2022 Village of Dexter 2022

Annual Drinking Water Quality Report
509 Liberty Street; PO Box 62
Dexter, New York 13634
Public Water Supply # 2202337

To comply with State Regulations, the Dexter Water System 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 the awareness of the need to protect our drinking resources. Last year, your tap water met all State drinking water health standards. 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. Copies of Village of Cape Vincent and DANC ADWQR reports are available in the Village Office.

If you have any questions about this report or concerning your drinking water, please feel free to contact Steve Lane at the Village Office at 639-6260. We want you to be informed about your drinking water. Village Board meetings are held the 3rd Tuesday of each month beginning at 4:00 PM.

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 number of certain contaminants in water provided by public water systems. The State Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

The Village uses two sources of water for its 1052 residents. Water is purchased from DANC (Development Authority of the North Country) and water from our well in Limerick. The water from DANC is from the Village of Cape Vincent Water System that takes its water from the St. Lawrence River and, after filtering it, pumps it to the Town of Cape Vincent's 500,000-gallon reservoir. The water is then pumped to the Village Distribution System connecting to our system at Limerick. The water is chlorinated at Cape Vincent and again, as needed, at the Limerick Booster Pump Station to maintain a minimum residual of 1.5 mg/L during transmission to Dexter. Water from the Limerick Well serves as our primary source to cut down on the cost of purchasing and operation and maintenance charged by DANC. Approximately 95 percent of our water for 2022 came from our well.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include the following: total coliform, turbidity, inorganic compounds, nitrate, 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, are more than a year old. It should be noted that all drinking water, including bottled drinking water, might be reasonably expected to contain at least small amounts of 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 County Health Department at 315-785-2277.

Since 1994, we have been testing a representative number of homes for the presence of Lead and Copper in tap water. The Village is currently required to sample 10 homes every three years. The last round of sampling took place in 2018. **Action Levels were not exceeded during the 2021 round of sampling.**

Contaminant	Units	Samples	Action Levels	MCLG	Average	90th Percentile	# Of sites Above the AL	Typical Source of Containment
Copper	Mg/l	10	1.3	0	.790	1.71	2	Corrosion of household Plumbing. Erosion of natural Resources. Leeching for wood Preservatives
Lead	PPB	10	1.2	0	.003	<1.0 PPB	None	Corrosion of household plumbing. Erosion of natural resources. Leaching for wood preservatives

Contaminant	Violation Y/N	Date of Sample	Level Detected Average	Unit of Measurement	MCLG		Regulatory Limit (MCL)	Likely Source of Contaminant

Table of Detected Contaminants

Contaminant	**Violation Y/N**	**Date of Sample**	**Level Detected Average**	**Unit of Measurement**	**MCLG**	**Regulatory Limit (MCL)**	**Likely Source of Contaminant**
Microbiological Contaminants							
Turbidity[1]	No	9/18/00	0.2	NTU	N/A	TT=0.5	Soil Runoff.

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Health Effects
Total Trihalomethanes And Halo acetic Acids (HAA5) (TTHMs-chloroform, Bromodichloromethane, Dibromochloromethane, And bromoform)	NO NO	Quarterly	TTHM-46.6 HAA5-36.5	Ug/l based on a running annual average Ug/l Based on a running annual average **Likely Source of Contamination:** By-product of drinking water Chlorination needed to kill harmful Organisms. TTHMs are formed When source water contains large Amounts of organic matter.		MCL=80 ug/l MCL=60 ug/l	Some people who drink Water containing Trihalomethanes in excess Of the MCL over many years **may** experience problems with their liver, kidneys, or central nervous systems, and **may** have an increased risk of getting cancer

Where do TTHM'S and HAA5's come from?

The Village has had continual difficulties meeting the requirements for the Stage II DBP levels for TTHM's. Violations occur when the running average for an individual location exceed the MCL. The running average is calculated with the 4 most recent quarter results for an individual site. A violation that occurs at a single site that is not isolated from the rest of the system requires a Village wide notification.

Trihalomethanes and Haloacetic acids are a groups of chemicals that formed in drinking water during treatment by chlorine, which reacts with certain acids that are in naturally-occurring organic material (e.g. decomposing vegetation such as tree leaves, algae or other aquatic plants) in surface water sources such as rivers and lakes. The amount of Trihalomethanes and Haloacetic acids in drinking water can change from day to day, depending on the temperature, the amount of organic material in the water, the amount of chlorine added, and a variety of other factors. Drinking water is disinfected by public water suppliers to kill bacteria and viruses that could cause serious illnesses. Chlorine is the most commonly used disinfectant in New York State. For this reason, disinfection of drinking water by chlorination is beneficial to public health.

