



2024 Annual Drinking Water Quality Report Seneca Nation



INTRODUCTION

To comply with Federal regulations, the Seneca Nation (SN), 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, your tap water met all federal 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 Federal standards.

The Environmental Health and Engineering division of the SN Health System, with cooperation from the Utility Departments on the Cattaraugus and Allegany Territories, is tasked with sampling, testing and monitoring drinking water quality.

If you have any questions about this report or concerning your drinking water, please contact Joel Merrill, PE, Civil Engineer or Rosalind Ground, Sanitarian, both at (716) 945-5894.

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, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water sources are:

- 1.) Cattaraugus Territory:
 - a. Groundwater Wells: drawn from two drilled wells which are located on Richardson Road. Richardson Road is one of the many systems that adds a low level of fluoride to drinking water in order to provide consumer dental health protection. According to the United States Centers for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at levels that range from 0.8 mg/l (parts per million). Our fluoride addition facility is designed and operated to meet this optimal range. This source is also disinfected prior to being pumped to two storage tanks and distribution. This source resumed operation in early 2019.
 - b. Intercommunity Water main: Water is purchased in bulk from Erie County Water Authority (ECWA). The connection is located at Routes 5/20 in Irving. This water is fluoridated and disinfected by ECWA. ECWA's water quality report table is attached.

- 2.) Allegany Territory:
- a. Groundwater Wells: drawn from two drilled wells which are located on Hiller Rd in Jimersontown. This water is disinfected and pumped to an elevated storage tank prior to distribution.
 - b. Groundwater Wells: drawn from two drilled wells which are located on North Authority Road in Sullivan Hollow, Killbuck. This water is disinfected and filtered prior to usage.
 - c. Groundwater Wells: drawn from two drilled wells which are located on South Loop Road in Steamburg. This water is disinfected and pumped to an elevated storage tank prior to distribution.
 - d. City of Salamanca: Groundwater wells: Salamanca Board of Public Utilities (BPU) report is available at: <http://www.salamancabpu.com>

Each source has undergone a risk analysis to determine the source water's susceptibility to contamination. Except for farming on the Cattaraugus territory, all sources have a low risk of contamination. Source water assessments are available from SN Health. Efforts are underway to further protect SN water sources.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the Federal 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, haloacetic acids, and radiological compounds. A full list of the contaminants tested follows. The tables 1 through 5 presented below depict which compounds were detected in your drinking water. The regulations allow 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. See also Erie County Water Authority's water quality monitoring report supplement attached for their detected contaminants

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 SN Health System at (716) 945-5894.

WHAT DOES THIS INFORMATION MEAN?

As you can see by the tables, 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 EPA.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Although our drinking water met or exceeded 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 ON FLUORIDE ADDITION

The Cattaraugus system is one of the many drinking water systems that provide drinking water with a controlled, low level of fluoride for consumer dental health protection. According to the United States Centers for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at a properly controlled level. To ensure that the fluoride supplement in your water provides optimal dental protection, we monitor fluoride levels on a daily basis to make sure fluoride is maintained at a target level of 0.8 mg/l. During 2024 monitoring showed that fluoride levels in your water were 0.65 mg/l. None of the monitoring results showed fluoride at levels that approach the 2.2 mg/l NY State Department of Health MCL for fluoride. EPA's Fluoride MCL is 4 mg/l and EPA's secondary standard for fluoride is 2 mg/l.

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.

SYSTEM IMPROVEMENTS

Various watermain projects are planned for 2025. These improvements are funded by SN, EPA, IHS drinking water grants and will provide secure storage and delivery of treated water in compliance with federal regulations. In addition, other projects are planned to protect aging infrastructure and provide treated water to areas not currently served.

SPECIAL NOTICE FOR UNREGULATED CONTAMINANT MONITORING DATA

Our water system has sampled for a series of unregulated contaminants. Unregulated contaminants are those that don't yet have a drinking water standard set by EPA. The purpose of monitoring for these

contaminants is to help EPA decide whether the contaminants should have a standard. As our customers, you have a right to know that these data are available. If you are interested on examining the results, please contact Joel Merrill or Rosalind Ground, both at (716) 945-5894.

