Drinking Water Quality Report Annual for 2023
Village of Chester
47 Main St
Chester N.Y. 10918
Public Water Supply ID #3503524

Introduction

To comply with State and Federal regulations, The Village of Chester **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.

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 contaminants; and radioactive contaminants.

If you have any questions about this report or concerning your drinking water, please contact Gary Green at (845) 469-2388, between the hours of 9 am and 2 pm Monday through Friday. We want you to be informed about your drinking water. If you want to learn more, please call our office and we **will** discuss your questions personally. The Village of Chester Board meets the second Monday of each month except October and November, which Is the first Monday.

Where your water comes from

1. Our main source of water is a surface water source. The water that enters the filter plant is treated with Soda Ash after filtration for corrosion control by raising the P.H. of the water; chlorine is added to our water as a disinfectant.
2. Our secondary source is a ground water source. The well water is treated with ESC-532 to treat iron & manganese in the water. We also treat the well water with Chlorine as a disinfectant.

Facts & Figures

1. In 2023 we produced 170,049,000 gallons of water for a daily average of 465,887,200 GPD.
2. Our water Audit for 2023 showed unaccounted for water amount of only 9.0%
3. The Village of Chester water distribution system has 29 miles of piping and 966 meters.
4. The Village of Chester provides water source for 4,077.

The water fees for 2023 are:	Next	Oto 999,000	Gallons per billing period@	$ 6.50	Per 1,000 gallons
For out of Corp. users:	Excess over	1,000, 000	Gallons per billing period@	$ 7.50	Per 1,000 gallons
	Next	0 to 999,000	Gallons per billing period@	$ 9.00	Per 1,000 gallons
	Excess over	1,000,000	Gallons per billing period@	$ 10.00	Per 1,000 gallons

CHESTER VILLAGE
NY3503524
Source Water Assessment Summary

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, it 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 'Table of Detected Contaminants" 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 mentioned before, our water is derived from two drilled wells. The source water assessment has rated these wells as having a medium-to-medium high susceptibility to microbials, nitrates, industrial solvents, and other industrial contaminants. These ratings are due primarily to the proximity of SPDES and NPDES permitted discharge facilities (industrial/commercial facilities that discharge wastewater into the environment and are regulated by the state and/or federal government) that are in the assessment area. In addition, the well draws from a confined aquifer with the estimated recharge area within the selected time of travel and the overlying soils may not provide adequate protection from potential contamination. While the source water assessment rates our well 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.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2023 our system followed applicable state drinking water operation, monitoring and report requirements.

NYS DOH Evaluation

The NYS DOH has evaluated this PWS's susceptibility to contamination under the Source Water Assessment Program (SWAP), and their findings are summarized in the paragraph below. It is important to stress that these assessments were created using available information and only estimate the potential for source water contamination. Elevated susceptibility ratings do not mean that source water contamination has or **will** occur for this PWS. This PWS provides treatment and regular monitoring to ensure the water delivered to consumers meets all applicable standards.
This assessment found no noteworthy risks to source water quality.

A copy of this Assessment including a map of the assessment area can be obtained by contacting us as noted on this report.

INFORMATION ON CRYPTOSPORIDIUM

Cryptosporidium is a microbial pathogen found in surface water and groundwater under the influence of surface water. Although filtration removes Cryptosporidium, the most used filtration methods cannot guarantee 100 percent removal. Ingestion of Cryptosporidium may cause cryptosporidiosis, a gastrointestinal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome disease within a few weeks. However, immuno-compromised people are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their health care provider regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

INFORMATION ON GIARDIA

Giardia is a microbial pathogen present in varying concentrations in many surface waters and groundwater under the influence of surface water. Giardia is removed/inactivated through a combination of filtration and disinfecting or by disinfecting. Ingestion of Giardia may cause giardiasis, and intestinal illness. People exposed to Giardia may experience mild or severe diarrhea, or in some instances no symptoms at all. Fever is rarely present.
Occasionally, some individuals **will** have chronic diarrhea over several weeks or a month, with significant weight loss. Giardiasis can be treated with anti-parasitic medication. Individuals who think that they may have been exposed to Giardiasis should contact their health care providers immediately. The Giardia parasite is

passed in the feces of an infected person or animal and may contaminate water or food. Person to person transmission may also occur in day care centers or other settings where hand-washing practices are poor.

INFORMATION ON RADON

Radon is a naturally occurring radioactive gas found in soil and outdoor air, that may be found in drinking water and indoor air. Some people exposed to elevated radon levels over many years in drinking water may have an increased risk of getting cancer. The main risk is lung cancer from radon entering indoor air from soil under homes.

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 systems disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice from their health 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 several reasons why it is important to conserve water:

Saving water saves energy and some of the costs associated with both 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; 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.

Use your water meter to detect hidden leaks. Simply turn of all taps and water using appliances, then check the meter after 15 minutes, if it moved, you have a leak.

Are there Contaminants in our Drinking Water?

As the state regulation requires, we routinely test your drinking water for contaminants. These contaminants include. Total coliform, turbidity, and inorganic compounds, total trihalomethanes, radiological, zinc, color, chlorine, PH and temperature. The table presented in this report 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, 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 obtain by calling the EPA's Safe Drinking Water Hotline (800) 426-4791 or the Orange County Health Department at (845) 291-2331

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 (MLCG) 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.

Action Level (AL) - The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.

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 disinfectant below to control microbial contamination.

