

Annual Drinking Water Quality Report for 2017
Village of Black River
107 Jefferson Place., Black River, 13612
(Public Water Supply ID#NY2202331)

INTRODUCTION

To comply with State regulations, the **Village of Black River**, 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.

If you have any questions about this report or concerning your drinking water, please contact **Steven Lillie, Superintendent of Public Works, at (315) 773-5721**. 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 first Monday of each month at 6:00 pm at the Village hall located at 107 Jefferson Place, Black River, NY 13612.**

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 system serves a population of 2300 through 1100 metered service connections. Our water source consists of three (3) springs and two (2) drilled wells, one within the village, one located south of the village. These sources are considered groundwater sources. The water is disinfected with an ultraviolet light source and sodium hypochlorite solution prior to entering the distribution system. Any water not consumed by our customers is then stored in an 800,000 gallon pre-stressed concrete storage tank.

SOURCEWATER ASSESSMENT STATEMENT

The New York State Department of Health 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 based on the risk posed by each potential source of contamination and how easily contaminants can move through the subsurface to the wells. **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.**

The source water assessment has rated these wells as having a medium-very high susceptibility to microbial, nitrates, herbicides/pesticides, petroleum products, solvents, industrial organics, metals and minerals. These ratings are due primarily to the close proximity of potential contamination sources and the main source drawing from an unconfined aquifer surrounding agricultural, commercial/industrial, and residential activities. An unconfined aquifer is a shallow, underground water body whose overlying soils may offer limited protection from potential contamination sources.

The New York State Department of Health will use this information to direct future source water protection activities. A copy of the assessment can be obtained by contacting the supplier of water.

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, 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, 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 New York State Department of Health, Watertown District Office (315) 785-2277.**

Table of Detected Contaminants

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCG/L	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Radioactive Contaminants							
radium 226	No	#9/5/17 * 11/14	0.992 1.35	pCi/L	N/A	5 pCi/L	Decay of natural and manmade deposits
radium 228	No	#9/5/17 *11/14	0.908 1.17	pCi/L	N/A	5pCi/L	
Gross Alpha	No	#9/5/17	2.88	pCi/L	N/A	15pCi/L	
Inorganic Contaminants							
Lead (3)	No	6/29/17	.002	mg/l	0	0.015	Corrosion of household plumbing; erosion of natural deposits.
Copper (2)	No	6/29/17	.170	mg/l	1300	1.3	Corrosion of household plumbing; erosion of natural deposits; leaching of wood preservatives.
Barium	No	2/27/12 2/27/12	68# 41*	mcg/l	2000	2000	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride	No	2/27/12	0.2# 0.5*	mg/l	N/A	2.2	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate as (N)	No	9/14/17	0.9# 0.83*	mg/l	10	10	Run-off from fertilizer use; leaching from septic tanks; erosion of natural deposits.
Cyanide	No	2/27/12	0.006# 0.006*	mg/l	0.2	0.2 mg/l	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories.
Disinfection By products							
Chlorine Residual	No	Daily	1.25 (1.0 – 1.5)# 1.0 (.08 – 1.3)*	mg/l	N/A	4.0	By-product of drinking water disinfection
Total Trihalomethanes (TTHM's)	No	8/22/17	94.1	mg/l	0	80-120	By-product of drinking water disinfection.
Haloacetic Acids (HAA5)	No	8/22/17	77.2	mg/l	N/A	70-130	By-product of drinking water disinfection.

Notes:

- # - Route 3 source
- * - Maple St. source

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 .14mg/l sample 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 10 samples collected. The action level for lead was exceeded at none of the ten (10) sites tested.

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.

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 2015, 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.
- ◆ 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 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.

WATER USE DESCRIPTION

During 2017, the Village of Black River produced 76,867,400 gallons. The Town of Rutland District #1 purchased 19,900,000 gallons. The Town of LeRay District #4 purchased 24,200,000 gallons and the Village of Black River used 32,767,400 gallons.

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) 773-5721.**