LEAD SERVICE LINE INVENTORY

A Lead Service Line (LSL) is defined as any portion of the water service line that is made of lead which connects the watermain to the building inlet. In accordance with the federal Lead and copper Rule Revisions (LCRR), our water system has compiled a lead service line inventory which is available for review by contacting Joel Merrill, Health Engineer at (716) 945-5894.

CLOSING

Thank you for allowing us to continue to provide your family with quality drinking water this year. We ask that all our consumers help us protect our water sources, which are the heart of our community. Please call our office if you have questions.

TABLE 1
2024 Water Quality Monitoring Report-Annual Water Quality Report Supplement-CATTARAUGUS SYSTEM⁴

DETECTED CONTAMINANTS						
Metals, Inorganics, Physical Tests	Violation Yes/No	Sample Date	Level Detected	MCLG	MCL	Sources in Drinking Water
Barium	No	6/20	1.18 ug/l	2,000	MCL=2,000	Erosion of natural deposits, drilling and metal wastes
Chloride	No	7/19	20.1 mg/l	0	MCL=250	Naturally occurring in source water
Nitrate	No	6/20	0.09 mg/l	10	MCL=10	Agricultural runoff; natural sources
Chromium	No	11/15/24	0.002 mg/l	0.1 mg/l	MCL=0.1	Erosion of natural deposits
Fluoride	No	2/19	0.69 mg/l	N/A	2.2 mg/l	Erosion of natural deposits and added for dental health
Lead ³	No	Various (2024)	0.01 mg/l	0	AL=0.015	Household plumbing, corrosion, natural sources, wood preservatives
Copper ³	No	Various (2024)	0.079 mg/l	0	AL=1.300	Home plumbing corrosion, natural erosion

Organic Compounds	Violation Yes/No	Sample Date	Level Detected	MCLG	MCL	Sources in Drinking Water
Trihalomethanes	No	quarterly	LRAA=0.062 mg/l	NE	MCL=0.08	Disinfection By-Product
Haloacetic Acids	No	quarterly	LRAA=0.043 mg/l	NE	MCL=0.06	Disinfection By-Product

Radiological Parameters	Violation Yes/No	Sample Date	Level Detected	MCLG	MCL	Sources in Drinking Water
Gross Alpha	No	3/21	0.0224 ±0.758 pCi/l	0	MCL=15	Natural sources
Gross Beta	No	3/21	0.618 ±1.34 pCi/l	0	MCL=15	Natural sources
Radium 228	No	3/21	0.301 pCi/L	NE	NE	Natural sources
Radium 226	No	3/21	0.0558 pCi/L	NE	NE	Natural sources

Microbiological Parameters ²	Violation Yes/No	Sample Date	Level Detected	MCLG	MCL	Sources in Drinking Water
Total coliform bacteria	No	Various	None	NE	5% of samples positive	Naturally present in the environment

¹ 90th percentile

² Coliform bacteria is an indicator for possible bacteriological contamination. No coliform bacteria were detected in any samples in 2024.

³ There were 20 lead and copper samples collected and analyzed in 2024. The minimum number of samples was 20 samples.

⁴ Erie County Water Authority (ECWA) and Richardson Road wells were sources in 2024. Results indicate highest level detected in either source. See ECWA table for ECWA source results.

TABLE 2
2024 Water Quality Monitoring Report-Annual Water Quality Report Supplement-JIMERTONTOWN SYSTEM

DETECTED CONTAMINANTS						
Metals, Inorganics, Physical Tests	Violation Yes/No	Sample Date	Level Detected	MCLG	MCL	Sources in Drinking Water
Barium	No	5/30/23	290 ug/l	2,000	MCL = 2,000	Erosion of natural deposits, drilling and metal wastes
Chloride	No	9/29/15	115 mg/l	NE	250 mg/l	Naturally occurring in source water
Nitrate	No	5/30/23	1.68 mg/l	10	MCL = 10	Agricultural runoff; natural sources
Copper	No	8/31/23	0.092 mg/l ¹	AL=1.30	AL=1.30	Home plumbing corrosion, natural erosion
Lead	No	8/31/23	0.0035 mg/l ¹	AL = 0.015	AL = 0.015	Household plumbing, corrosion, natural sources, wood preservatives
Chromium	No	5/30/23	0.002 mg/l	0.1 mg/l	0.1 mg/l	Erosion of natural deposits
Fluoride	No	5/30/23	0.1 mg/l	NA	2.2 mg/l	Erosion of natural deposits

