

# ANNUAL DRINKING WATER QUALITY REPORT

2024



*Annual Drinking Water Quality Report for 2023*  
*Village of Sinclairville*  
*P.O. Box 469*  
*Sinclairville, NY 14782*  
*Public Water Supply ID# NY0600376*

## **INTRODUCTION**

To comply with State regulations, Village of Sinclairville, annually issues 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, we conducted tests for over thirty contaminants. We detected one of those contaminants, cyanide, at a level higher than the State allows. More information about this issue and health effects of cyanide are included in the Table of Detected Contaminants and in the section "What Does This Information Mean?"

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 the Village of Sinclairville Clerk, Darla Frost-Kianos at the Village Office, 8 Lester Street, by phone 716-962-9455. We want you to be informed about your drinking water. If you want to learn more, we urge you to attend any of our regularly scheduled Village Board meetings held on the first Wednesday of every month at 8 Lester Street at 7:00 PM.

## **WHERE DOES OUR WATER COME FROM?**

In general, the sources of drinking water (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 approximately 772 people through 250 service connections. The Village of Sinclairville's water system includes four groundwater wells. The water is chlorinated prior to distribution.

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 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. While some inorganic contaminants were detected in our 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 from natural sources. The presence of contaminants does not necessarily indicate that the water poses a health risk.

As mentioned before, our water is derived from four drilled wells. The source water assessment has rated these wells as having a very-high susceptibility to microbials and nitrates, and a high susceptibility to industrial solvents, and other industrial contaminants including metals and pesticides and herbicides. These ratings are due primarily to the close proximity of two state or federal government permitted septic systems and residential septic systems to the wells, and the proximity of a facility that has been listed on the state's toxic release inventory as having released a toxic chemical into the environment. In addition, the wells draw from an unconfined aquifer that yields more than 100 gallons per minute, and the overlying soils are not known to

provide adequate protection from potential contamination.

A copy of the assessment, including a map of the assessment area, can be obtained by contacting us, as noted below. While the source water assessment rates our wells 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.

### 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, 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 Chautauqua County Health Department at 716-753-4481.

Table of Detected Contaminants

Contaminant	Violation	Date of Sample	Level Detected	Unit Measurement	Regulatory Limit (MCL/ AL)	MCLG	Likely Source of Contamination
<b>INORGANIC CONTAMINANTS</b>							
Lead(1)	No	5/31/23 - 6/5/23	1.1; Range= ND - 3.4	ug/l	15 (AL)	0	Corrosion of household plumbing systems; Erosion of natural deposits
Copper(2)	No	5/31/23 - 6/5/23	0.115; Range= 0.0183 - 0.178	mg/l	1.3(AL)	1.3	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.
Barium Entry Point #1)	No	8/23/21	0.189	mg/l	2 (MCL)	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Nitrate Entry Point #2)	No	6/7/23	1.3	mg/l	10 (MCL)	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Arsenic Entry Point #2)	No	11/1/23	5.8	ug/l	10 (MCL)	N/A	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium Entry Point #2)	No	11/1/23	0.811	mg/l	2 (MCL)	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Cyanide Entry Point #2)	Yes	11/1/23	0.711	mg/l	0.2 (MCL)	0.2	Some people who drink water containing cyanide well in excess of the MCL over many years could experience nerve damage or problems with their thyroid.
Fluoride Entry Point #2)	No	11/1/23	0.15	mg/l	2.2 (MCL)	N/A	Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Children may get mottled teeth.
Nickel Entry Point #2)	No	11/1/23	1.8	ug/l	N/A	N/A	Nickel enters groundwater and surface water by dissolution of rocks and soils, from atmospheric fallout, from biological decays and from waste disposal.
<b>PRINCIPAL ORGANIC CONTAMINANTS</b>							
Chloroethane	No	2/22/23 6/21/23 11/1/23	Avg. = 3.27 Range= 1.9 - 4.4	ug/l	5	N/A	Sources of chloroethane include process and fugitive emissions from its production and use as a chemical intermediate, evaporation from solvent, aerosol, and antiseptic application, stack emissions from plastics and refuse combustion, inadvertent formation during chlorination treatment, leaching from landfills and formation via microbial degradation of other chlorinated solvents.
Permethane	No	2/22/23	Avg. = 1.44	ug/l	5 (MCL)	N/A	Used to kill a variety of pests; used to make other

		6/21/23 11/1/23	Range= 0.91 - 2.2				chemicals or as a solvent to get oil out of nuts, seeds, and wool.
Chloromethane	No	2/22/23 6/21/23 11/1/23	Avg = 1.97 Range= 1.1 - 2.5	ug/l	5	N/A	Used in organic chemistry; used as an extractant for greases, oils, and resins; as a solvent in the rubber industry; as a refrigerant, blowing agent and propellant in polystyrene foam production; as an anesthetic; as an intermediate in drug manufacturing; as a food additive, a fumigant and a fire extinguisher.

