	ug/L	N/A	MCL = 300	Naturally occurring or indicative of landfill contamination.
Sodium	No	8/9/12	7.21	mg/L	N/A	N/A[1]	Naturally occurring or indicative of road salt contamination.
Sulfate	No	8/9/12	16.9	mg/L	N/A	MCL = 250	Naturally occurring.
Nitrate	No	2016	Horicon Well 0.634 County Home Well 1.28 (ave)	mg/L	10	MCL = 10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Radiological Contaminants							
Radium 226	No	8/9/13	Horicon Well 0.07	pCi/L	0	MCL = 5	Erosion of natural deposits.

Table of Detected Contaminants – Distribution System

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg./Max) (Range)	Unit of Measure	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Inorganic Contaminants							
Copper	No	2014	0.523[2] 0.055 – 1.01[3]	mg/L	1.3	AL = 1.3	Corrosion of household plumbing systems
Lead	No	2014	6[2] ND - 10[3]	µg/L	0	AL = 15	Corrosion of household plumbing systems
Stage-1 Disinfection Byproducts							
Trihalomethanes (TTHMs)	No	7/07/16	Industrial Park 11.8	µg/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.
Haloacetic Acids (HAA5)	No	7/07/16	Industrial Park 6.7	µg/L	n/a	MCL = 60	By-product of drinking water disinfection needed to kill harmful organisms.

Notes:

1 – The Health effects language for sodium is as follows: "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."

2 – During 2014, we collected 20 lead and copper samples between June 9 and June 26. The level presented represents the 90th percentile of the 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 or lead values detected at your water system and represents the third highest result.
3 – The levels presented represent the range of detected contaminants. Neither copper nor lead were detected above the Action Level at any site.

DEFINITIONS:
Action Level (AL): The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.
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.
Micrograms per liter (µg/L): Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).
Milligrams per liter (mg/L): Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).
Millirems per year (mrem/yr): A measure of radiation absorbed by the body.
Nephelometric Turbidity Unit (NTU): A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
Non-Detects (ND): Laboratory analysis indicates that the constituent is not present.
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?
As you can see by the table, our system had no MCL violations in 2016. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below the level allowed by the State.

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.

INFORMATION ABOUT COPPER IN DRINKING WATER
Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their personal doctor.

INFORMATION ABOUT LEAD IN DRINKING WATER
If present, elevated levels of lead can cause serious health problems, especially for pregnant women 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. Warrensburg WD 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?
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 up 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.
- Water your lawn only when it needs it and avoid running the sprinkler all night long. You can save 750-1,500 gallons per month.
- Install water-saving showerheads or flow restrictors. This can save 700 gallons per month.
- Shorten your showers. Even a one or two-minute reduction can save up to 700 gallons per month.
- Capture tap water, while waiting for hot water to come down the pipes, in a watering can to use later on house plants or your garden. Saves 200 to 300 gallons per month.

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.

This report was prepared for the Town of Warrensburg by:

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