Organic Compounds	Violation Yes/No	Sample Date	Level Detected	MCLG	MCL	Sources in Drinking Water
Trihalomethanes	No	2024	0.0034 mg/l	NE	MCL=0.08	Disinfection By-Product
Haloacetic Acids	No	2024	0.0016 mg/l	NE	MCL=0.06	Disinfection By-Product

Radiological Parameters	Violation Yes/No	Sample Date	Level Detected	MCLG	MCL	Sources in Drinking Water
Gross Alpha	No	11/21/24	-2.0E-01 pCi/l	0	MCL=15	Natural sources
Gross Beta	No	11/21/24	2.00E+00 pCi/l	0	MCL=15	Natural sources
Uranium 234	No	11/13/24	2.12E-01 pCi/l	NE	NE	Natural sources
Uranium 235	No	11/13/24	-6.02E-03 pCi/l	NE	NE	Natural sources
Uranium 238	No	11/13/24	1.08E-01 pCi/l	NE	NE	Natural sources

Microbiological Parameters ²	Violation Yes/No	Sample Date	Level Detected	MCLG	MCL	Sources in Drinking Water
Total coliform bacteria	No	Various	None	NE	5% of samples positive	Naturally present in the environment

¹ Maximum result

²Coliform bacteria is an indicator for possible bacteriological contamination. No coliform bacteria were detected in any samples in 2024.

TABLE 3
2024 Water Quality Monitoring Report-Annual Water Quality Report Supplement-STEAMBURG SYSTEM

DETECTED CONTAMINANTS						
Metals, Inorganics, Physical Tests	Violation Yes/No	Sample Date	Level Detected	MCLG	MCL	Sources in Drinking Water
Barium	No	10/1/18	230 ug/l	2,000	MCL = 2,000	Erosion of natural deposits, drilling and metal wastes
Chloride	No	9/29/15	21.7 mg/l	NE	250 mg/l	Naturally occurring in source water
Nitrate	No	6/6/22	1.87 mg/l	10	MCL = 10	Agricultural runoff; natural sources
Copper	No	8/21/23	0.056 mg/l ¹	AL=1.30	AL=1.30	Home plumbing corrosion, natural erosion
Lead	No	8/21/23	0.002 mg/l ¹	AL = 0.015	AL = 0.015	Household plumbing, corrosion, natural sources, wood preservatives
Chromium	No	10/1/18	<0.007 mg/l	0.1 mg/l	0.1 mg/l	Erosion of natural deposits
Fluoride	No	10/1/18	<0.1 mg/l	2.2 mg/l	202 mg/l	Erosion of natural deposits

Organic Compounds	Violation Yes/No	Sample Date	Level Detected	MCLG	MCL	Sources in Drinking Water
Trihalomethanes	No	2024	0.0026 mg/l	NE	MCL=0.08	Disinfection By-Product
Haloacetic Acids	No	2024	0.00094 mg/l	NE	MCL=0.06	Disinfection By-Product

Radiological Parameters	Violation Yes/No	Sample Date	Level Detected	MCLG	MCL	Sources in Drinking Water
Gross Alpha	No	9/24/18	0.507 ±0.123 pCi/l	0	MCL=15	Natural sources
Gross Beta	No	9/24/18	0.995 ±0.78 pCi/l	0	MCL=15	Natural sources
Radium 228	No	9/24/18	0.104 ±0.384pCi/l	NE	NE	Natural sources
Radium 226	No	9/24/18	0.0767 ±0.390pCi/l	NE	NE	Natural sources

Microbiological Parameters ²	Violation Yes/No	Sample Date	Level Detected	MCLG	MCL	Sources in Drinking Water
Total coliform bacteria	No	Various	None	NE	5% of samples positive	Naturally present in the environment

¹ Maximum result

² Coliform bacteria is an indicator for possible bacteriological contamination. No coliform bacteria were detected in any samples in 2024.

