2021 Annual Drinking Water Quality Report Village of Aurora

456 Main Street, Aurora, NY 13026

(Public Water Supply ID#0501714)

INTRODUCTION

To comply with State regulations, the Village of Aurora, 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 Adam Van Horn, at (315) 364-5239 or email the Village office at villageclerk@auroranewyork.us. 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 third Wednesday of each month at 7:00 PM in the meeting room of the Aurora Firehouse located at 456 Main Street, Aurora, NY 13026.

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 contaminant s; 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 system serves a population of 425 through 220 metered connections. The water for the Village of Aurora is purchased from Wells College. Wells College draws its water from Cayuga Lake, the water is then filtered through Diatomaceous Earth filters and disinfected by injection of sodium hypochlorite solution before entering the distribution system. Any water not consumed by our customers is then stored in two storage tanks. A 300,000 gallon glass-lined tank located on Sherwood Rd. east of the village and a 150,000 gallon welded steel elevated tank located on the campus of Wells College. The portion of Cayuga Lake where the intake for the Filtration Plant is located is listed as a Class AA Special Water body by the NYSDEC and is considered to be an excellent source of drinking water.

NEW YORK STATE DEPARTMENT OF HEALTH SOURCE WATER ASSESSMENT

The NYS Department of Health has completed a source water assessment for Wells College, based on available information. Possible and actual threats to this drinking water source were evaluated. This 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 lakes. 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 the section of this document "Are there contaminants in our drinking water?" for a list of the contaminants that have been detected in the drinking water.) The source water assessments are intended to provide managers with additional information for protecting source waters into the future.

As mentioned before, our water is derived primarily from Cayuga Lake. The source water assessment has rated this source as having an elevated susceptibility to protozoa and phosphorus due to the elevated density of CAFOs (Concentrated Animal Feeding Operations) and the moderate density of sanitary wastewater discharges in the assessment area. The amount of agricultural lands used for crops increases the susceptibility potential for pesticides. An additional source of potential contamination for sediments and turbidity include a stream that discharges into the Lake near the intake.

County and state health departments will use this information to direct future source water protection activities. These may include water quality monitoring, resource management, planning, and education programs. A copy of the complete assessment is available for review by calling the Cayuga County Health Department at 253-1405.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, the drinking water is routinely tested for numerous contaminants. These contaminants include: total coliform, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, 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.

Results from the 2021 Wells College water sampling is reported at the end of this report.

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 Cayuga County Health Department at (315) 253-1405.

Table of Detected Contaminants

Contaminants	Violation Yes/No	Date of Sample	Level Detected (Ave/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Lead[1]	NO	8/27/21	<0.1-42 13.4	ug/L	0	15	Contained in Finished Water, an artifact of old piping and lead soldered joints.
Copper[2]	NO	8/27/21	0.124 – 1.73 0.666	mg/l	0	1.3	Corrosion of household plumbing, erosion of natural deposits

Notes

1 –The level presented represents the 90th percentile of the 10 samples collected.

2 – 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, 10 samples were collected at your water system and the 90th percentile value was the 0.666 mg/l value. T.

The following items were sampled for in the Aurora water system, but not detected: total coliforms.

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. MRDSLGs do not reflect the benefits of the use of disinfectants to control microbial contaminations.

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).

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 Union Springs 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.gove/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 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.

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 at (315) 364-5239.

2021 Wells College Sampling Results

Table of Detected Contaminants

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Microbiological Contaminants							
Turbidity/FINISH	No	7/12/21	0.98/MAX	NTU	N/A	1.0	Soil Run-off
Inorganic Contaminants							
Nitrate	no	12/6/21	1.17	mg/l	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sulfate	no	1/07/21	28.8	mg/l	N/A	250	Naturally occurring
Barium	no	10/05/21	26.5	ug/l	2000	2000	Discharge from metal refineries and drilling wastes and erosion of natural deposits
Organic Contaminants							
1,4 Dioxane	no	8/4/21 11/30/21	0.02 0.0366	ug/l	N/A	N/A	Released into the environment from commercial and industrial sources and is associated with inactive and hazardous waste sites
PFOA	no	5/25/21		ng/l		2	
PFOS	no	5/25/21	ND	ng/L		2	
Chloroform	No						

Disinfection Byproducts							
Total Trihalomethanes	Yes[2, 3,	Quarterly	Range: 52.2-138.7 Highest Average: 92	ug/L	N/A	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	No	Quarterly	Range: <9-25.8 Highest Average: 17	ug/L	N/A	60	By product of drinking water chlorination needed to kill harmful organisms.

