Annual Drinking Water Quality Report for 2022
Piercefield Water System
Pump House Road, Piercefield
(Public Water Supply ID # 4404396))

INTRODUCTION

To comply with State regulations, the Piercefield 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 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. Routine maintenance and testing are performed throughout the year.

If you have any questions about this report or concerning your drinking water, please contact Jay Rust, Water Operator, 518-359-9660. 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, which are held the second Thursday of each month at 7:30 p.m. at the Town Hall in Piercefield, 48 Waller Street. The St. Lawrence County water quality authority is NYSDOH-Canton District Office, 58 Gouverneur St. Canton, NY 13617-3200, (315) 386-1040.

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 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 system serves approximately 160 people through 80 service connections. Our water source is a series of drilled wells which are located on Pumphouse Road, in Piercefield. This November, the Highway Department fixed a leak in the 6-inch water main with a coupler. They also replaced 8 well caps. The water is treated with chlorine prior to distribution. Our system is historically at very low risk of contaminants, as witness the adjoining table.

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 (monthly), Sodium, Iron, Gross Beta, Gross Alpha, Barium, Fluoride, Sulfate, Chloride, Zinc, Nitrite, Nitrate, HAAs, TTHM, Lead, Copper, and POCs/Vinyl Chloride. The table presented on the last page 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. None of the compounds we analyzed for were detected at unacceptable levels in your drinking water.

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 District Health Department at 58 Gouverneur St., Canton, NY 13617, Telephone No. (315) 386-1040.

Table of Detected Contaminants

Table on following sheet.

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 New York State requirements.

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 Piercefield Water System 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 (800-426-4791) or at http://www.epa.gov/safewater/lead.

We are required to present the following information on nitrate in drinking water:

"Nitrate in drinking water at levels above 10 mg/l is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider."

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

Last year, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards.

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
- 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 may use up to 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.

CLOSING

The Town of Piercefield is dedicated to the task of providing you with a consistent supply of high-quality drinking water. This requires continuous monitoring and maintenance of our water pumping stations in addition to frequent sampling for contaminants. Last year, the cost of Piercefield pump station utilities (propane, electricity, phone), water test fees, labor, materials and hardware to keep the pumps functioning properly, totaled $14,808.81**.** This does not include the water district debt service, which is included in the Town property tax levy. The debt service is affected by funding that was borrowed from Community Bank N.A. to discharge the previous USDA loan and to purchase pipe that will be used to replace aging mains in the next few years. This funding was secured at a lower interest rate than the USDA loan and will be repaid annually until 2033. The USDA loan was originally scheduled to be discharged in 2035.

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 and repairs that will benefit all of our customers. The costs of these activities may be addressed through rate adjustments. We ask that all our customers help us protect our water sources, which are the heart of our community. Please call our office at 518-359-9660 if you have questions.

If you have received multiple copies of this report, please distribute them among your tenants.

Thank you for your time,

Jay Rust
Highway Superintendent/ Water Operator

Table of Detected Contaminants PW 2022

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Reg. Limit MCL TT AL	MCLG	Sources in Drinking Water
Sodium	No	7/12/2021	15.1mg/l	27mg/l		Runoff from fertilizer use, leaching from septic tanks, erosion of natural deposits.
Barium	No	7/12/2021	0.5mg/l	2	2	Discharge of drilling wastes, discharge from metal refineries, erosion of natural deposits.
Fluoride	No	7/12/2021	0.4mg/l	2		Erosion of natural deposits, water additive that promotes strong teeth, discharge from fertilizer and aluminum factories.
Free avail. Chlorine	Nol	8/2/2021	1.0mg/l			Used to purify water
Nitrate	No	12/8/2022	0.2 mg/L	10 mg/L	10mg/L	
	No	8/3/2021	0.2mg/l	10 mg/l	10 mg/l	Runoff from fertilizer use, leaching from septic
	No	10/12/2020	0.2mg/l	10mg/l	10mg/l	tanks, sewage, erosion of deposits.
HAA5	No	7/18/2022	4.9 µg/l	60 µg/l	N/A	By-product of drinking water disinfection
	No	8/5/2019	7.2µg/l	60 µg/l	N/A	needed to kill harmful organisms.
TTHM	No	9/12/2016	31.0 µg/l	80 µg/l	N/A	By-product of drinking water chlorination
	No	11/16/2016	< 0.5 µg/l	80 µg/l	N/A	needed to kill harmful organisms. TTHMs are
	No	9/11/2018	13.8 µg/l	80 µg/l	N/A	formed when source water contains large
	No	8/5/2019	25 µg/l	80 µg/l	N/A	amounts of organic matter.
Lead	No	8/11/2021	0.0010mg/l	0.015 mg/l	N/A	Corrosion of household plumbing, erosion of natural deposits.
Copper	No	8/11/2021	0.019 mg/l	1.3 mg/l	N/A	Corrosion of household plumbing, erosion of natural deposits, leaching from wood preservatives.
Radium-226/228	No	10/22/2020	ND	15pCI/l	N/A	Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.
Dioxane**:**	No	11/22/2022	0.02 ug/l	n/a	n/a	Released into the environment from commercial industrial sources and is associated with inactive and hazardous waste sites.

Notes:

Sodium: Water containing, more than 20mg/l of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270mg/l of sodium should not be used for drinking by people on moderately restricted sodium diets.

Copper: The level presented represents the 90th percentile for the 5 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 values detected at your water system. The action levels for lead and copper were not exceeded at any of the sites tested.

Barium: Some people who drink water containing barium in excess of MCL over many years could experience an increase in their blood pressure.

Fluoride: Some people who drink water containing Fluoride in excess of MCL over many years could get bone disease, including pain and tenderness of bones. Children may get mottled teeth.

HAA5: Some people who drink water containing halo acetic acids in excess of MCL over many years may have an increased risk of getting cancer.

TTHM: 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.

Lead: Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

Nitrate: Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

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.

Gross Alpha: Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCI over many years may have an increased risk of getting cancer

Gross Beta: Certain materials are radioactive and may emit forms of radiation known as photons and beta radiation. Some people who drink water containing beta and photon emitters in excess of MCL over many years may have increased risk of getting cancer.

DEFINITIONS:

Milligrams per liter (mg/l) - One part per million: corresponds to one minute in two years or a single penny in $10,000.

Micrograms per liter (µg/l) - corresponds to one part of liquid in one billion parts of liquid (parts per billion -ppb).

Maximum Contaminant Level (MCL) - The "Maximum Allowed" is the highest level of a contaminant that is allowed in drinking water.
MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) - The "Goal" is 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 of health. MRDLGs do not reflect the benefits of the using of disinfectants to control microbial contamination.

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

Dioxane (ug/l): Laboratory studies show that 1,4-dioxide caused liver cancer in animals exposed at high levels throughout their lifetime. Whether 1,4- dioxane causes cancer is unknown. The United States Environmental Protection Agency considers 1,4-dioxane is likely to be carcinogenic to humans based upon studies of animals exposed to high levels of this chemical over their lifetime.