TABLE 4: 2024 Water Quality Monitoring Report Supplement-SULLIVAN HOLLOW SYSTEM

DETECTED CONTAMINANTS						
Metals, Inorganics, Physical Tests	Violation Yes/No	Sample Date	Level Detected	MCLG	MCL	Sources in Drinking Water
Barium	No	6/24/19	120 ug/l	2,000	MCL = 2,000	Erosion of natural deposits, drilling and metal wastes
Chloride	No	9/29/15	3.32 mg/l	NE	250 mg/l	Naturally occurring in source water
Nitrate	No	6/6/22	0.018 mg/l	10	MCL = 10	Agricultural runoff; natural sources
Copper	No	8/20/23	0.310 mg/l	AL=1.30	AL=1.30	Home plumbing corrosion, natural erosion
Lead	No	8/20/23	0.001 mg/l	AL = 0.015	AL = 0.015	Household plumbing, corrosion, natural sources, wood preservatives
Chromium	No	6/24/19	ND	0.1 mg/l	0.1 mg/l	Erosion of natural deposits
Fluoride	No	9/17/22	0.2 mg/l	2.2 mg/l	202 mg/l	Erosion of natural deposits

Organic Compounds	Violation Yes/No	Sample Date	Level Detected	MCLG	MCL	Sources in Drinking Water
Trihalomethanes	No	2024	0.003 mg/l	NE	MCL=0.08	Disinfection By-Product
Haloacetic Acids	No	2024	0.0013 mg/l	NE	MCL=0.06	Disinfection By-Product

Radiological Parameters	Violation Yes/No	Sample Date	Level Detected	MCLG	MCL	Sources in Drinking Water
Gross Alpha	No	9/29/15	0.948 \pm 1.21 pCi/l	0	MCL=15	Natural sources
Gross Beta	No	9/29/15	0.302 \pm 0.95 pCi/l	0	MCL=15	Natural sources
Radium 228	No	9/29/15	0.0938 \pm 0.339pCi/l	NE	NE	Natural sources
Radium 226	No	9/29/15	0.00 \pm 0.325pCi/l	NE	NE	Natural sources

Microbiological Parameters ²	Violation Yes/No	Sample Date	Level Detected	MCLG	MCL	Sources in Drinking Water
Total coliform bacteria	N	Various	None	NE	5% of samples positive	Naturally present in the environment

¹ 90th percentile

² Coliform bacteria is an indicator for possible bacteriological contamination. No coliform bacteria were detected in any samples in 2024

TABLE 5: 2024 Water Quality Monitoring Report-Report Supplement-SHELTON PARK SYSTEM

DETECTED CONTAMINANTS						
Metals, Inorganics, Physical Tests	Violation Yes/No	Sample Date	Level Detected	MCLG	MCL	Sources in Drinking Water
Barium	No	6/24/19	154 ug/l	2,000	MCL = 2,000	Erosion of natural deposits, drilling and metal wastes
Chloride	No	4/1/15	78.8 mg/l	NE	250 mg/l	Naturally occurring in source water
Nitrate	No	6/6/22	1.05 mg/l	10	MCL = 10	Agricultural runoff; natural sources
Copper	No	8/20/23	0.025 mg/l	AL=1.30	AL=1.30	Home plumbing corrosion, natural erosion
Lead	No	12/27/22	0.0016 mg/l	AL = 0.015	AL = 0.015	Household plumbing, corrosion, natural sources, wood preservatives
Chromium	No	6/24/19	0.009 mg/l	0.1 mg/l	0.1 mg/l	Erosion of natural deposits
Fluoride	No	9/1/22	0.1 mg/l	2.2 mg/l	202 mg/l	Erosion of natural deposits

Organic Compounds	Violation Yes/No	Sample Date	Level Detected	MCLG	MCL	Sources in Drinking Water
Trihalomethanes	No	2024	0.002 mg/l	NE	MCL=0.08	Disinfection By-Product
Haloacetic Acids	No	2024	0.0005 mg/l	NE	MCL=0.06	Disinfection By-Product

Radiological Parameters	Violation Yes/No	Sample Date	Level Detected	MCLG	MCL	Sources in Drinking Water
Gross Alpha	No	4/1/15	2.23 pCi/l	0	MCL=15	Natural sources
Gross Beta	No	4/1/15	1.85 pCi/l	0	MCL=15	Natural sources
Radium 228	No	4/1/15	-0.34 pCi/l	NE	NE	Natural sources
Radium 226	No	4/1/15	0.1 pCi/l	NE	NE	Natural sources

Microbiological Parameters ²	Violation Yes/No	Sample Date	Level Detected	MCLG	MCL	Sources in Drinking Water
Total coliform bacteria	N	Various	None	NE	5% of samples positive	Naturally present in the environment

¹ 90th percentile

² Coliform bacteria is an indicator for possible bacteriological contamination. No coliform bacteria were detected in any samples in 2024.