**STAGE 2 DISINFECTION BYPRODUCTS (Water St.)**

Total Trihalomethanes	No	8/23/23	10.3	ug/l	80 (MCL)	N/A	Byproduct of drinking water chlorination needed to kill harmful organisms. THMS are formed when source water contains large amounts of organic matter.
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**RADIOLOGICAL**

Gross Alpha	No	7/27/22 11/22/22	Avg = 0.272 Range= ND - 0.544	pCi/L	15(MCL)	0	Erosion of natural deposits.
Gross Beta(3)	No	7/27/22 11/22/22	Avg = 0.994 Range= 0.528 - 1.46	pCi/L	50(MCL)	0	Decay of natural deposits and man-made emissions.
Radium-226	No	7/27/22 11/22/22	Avg = 0.08 Range= 0.055 - 0.11	pCi/L	5(MCL)	N/A	Erosion of natural deposits.
Radium-228	No	7/27/22 11/22/22	Avg = 0.65 Range= 0.447 - 0.852	pCi/L	5(MCL)	N/A	Erosion of natural deposits.
Uranium	No	7/27/22 11/22/22	Avg = 0.37 Range= ND- 0.073	ug/L	30	0	Erosion of natural deposits.

**DISINFECTANT (Entry Point #1)**

Chlorine Residual	No	Daily (2023)	Avg = 0.71 Range= ND-1.41	mg/l	4.0 (MCL)	N/A	Water additive used to control microbes
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**DISINFECTANT (Entry Point #2)**

Chlorine Residual	No	Daily (2023)	Avg = 0.67 Range= 0.08-1.76	mg/l	4.0 (MCL)	N/A	Water additive used to control microbes
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**Notes:**

1 - The level presented represents the 90<sup>th</sup> percentile of the 20 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 90<sup>th</sup> percentile is equal to or greater than 90% of the lead values detected at your water system. The 90<sup>th</sup> percentile was found to be the 3<sup>rd</sup> highest result and that result was 1.1 ug/l. The action level for lead was not exceeded at any of the sites tested.

2 - The level presented represents the 90<sup>th</sup> percentile of the ten samples collected. Again, 20 samples were collected within the system. The 90<sup>th</sup> percentile for copper was found to be the 3<sup>rd</sup> highest result and that result was 0.115 mg/l. The action level for copper was not exceeded at any of the sites tested.

3 - The NYSDOH considers 50 pCi/l to be the level of concern for beta particles.

**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 that is 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.

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

#### WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system exceeded the maximum contaminant level for cyanide in 2023. A sample collected in the fourth quarter exceeded the MCL, resulting in a violation. We are working closely with the Chautauqua County Health Department to resolve this problem and will keep you informed of our progress and all future results that exceed the MCL. Increased monitoring for cyanide will take place in 2024.

The New York State Health Department has provided us the specific health effects for cyanide as follows:

"Some people who drink water containing cyanide well in excess of the MCL over many years could experience nerve damage or problems with their thyroid."

Arsenic was also detected in our water in 2023; however, it was detected below the MCL. We are required to present the following information on arsenic in drinking water:

"NYS and EPA have promulgated a drinking water arsenic standard of 10 parts per billion. While your drinking water meets the standard for arsenic, it does contain low levels of arsenic. The standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effect of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems."

We have learned through our testing that some contaminants have been detected; however, except for cyanide discussed above, these contaminants were detected below current federal drinking water requirements. Lead and copper were detected within the system and of 20 samples collected none were found exceeding the action levels. We are however required to present the following information on Lead in drinking water:

Lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Village of Sinclairville is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact The Village of Sinclairville at 716-962-9455. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead>.

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

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. During 2023, our system was in compliance with State drinking water operating and monitoring requirements, but not reporting requirements. In 2023, we failed to submit results for our synthetic organic contaminant testing to the Chautauqua County Health Department within the appropriate timeframe established by the State. We also monitored for free chlorine residuals every day, but we failed to submit the monthly operations report for the month of June to the Health Department within the appropriate timeframe established by the State. These violations do not pose a threat to your water quality.

### **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).

### **INFORMATION FOR NON-ENGLISH SPEAKING RESIDENTS**

#### **Spanish**

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

#### **French**

Ce rapport contient des informations importantes sur votre eau potable. Traduisez-le ou parlez en avec quelqu'un qui le comprend bien.

### **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 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 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**

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.