**Annual Drinking Water Quality Report for 2019**
**Village of Cape Vincent**
**31317 County Route 6 Cape Vincent, NY**
**(Public Water Supply ID# 2202333)**

## INTRODUCTION

To comply with State regulations, the **Cape Vincent Water Department** 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.

## 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 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 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 source is the St. Lawrence River. During 2019, our system did not experience any restriction of our water source. The water is pumped from the intake pump station to the filtration plant where a cationic polymer is added to enhance coagulation and filtering. The filtered water is then disinfected with chlorine prior to distribution.

### SWAP Summary

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(s) 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.

The Great Lakes' watershed is exceptionally large and too big for a detailed evaluation in the SWAP. General drinking water concerns for public water supplies which use these sources includes storm generated turbidity, wastewater, toxic sediments, shipping related spills, and problems associated with exotic species (e.g. zebra mussels – intake clogging and taste and odor problems). The summary below is based on the analysis of the contaminant inventory compiled for the drainage area deemed most likely to impact drinking water quality at the PWS intake.

The assessment found an elevated susceptibility to contamination for this source of drinking water. The amount of agricultural lands in the assessment area results in elevated potential for microbials, DBP precursors, and pesticide contamination. While there are some facilities present, permitted discharges do not likely represent an important threat to source water quality based on their density in the assessment area. There are no noteworthy contamination threats associated with other discrete contamination sources.

A copy of the assessment can be obtained by contacting the supplier of water.

## FACTS AND FIGURES

Our water system serves 1,500 people through 516 service connections. The system also provides water to the Town of Cape Vincent and to the Western Regional Water Line operated by the Development Authority of the North Country (D.A.N.C.). The total amount of water produced in 2019 was 157,241,200 gallons. The daily

average of water treated and pumped into the distribution system is 430,798 gallons per day. Our highest single day (August 4, 2019 ) was 611,500 gallons. The amount of water delivered to customers was 147,805,191 gallons. This leaves an unaccounted for total of 9,436,009 gallons ( 6 % of the total produced ). Undetected leaks and water main breaks, hydrant flushing, fire department usage, sanitary sewer flushing, unauthorized usage, and under registering in older meters constitutes the bulk of the water loss. The Villages total production water meter was replaced due to inaccuracy in November of 2015.

## 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, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, radiological 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, 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 Health Department's Watertown District Office at (315) 785 2277.

As the State regulations require, we routinely test your drinking water 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. None of the compounds we analyzed for were detected in your drinking water.

**Table of Detected Contaminants**

| Contaminant | Violation Yes/No | Date of Sample | Level Detected (Maximum) (Range) | Unit Measure | MCLG | Regulatory Limit (MCL, TT, or AL) | Likely Source of Contamination |
|---|---|---|---|---|---|---|---|
| **Microbiological Contaminants** | | | | | | | |
| Turbidity[1] Distribution | No | 01-12 2019 | AVG. 0.2 | NTU | N/A | TT=<5 NTU | Particles from corrosion of water mains |
| Turbidity[1a] Filter Effluent | No | 01-12 2019 | AVG. 0.148 | NTU | N/A | TT= 95% of samples <0.3 NTU | Particles too fine to filter completely. |
| **Inorganic Contaminants** | | | | | | | |
| Copper | No | 07/12/17 | 0.279[2] 0.009 - 0.366 | mg/l | 1.3 | AL-1.3 | Corrosion of Household Plumbing |
| Lead | No | 07/12/17 | BRL[3] <BRL -0.0013 | mg/l | 0 | AL-15 | Corrosion of Household Plumbing |
| Nitrate (as Nitrogen) | No | 6/19/19 | 0.261 | mg/l | 10 | 10 | Runoff from fertilizer use; Leaching from septic tanks; Erosion of natural deposits |
| Chloride | No | 5/03/03 | 16.1 | mg/l | N/A | MCL-250 | Naturally Occurring |
| Sulfate | No | 5/03/03 | 18.4 | mg/l | N/A | MCL-250 | Naturally Occurring |
| Barium | No | 7/29/10 | 0.023 | mg/l | 2 | MCL-2 | Erosion of Natural Products |
| Manganese | No | 5/03/03 | 0.001 | mg/l | N/A | MCL-300 | Naturally Occurring |
| Sodium[4] | No | 5/03/03 | 12.1 | mg/l | N/A | See Table Note 5 | Naturally Occurring |
| Zinc | No | 5/03/03 | 0.211 | mg/l | N/A | MCL-5 | Naturally Occurring |

**Additional information is available from the EPA's SAFE DRINKING WATER HOTLINE (800-426-4791)**

## Disinfection Byproducts

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Total Organic Carbon Stage 1 Rule | No | 01 – 12 2019 | 2.1 – 2.2 | mg/l | N/A | TT | Naturally present in the environment |
| | | | | | | | |
| Total Trihalomethanes Stage 2 Rule | No | 02,05,08,11,2019 | 19.8 – 53.7 | ug/l (ppb) | N/A | N/A | Byproduct of drinking water chlorination |
| | | | | | | | |
| Haloacetic Acids Stage 2 Rule | No | 02,05,08,11,2019 | 11.5 – 29.0 | ug/l (ppb) | N/A | N/A | Byproduct of drinking water chlorination |

**Table 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 average distribution turbidity measurement (0.237 NTU) for the year occurred in August. State regulations require that turbidity must always be below 1NTU.

**1a** - The regulations require that 95% of the turbidity samples collected have measurements below 0.3 NTU. The average maximum filter effluent recorded at the plant in 2019 was 0.108 NTU. 100% of the filter effluent turbidities were below the MCL.

**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, ten samples were collected at your water system and the 90th percentile value was the ninth highest value. The action level for copper was not exceeded at any of the sites tested.

**3** – The level presented represents the 90th percentile of the ten samples collected. The action level for lead was exceeded at one of the 10 sites tested.

**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.

**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.

***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).

***Nanograms per liter*** (ng/l): Corresponds to one part of liquid to one trillion parts of liquid (parts per trillion - ppt).

***Picograms per liter*** (pg/l): Corresponds to one part per of liquid to one quadrillion parts of liquid (parts per quadrillion – ppq).

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

***Millirems per year*** (mrem/yr): A measure of radiation absorbed by the body.

***Million Fibers per Liter*** (MFL): A measure of the presence of asbestos fibers that are longer than 10 micrometers.

***BRL***: Below reporting limit – Analyte NOT DETECTED at or above the reporting limit.

**Additional information is available from the EPA's SAFE DRINKING WATER HOTLINE (800-426-4791)**

## 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 below the level allowed by the State.

## IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

**During 2019, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.**

## 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).

## 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 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 off all taps and water using appliances, Then check the meter after 15 minutes, If it moved, you have a leak

## CLOSING

**If you have any questions about this report or concerning your drinking water, please contact Superintendent - Marty T. Mason at 315-654-2474 or WTPO - Gareth A. Hogan at 315-654-4510.**

**Or by email,** capevincentdpw@centralny.twcbc.com
capevincentwater@centralny.twcbc.com

**Additional information is available from the EPA's SAFE DRINKING WATER HOTLINE (800-426-4791)**