ABBREVIATIONS AND TERMS

AL = Action Level: the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

CFU/100 ml = Colony Forming Units per 100 milliliters

MCL=Maximum Contaminant Level: the highest level of a contaminant allowed in a drinking water

MCLG= Maximum contaminant level goal: the level of contaminant in a drinking water below which there is no known or expected risk

MFL = Million fibers/liter (Asbestos)

Mg/liter = milligrams per liter (parts per million)

MRDL = Maximum Residential Disinfectant Level: the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of disinfectant is necessary for control of microbial contaminants

MRDLG = Maximum Residual Disinfectant Level Goal: 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

Mrem/yr = millirems per year

uS/cm= Microseimens per centimeter (a unit of conductivity measurement)

ND= Not detected: absent or present at less than testing method detection limit

Ng/liter= nanograms per liter = parts per trillion

NE= Not Established

NR= not regulated

NTU= Nephelometric turbidity Units

pCi/L= Picocuries per liter

LRAA= Location Running Annual Average

SU = Standard Units (ph measurement)

TT = Treatment Technique: a required process intended to reduce the level of contaminant in drinking water

Ug/liter (ug/L) = micrograms per liter (parts per billion)

Variances and Exemption = State or EPA permission not to meet an MCL or treatment techniques under certain conditions.

< = less than

>= less than or equal to

TYPES OF CONTAMINANTS

**Microbial contaminants*, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

**Inorganic Contaminants*, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

**Pesticides and Herbicides*, which may come from a variety of sources such as urban storm water runoff, agricultural and residential uses

**Organic Chemical Contaminants*, including synthetic and volatile organic chemicals, which are by-products of the industrial processes and petroleum production, and can also, come from gas stations, urban storm water runoff, and septic systems

**Radioactive Contaminants*, which can be naturally occurring or be the result of oil and gas production and mining activities



Erie County Water Authority

295 Main Street • Room 350 • Buffalo, NY 14203-2494
716-849-8484 • Fax 716-849-8463

Office of the Commissioners

March 14, 2025

VIA EMAIL

Dear Bulk Water System Customer:

Attached please find the Erie County Water Authority's ("Authority") 2024 Annual Water Quality Report (AWQR) supplement. We are forwarding this supplement to you for your use in preparing your system's report. This report is prepared in accordance with the requirements of both the United States Environmental Protection Agency and the New York State Department of Health.

We are pleased to report that the Authority's water system operated under "NO VARIANCE OR EXEMPTION" from any federal or state regulatory requirements. The Authority is proud of these results and will continue its proactive efforts to provide customers with high quality water at a very affordable rate.

Please note you may find the Authority's Annual Water Quality Reports in their entirety on the Authority's website through the following link, [Annual Water Quality Reports - Erie County Water Authority](#). If you have any questions regarding the content of this report or prefer a paper copy, please contact Sabrina Figler, Director of Water Quality at 716-685-8574 or sfigler@ecwa.org.

Sincerely,

ERIE COUNTY WATER AUTHORITY

Handwritten signature of Jerome D. Schad in black ink.

Jerome D. Schad, Chair

Handwritten signature of Peggy A. LaGree in black ink.

Peggy A. LaGree, Vice Chair

Handwritten signature of Michele M. Iannello in black ink.