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 more than 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)

A microgram per liter (ug/L) - corresponds to one part of liquid in one billion parts of liquid (parts per billion-ppb)

Non-Detects (ND) - Laboratory analysis indicates that the constituent is not present.

Nanograms per liter(ng/L) - corresponds to the part of liquid to one trillion parts of liquid (part per trillion - ppt).

Table of Detected Contaminants

Contaminant Walton Lake	Violation Y/ N	Date of Sample	Level Detected (Avg./Max range)	Unit Measurement	MCLG	Regulatory Limit (MCL TT OR AL)	Likely source of Contamination
Distribution							
Haloacedic Acids (HAA5's) **LRAA1** **MEADOW HILLS APTS.** **LRAA2**	**NO**	**Quarterly 2023**	**(15-65.3) *Avg.* 29.47** **(30.2-68.5) *Avg.* 47.07**	**Ug/l**	**N/A**	**MCL60**	**Byproduct of drinking water disinfection to kill harmful organisms.**
(Disinfection by products) Total Trihalomethanes **LRAA1** **MEADOW HILL APTS** **LRAA2**	**NO**	**Quarterly 2023**	**(25.6-115) *Avg.* 55.32** **(50.5-76.4) *Avg.* 61.2**	**Ug/l**	**N/A**	**MCL80**	**Byproduct of drinking water chlorination needed to kill harmful organism. THMs are formed when source water contains large amounts of organic matter**
(Inorganic Copper)	**NO**	**9/6/2023**	**90th percentile .722 (Note 2)**	**Mg/L**	**1.3 mg/l**	**AL=1.3**	**Corrosion of galvanized pipes, erosion of natural deposits**
Lead	**NO**	**9/6/2023**	**90th percentile 12 (Note 3)**	**Ug/L**	**0**	**Al=15**	**Corrosion of household plumbing systems, erosion of natural deposits**
Filtration Plant							
Turbidity	**NO**	**For the year of 2023**	**99% of samples below 0.3**	**NTU**	**N/A**	**TT=95%<0.3**	**Soil erosion**
Turbidity	**NO**	**3/15/2023**	**(Note 1) High .21**	**NTU**	**N/A**	**TT=1**	**Soil erosion**
Barium	**NO**	**7/3/2023**	**.0087 Mg/L**	**Mg/L**	**2**	**2**	**Erosion of natural deposits**
Sodium	**NO**	**7/3/2023**	**73.6 Mg/L**	**Mg/L**	**N/A**	**See note 4**	**Naturally Occurring**
Nickel	**NO**	**7/3/2023**	**.0008 Mg/L**	**Mg/L**	**100**	**MCL=10Mg/L**	**Erosion of Natural Deposits**
Perfluorooctanoic acid (PFOA)	**NO**	**6/27/2023**	**<1.47Ng/L**	**Ng/L**	**N/A**	**MCL=10Mg/L**	**Widespread use in commercial and industrial applications**
Perfluorooctanoic sulfonic acid (PFOS)	**NO**	**6/27/2023**	**<1.47Ng/L**	**Ng/L**	**N/A**	**MCL=10Mg/L**	**Widespread use in commercial and industrial applications**
WELL, #12							
Manganese	**NO**	**Throughout 2023**	***Avg.* 85.75 Ug/L Rnq. 20-119 Ug/L**	**Ug/L**	**N/A**	**MCL= 300Ug/L**	**Runoff from Fertilizer use; Leaning from septic tanks, sewage; Erosion of natural deposits**
Nitrate	**NO**	**7/3/2023**	**.157 Mg/L**	**Mg/L**	**10**	**MCL=10Mg/L**	**Naturally Occurring**

Iron	**NO**	**Throughout 2023**	**Average < .050/Mg/L No range applies**	**Mg/L**	**.3 Mg/L**	**.3 Mg/L**	**Naturally Occurring**
Barium	**NO**	**7/3/2023**	**0.345 Mg/L**	**Mg/L**	**2**	**2 MC/L**	**Erosion of Natural Deposits**
Nickel	**NO**	**7/3/2023**	**.0008 Mg/L**	**Mg/L**	**100**	**100 MC/L**	**Erosion of Natural Deposits**

Notes:

1. Turbidity is a measure of the cloudiness of the water. We tested it because it is a good indicator of the effectiveness of our filtration system. Our highest single turbidity measurement for the year occurred on 3/15/2023 (.21 NTU). State regulations require that turbidity must always be below 1 NTU. The regulations also require that 95% of the turbidity samples collected have measurements below 0.3 NTU
2. The level presented represents the 90th percentile of the 24 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, 20 samples were collected at your water system and the 90th percentile value was the second highest value, the low was .205 Mg/L and the high was .967 Mg/L. No copper detected in any samples.
3. The level presented represents the 90th percentile of the 24 samples collected. The low was 1.0 Ug/l the high was 17 Ug/L. Only two samples taken exceeded the action level for Lead.
4. 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.
5. 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 because of materials used in your home's plumbing. The village of Chester 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 and 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.
6. Please note that in addition to PFOS and PFOA, the lab ran the analysis for the entire EPA method 537.1, which includes 16 additional per fluorinated chemicals, 2 of these additional chemicals were detected, the highest of which was <1.47 mg/l. These additional analytes are not currently regulated and do not have an MCL.

Thank you for allowing us to continue to provide your family with quality water this year. To maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all our customers. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary 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.