IMPORTANT INFORMATION ABOUT THM'S

Some studies suggest that people who drink chlorinated water (which contain trihalomethanes) or water containing elevated levels of trihalomethanes for long periods of time may have an increased risk for certain health effects. For example, some studies of people who drank chlorinated drinking water for 20 to 30 years show that long term exposure to disinfection by-products (including trihalomethanes) is associated with an increased risk for certain types of cancer. A few studies of women who drank water containing trihalomethanes during pregnancy show an association between exposure to elevated levels of trihalomethanes and small increased risks for low birth weights, mis carriages and birth defects. However, in each of the studies, how long and ow frequently people actually drank the water, as well as how much trihalomethanes the water contained is not known for certain. Therefore, we do not know for sure if the observed increases in risk for cancer and other effects are due to trihalomethanes or some other factor.
The individual trihalomethanes chloroform, bromodichloromethane and dibromochloromethane cause cancer in laboratory animals exposed to high levels over their lifetimes. Chloroform, bromodichloromethane and dibromochloromethane are also known to cause effects in laboratory animals after high levels of exposure, primarily on the liver, kidney, nervous system and on their ability to bear healthy offspring. Chemicals that cause adverse health effects in laboratory animals after high levels of exposure may pose a risk for adverse health effects in humans exposed to lower levels over long periods of time.

IMPORTANT INFORMATION ABOUT HAA5's

Some studies of people who drank chlorinated drinking water for 20 to 30 years show that long term exposure to disinfection by-products is associated with and increased risk for certain types of cancer. However, how long and how frequently people drank the water as well as how much haloacetic acids the water contained is not known for certain. Therefore, we do not know for sure if the observed increased risk for cancer is due to disinfection by-products or some other factor.

THE VILLAGE WITH THE COOPERATION OF THE TOWN OF BROWNVILLE INSTALLED AN AERATION SYSTEM IN OUR STANDPIPE IN NOVEMBER OF 2020 TO REDUCE THE TTHM'S IN OUR WATER SUPPLY TO BRING THE VILLAGE INTO COMPLIANCE.

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.
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).

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had no MCL 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 2017, 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 carep 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).

Contaminant	Violation Y/N	Date of Sample	Level Detected Average	Unit of Measurement	MCLG	Regulatory Limit (MCL)	Likely Source of Contaminant

Radiological Contaminants

Radium-226 Radium -228	No	10/16/17	.347 .580	PCL/L	0	MCL=4	Decay of natural deposits and man made emissions
Alpha Particle	No	10/16/17	.194	PCL/L	0	MCL=15	Erosion of natural deposits

INORGANIC CONTAMINANTS

Barium	No	9/29/03	0.058	mg/l	2	MCL=2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Copper	No	12/18/00	23.4	mg/l	N/A	MCL=250	Corrosion of household plumbing; Erosion of natural deposits; leaching from wood preservatives.
Chloride	No	9/29/03	99.8	mg/l	N/A	MCL=250	Naturally occurring or indicative of road salt contamination
Iron	No	12/11/00	1.54	mg/l	N/A	MCL=2.2	Naturally occurring.
Manganese	No	9/29/03	0.016	mg/l	10	MCL=10	Naturally occurring; indicative of landfill contaminants.
Color	No	1/26/00	0.052	mg/l	2	MCL=2	Large quantities of organic chemicals, inadequate treatment, high disinfectant demand and the potential for production of excess amounts of disinfectant by-productssuch as trihalomethanes, the presence of metals such as copper, iron and manganese; Natural color may be caused by decaying leaves, plants, and soil organic matter.
Odor	No	12/18/00	23.4	mg/l	N/A	MCL=250	Organic or inorganic pollutants originating from municipal and industrial waste discharge; natural sources.
Sodium	No	9/29/03.	23.9	mg/l	N/A	MCL=250	Naturally occurring; road salt; road salt; water softeners; animal waste.
Nitrate	No	7/07/22	.122	mg/l	N/A	MCL=2.2	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosin of natural deposits.

Principal Organic Chemicals – 7/6/22

No Contaminants Detected – 2022

Synthetic Organic Contaminants (Pesticides & Herbicides)

No Contaminants Detected – 7/12/2021

Volatile Organic Contaminants – 2/08/2021

No Contaminants Detected – 11/14/2021

WHY SAVE WATER AND HOW TO AVIOD 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 and;
~ 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. Get the most 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 the drip 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 of water per 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 has moved, you have a leak. All of our meters have a leak detector dial in the middle of the dial that will turn if when everything is off, signifying a leak.
~ Use low flow showerheads and faucets.
~ Water your lawn sparingly every morning or late evening.
~ Don’t cut your lawn too short; longer grass conserves water.

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 to protect our water resources, which are the heart of our community. Please call our office if you have any questions.

Stephen R. Lane
Village Manager