Michele M. Iannello, Treasurer

JDS:PAL:MMI:alh

Attachment

Cc: Sabrina Figler, Director of Drinking Water Quality (*via email*)
Earl Wells III, e3 Communications (*via email*)

2024 ANNUAL WATER QUALITY REPORT

ERIE COUNTY WATER AUTHORITY



DETECTED CONTAMINANTS

CONTAMINANT	VIOLATION YES/NO	DATE OF HIGHEST OCCURRENCE	LEVEL DETECTED (Avg/Max); (Range)	UNIT MEASUREMENT	MCLG	REGULATORY LIMIT (MCL, TT OR AL)	LIKELY SOURCE OF CONTAMINATION
Inorganic Contaminants & Physical Tests							
Barium	No	4/24/2024	0.0201-0.0222 mg/L; Average=0.0212mg/L	mg/L	2.0 mg/L	2.0 mg/L	Erosion of natural deposits; discharge of drilling wastes; discharge from metal refineries.
Chloride	No	1/31/2024	15.1-31.7 mg/L; Average=19.3 mg/L	mg/L	NE	250 mg/L	Naturally occurring or indicative of road salt contamination
Chlorine	No	11/12/2024	1.30-1.85 mg/L; Average=1.59 mg/L	mg/L	NA	MRDL=4.0 mg/L	Added for disinfection.
Copper ²	No	8/2024	ND-110 ug/L; 90 th percentile=36.2 ug/L, 0 of 76 above AL	ug/L	1300 ug/L	AL=1300 ug/L	Corrosions of home plumbing systems; natural erosion; leaching from wood preservatives
Fluoride	No	9/22/2024	0.20-1.09 mg/L; Average=0.68 mg/L	mg/L	NA	2.2 mg/L	Erosion of natural deposits; water additive that promotes strong teeth; discharge from aluminum and fertilizer facilities.
Lead ³	No	7/2024	ND-40.1 ug/L; 90 th percentile =7.4 ug/L, 3 of 76 above AL	ug/L	0 ug/L	AL=15 ug/L	Home plumbing corrosion; natural erosion.
Nickel	No	4/24/2024	0.98-1.05 ug/L. Average=1.02 ug/L	ug/L	NE	NR	Nickel enters ground water and surface water by dissolution of rocks and soils, from atmospheric fall out; from biological decay and from waste disposal.
Nitrates	No	5/20/2024	0.19-0.23 mg/L Average = 0.21 mg/L	mg/L	10 mg/L	10 mg/L	Nitrates are naturally present in soils, water, air, and plants. Other sources are fertilizer and sewage runoff.
Manganese	No	2/8/2024	0.0-6.08 ug/L; Average=0.89 ug/L	ug/L	NE	NR	Naturally occurring, indication of landfill contamination.
pH	No	7/22/2024	7.30-8.18; Average=7.97	SU	NE	NR	Naturally occurring; adjusted for corrosion control.
Distribution System Turbidity	No	7/18/2024	0.09-0.96 NTU; Average=0.20 NTU	NTU	NA	TT =<5 NTU	Soil runoff
Entry Point Turbidity ¹	No	1/29/2024	0.13 NTU highest level detected; Lowest monthly % <0.30 NTU=100%	NTU	NA	TT=95% of samples <= 0.30 NTU	Soil runoff
Total Organic Carbon	No	2/7/2024	1.49-2.39 mg/L; Average =1.78 mg/L	mg/L	NA	TT	Naturally occurring in the environment
Disinfection By-products							
Total Trihalomethanes	No	8/19/2024	13.7-62.9 ug/L; LRAA = 52 ⁴	ug/L	NE	LRAA = 80	By-product of water disinfection (chlorination)
Total Haloacetic Acids	No	5/23/2024	8.92-53.2 ug/L; LRAA = 41 ⁴	ug/L	NE	LRAA = 60	By-product of water disinfection (chlorination)
Radiological Contaminants							
Radium 228	No	7/19	ND	pCi/L	NE	NE	Erosion of natural deposits.
Combined Radium 226/228	No	7/19	ND	pCi/L	0	5.0	Erosion of natural deposits.

2024 ANNUAL WATER QUALITY REPORT

ERIE COUNTY WATER AUTHORITY



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. State regulations require that turbidity must always be below 1 NTU in the combined filter effluent. The regulations require that 95% of the entry point turbidity samples collected have measurements below 0.3 NTU. Our highest single system turbidity measurement, 0.130 NTU, for the year occurred in January 29, 2024

2 – The level presented represents the 90th percentile of the 76 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, 76 samples were collected at your water system and the 90th percentile value was the ninth highest sample at 36.2 ug/L.

3 - The 90th percentile value of lead was the ninth highest sample at 7.36 ug/L. The action limit for lead was exceeded at 3 of the 76 sites tested.

4 – This level represents the highest locational running annual average calculated from data collected.