Notes:

1 – Turbidity is a measure of the cloudiness of the water. We test it because it is a good indicator of the effectiveness of our filtration system. Our highest single turbidity measurement for the year occurred on 7/12/21 0.98. State regulations require that turbidity must always be below 5 NTU. The regulations require that 95% of the turbidity samples collected have measurements below 1.0 NTU.

2 – This level represents the highest locational running annual average (LRAA) calculated during the calendar year 2021, and the range of detected values at 2 sample sites. The system was out of compliance of the 80 ug/l limit at 1 sample site for the 4th quarter of 2021 with an LRAA during that quarter of 92 ug/l.

3 – Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their kidneys, liver, or central nervous system, and may have an increased risk of getting cancer.

Wells College was required to sample for the following contaminants in 2021, which were not detected in the water:

Aldicarb Sulfoxide, Aldicarb Sulfone, Oxamyl (Vydate), Methomyl (Lannate), 3-Hydroxy Carbofuran, Aldicarb (Temik), Propoxur (Baygon), Carbofuran, Carbaryl (Sevin), Methiocarb, Pentachlorophenol, 2,4,5-TP (Silvex), 2,4,5-T, 2,4-DB, Dinoseb, Picloram, Acifluorfen, Simazine, Atrazine, Metribuzin, Alachlor (Lasso), Metolachlor (Dual), Butachlor, Hexachlorocyclopentadiene (C-56), Hexachlorobenzene, HCH, Alpha, HCH, Gamma (Lindane), HCH, Beta, HCH, Delta, Heptachlor, Aldrin, Heptachlor epoxide, Endosulfan I, 4,4'-DDE, Dieldrin, Endrin, 4,4'-DDD, Endosulfan II, 4,4'-DDT, Endrin aldehyde, Endosulfan sulfate, Methoxychlor, Mirex, Toxaphene, Chlordane, technical, Aroclor 1016, Aroclor 1221, Aroclor 1232, Aroclor 1242, Aroclor 1248, Aroclor 1254, Aroclor 1260, 1,2-Dibromoethane (EDB), 1,2,3-Trichloropropane, Dibromo-3-chloropropane, Dichlorodifluoromethane, Chloromethane, Vinyl Chloride, Bromomethane, Chloroethane, Trichlorofluoromethane, 1,1-Dichloroethene, Methylene Chloride, trans-1,2-Dichloroethene, Methyl-t-Butyl-Ether, 1,1-Dichloroethane, Methyl Ethyl Ketone, cis-1,2-Dichloroethene, Bromochloromethane, 2,2-Dichloropropane, 1,2-Dichloroethane, 1,1,1-Trichloroethane, 1,1-Dichloropropene, Carbon Tetrachloride, Benzene, Dibromomethane, 1,2-Dichloropropane, Trichloroethene, cis-1,3-Dichloropropene, Methyl Isobutyl Ketone, trans-1,3-Dichloropropene, 1,1,2-Trichloroethane, Toluene, 1,3-Dichloropropane, Tetrachloroethene, 1,1,1,2-Tetrachloroethane, Chlorobenzene, Ethylbenzene, m/p-Xylene, Styrene, 1,1,2,2-Tetrachloroethane, o-Xylene, 1,2,3-Trichloropropane, Isopropylbenzene, Bromobenzene, n-Propylbenzene, 2-Chlorotoluene, 4-Chlorotoluene, 1,3,5-Trimethylbenzene, tert-Butylbenzene, 1,2,4-Trimethylbenzene, sec-Butylbenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, p-Cymene, 1,2-Dichlorobenzene, n-Butylbenzene, 1,2,4-Trichlorobenzene, Naphthalene, Hexachlorobutadiene (C-46), 1,2,3-Trichlorobenzene, Fluoride (Free), Beryllium, Chromium, Nickel, Arsenic, Selenium, Cadmium, Antimony, Thallium, Lead, Mercury, Cyanide, Perfluorooctane acid, Perfluorooctane Sulfonate, microcystin.