Definitions and Abbreviations:

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 more than 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 in one trillion parts of liquid (parts per trillion - ppt).

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

AL = Action Level: The concentration of the highest contaminant

LRAA = Locational Running Annual Average

ND = Not Detected: Laboratory analysis indicates the constituent is not present

NE = Not Established **NR** = Not Regulated

NA = Not Applicable **SU** = Standard Units

Annual Drinking Water Quality Report for 2024

Salamanca Board of Public Utilities

225 Wildwood Avenue, Salamanca, New York 14779

City of Salamanca, Public Water Supply ID# NY0400349

Town of Great Valley WD #1, Public Water Supply ID# NY0412218 (Killbuck)

Town of Great Valley WD #4, Public Water Supply ID# NY0430052 (Highland Ave.)

Introduction

To comply with State and Federal regulations, the Salamanca Board of Public Utilities 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 **Dennis Hensel at (716) 945-3130**. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled Salamanca Board of Public Utilities' Monthly Commission Meetings.

What are the sources of our water?

In general, the sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, 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 Departments and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water originates from twelve wells, ranging in depth from 50 feet to more than 80 feet. Eleven wells (WF) are located near Water Street in the center of the City of Salamanca. Another well (GV) is located at the extreme eastern boundary of the City near Great Valley Creek. Since natural filtration of the ground water through an extensive sand and gravel aquifer occurs, only chlorination is required prior to distribution to our customers. The storage tanks, which are located on Newton Run in the City of Salamanca, usually contain between 3.5 and 4 million gallons, which equates to 3.5 to 4 days reserve capacity. During 2024, our system did not experience any water use restrictions.

In 2003, the NYS DOH completed a source water assessment for our water system, based on available information. Possible and actual threats to the drinking waters sources were evaluated. The 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 contamination of the source water. It does not mean that the water delivered to consumers is, or will become contaminated. See section "Are contaminants in our drinking water?" for a list of the contaminants that have been detected. The source water assessments provide resource managers with additional information for protecting source waters into the future.

As was mentioned before, our water is derived from twelve wells. The source water assessment has rated the combined susceptibility to contamination for these wells as high from cations/anions (salts, sulfate), enteric viruses, halogenated solvents, herbicides/pesticides, nitrates, other industrial organics and petroleum products; and medium high from enteric bacteria, metals and protozoa. These ratings for the wells are due to their proximity to industrial activities. While the assessment rates our source as being susceptible to enteric bacteria, 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.

A copy of this assessment, including a map of the assessment area, can be obtained by contacting us as noted above.

Facts and Figures

The Salamanca Board of Public Utilities is the supplier of potable water to Customers in the City of Salamanca and in portions of the Townships of Salamanca and Great Valley. There are presently 2,679 service connections, representing an estimated 6,150 potable water users.

The total water produced in 2024 was 333 million gallons. The daily average of water treated and pumped into the distribution system is 1,116,786 gallons per day. Our highest single day was 1,884,900 gallons. The amount of water delivered to customers was nearly 64% of the actual production. The additional quantity of water was used to flush mains, fight fires, for fire training, and leakage. In 2024, water customers were charged \$3.14 per 1,000 gallons of water. Average monthly potable water charges for a family of three should be about \$24.79, or about 83 cents per day. Charges for customers residing in the Townships of Salamanca and Great Valley are presently 127% of those of the City of Salamanca.

Are contaminants in our drinking water?

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include coliform bacteria, inorganic compounds, nitrate, 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. All of this data, though representative, may be more than one year old. Also available at the Salamanca Board of Public Utilities’ business office, is a list of analytical results for parameters where there were no detections.

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 Cattaraugus County Health Department at (716) 701-3386. Information is also available from the EPA website: <https://www.epa.gov/dwreginfo/drinking-water-regulations>.

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Disinfectants							
Chlorine Residual	No	2024	Avg. = .39 (.1 - .68)	mg/l	N/A	MRDL = 4	Water additive used to control microbes.
Inorganic Contaminants							
Arsenic	No	2/16/22	High = .6 (ND - .6)	ug/l	N/A	MCL = 10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
Barium	No	2/16/22	High = 157 (77 - 157)	ug/l	2,000	MCL = 2,000	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Copper ¹ - City of Salamanca & Town Districts	No	6/6/23 to 6/7/23	115 (21 - 241)	ug/l	1,300	AL = 1,300	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead ² - City of Salamanca & Town Districts	No	6/6/23 to 6/7/23	2.6 (ND - 7)	ug/l	0	AL = 15	Corrosion of household plumbing systems; erosion of natural deposits.
Disinfection By-Products							
Total Trihalomethanes - City	No	8/6/24	10.4	ug/l	N/A	MCL = 80	By-product of drinking water disinfection needed to kill harmful organisms. TTHms are formed when source water contains large amounts of organic matter.
- G.V. TWD #4	No	8/8/23	1.7				

Notes:

- 1 - The levels presented represent the 90th 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 90th percentile is equal to or greater than 90% of the copper or lead values detected at your water system. In this case, 20 samples were collected within the City and Town districts and the 90th percentile value for copper was the third highest value, 115 ug/l. The action level for copper was not exceeded at any of the sites tested.
- 2 - The 90th percentile values for lead in the City System and the Town Districts combined was 2.6 ug/l. None of the samples exceeded the action level of 15 ug/l for lead.

Definitions:

Action Level (AL): The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements which a water system must follow.

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.

Micrograms per liter (ug/l): Corresponds to one part of liquid in one billion parts of liquid (parts per billion – ppb).

Milligrams per liter (mg/l): Corresponds to one part of liquid in one million parts of liquid (parts per million – ppm).

N/A: Not applicable.

Non-Detects (ND): Laboratory analysis indicates that the constituent is not present.

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 at values well below the level allowed by the State. Regardless, we are required to provide the following information on lead in drinking water.

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfeed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. The City of Salamanca is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and take steps to reduce your family’s risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, and making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or a galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact the City of Salamanca at (716) 945-3130. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <https://www.epa.gov/safewater/lead>.

Is our water system meeting other rules that govern operations?

On February 22, 2023, the CCHD conducted a sanitary survey of our water systems. Deficiencies were noted and are listed below.

- 1) Individual sample taps for each source at the well field were not available. If necessary, this situation would not allow for “triggered source water monitoring” as required by the US EPA’s Ground Water Rule. However, be advised that in December 2019 we installed taps for half of the well field when the original piping was replaced.
- 2) Water Street Wells and Plant are not properly located or properly protected to meet the requirements of 10NYCRR Part 5 – D.3
- 3) No standby power is provided at either well house. However, we do have a diesel pump at the Water Street treatment plant that can pump chlorinated water but at a rate lower than the average day demand. Due to available storage this should not create a problem unless power remained off for more than a day or a major fire occurred.
- 4) Floor level of existing treatment facility for Great Valley Site is below the 100-year flood plain.

The Board and City have approved moving forward with the relocation of the Water St. wells to the Prey site on CR49, also included in the upgrades is an additional well at the Great Valley site with a new pump house that will be elevated well above the 100-year flood plain. Power generation is included at both sites as well.

Additionally, 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 2024, we did not complete all monitoring or testing for synthetic organic compounds (10NYCRR Subpart 5-1, Table 9C), and therefore cannot be sure of the quality of your drinking water during that time.

Information on Lead Service Line Inventory

A Lead Service Line (LSL) is defined as any portion of pipe that is made of lead which connects the water main to the building inlet. An LSL may be owned by the water system, owned by the property owner, or both. The inventory includes both potable and non-potable SLs within a system. In accordance with the federal Lead and Copper Rule Revisions (LCRR) our system has prepared a lead service line inventory and have made it publicly accessible by contacting the BPU office 225 Wildwood suite 6, Salamanca, NY 14779, where a copy is available for review, addition copies are available by contacting office personnel.

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 some infants can be particularly at risk from infections. These people should seek advice from their health care provider about their drinking water. EPA/DCD 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 saving water is a good idea.

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 costs 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 and helps 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 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 those 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.

Water System Security

The Board of Public Utilities would like to remind residents to remain vigilant of any suspicious activity regarding the water distribution system. Please report any suspicious activity to the Board of Public Utilities or the Salamanca Police Department.

Closing

Thank you for allowing us to continue to provide you and your family with quality drinking water this year. We ask that all our customers help us protect our water sources, which are the heart of the community and our way of life. Please call our office if you have questions.