2024

Village of Albion Water System
Annual Water Quality Report
35 East Bank Street, Albion NY, 14411
Public Water Supply NYID# NY3600596

Including the Towns of: Albion # NY3623006, Barre # NY3630002, Carlton # NY3604569,
Gaines # NY3600597, Kendall 6 # NY3630096, Murray North # NY3622603,
Murray South # NY3630012, Ridgeway A # NY3630044

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.

INTRODUCTION

To comply with State regulations, the Village of Albion 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. 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 Levi Boyer, Chief Operator at 585-682-3962. 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, which are held on the 4th Wednesday of every month, at the village office at 6PM.

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 source is Surface Water from Lake Ontario which is located at the north of Orleans County. During 2024, our system did not experience any restriction of our water source. The water treatment consists of pre-treatment disinfection, up flow clarification, filtration, post disinfection, and fluoridation prior to distribution prior to distribution

SOURCE WATER ASSESSMENT

The New York State Department of Health completed a Source Water Assessment Report for the Village of Albion Water System as a requirement of the Source Water Assessment Program (SWAP). The Executive Summary of the report states that the Great Lakes watershed is exceptionally large and too big for a detailed evaluation in the SWAP. General drinking water concerns for public water supplies which use these sources include: storm generated turbidity, waste water, toxic sediments, shipping related spills, and problems associated with exotic species (e.g., Zebra Mussels-intake clogging and taste and odor problems). The summary below is based on the analysis of the contaminant inventory compiled for the drainage area deemed most likely to impact the drinking water quality of the Village of Albion Water System.

The assessment found a moderate susceptibility to contamination for the source of supply of the Village of Albion Water System. The number of agricultural lands in the assessment area results in elevated potential for Disinfection By-Product precursors, and pesticide contamination. While there are some facilities present, permitted discharges do not likely represent an important threat to source water quality based on their density in the assessment area. There is also noteworthy contamination susceptibility associated with other discrete contaminant sources, and these facilities include: mines/quarries.

FACTS AND FIGURES

Our water system serves approximately 15,000 people in the Village of Albion, Albion/Orleans Correctional Facility, and Towns of Albion, Barre, Carlton, Gaines, Murray and Ridgeway. The total water produced in 2024 was 655,527,000 gallons for an average daily production of 1,795,964 gallons a day. The maximum output for a single day was 2,456,000 gallons. The amount of water delivered to customers was 423,410,173 gallons. An additional 6,914,893 gallons were used in the treatment process and Village buildings. This leaves 225,201,934 gallons (34.35%) unaccounted for as a result of leaks, flushing, fires, and unmetered Village Buildings. Included in the total water delivered, Village residents used 106,868,570 gallons, the Albion/Orleans Correctional Facility 55,531,881 gallons, the Town of Albion 42,202,500 gallons, the Town of Barre 30,997,234 gallons, the Town of Carlton 53,099,085 gallons, the Town of Gaines 88,399,873 gallons, the Town of Murray 41,562,030 gallons, and the Town of Ridgeway 4,750,000 gallons.

In 2024, water customers in the Village of Albion were charged $3.90/1,000 gallons and $33.60 quarterly base charge for an average yearly charge of $492. The Albion/Orleans Correctional Facility were charged $4.65/1,000 gallons and $1200.00 quarterly base charge for an average yearly charge of $299 per occupant. The Town of Albion charged $15.00 for first 500 gallons then $4.88/1,000 gallons afterwards, and a $5.00 quarterly meter charge, for an average yearly charge of $467. The Town of Barre charged $6.00/1,000 gallons and a $15.00 quarter maintenance fee for an average yearly charge of $610. The Town of Carlton charged $18.00 for the first 3,000 gallons and $4.00/1,000 gallons after that for an average yearly charge of $390. The Town of Gaines charged $4.88/1,000 gallons and $16 quarter administration fee for an average yearly charge of $511. The Town of Murray charged $6.25/1,000 gallons and a $10.00 quarter maintenance fee for an average charge of $613. The Town of Ridgeway charged $25.00 for the first 4,000 gallons and $5.90/1,000 gallons up to 20,000 gallons and $5.30/1,000 gallons for amount used over 20,000 gallons for an average charge of $546. These averages are based on total gallons billed by the Towns and Correctional Facilities plus tax levies.

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, turbidity, inorganic compounds, nitrate, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, radiological and synthetic organic compounds. Most of the compounds we analyzed for were not detected in your drinking water.

The table presented 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.

TABLE OF DETECTED CONTAMINANTS

CONTAMINANT	VIOLATION (YES OR NO)	DATE OF SAMPLE	LEVEL DETECTED (AVG/MAX/ RANGE)	UNITS	MCLG	REGULATORY LIMITS (MCL, TT OR AL)	LIKELY SOURCE OF CONTAMINATION
TURBIDITY							
FINISHED WATER [1] (At Entry Point)	NO	Continuous	0.0277 - 0.1498	NTU	N/A	TT-95%<0.3NTU MCL=1.0 NTU	Soil Runoff
DISTRIBUTION SYSTEM (Various Locations)	NO	5 per Week	0.044 - 0.866	NTU	N/A	5 NTU	Sediments in storage tanks and piping
INORGANICS							
BARIUM	NO	8/7/2024	0.026	mg/L	2.0	MCL=2.0 mg/L	Erosion of mineral deposits, discharge from metal refineries
CHROMIUM	NO	8/7/2024	ND	mg/L	0.1	MCL=0.1 mg/L	Erosion of natural deposits, discharge from steel & pulp mills
FLUORIDE	NO	8/7/2024	0.72	mg/L	N/A	N/A	Erosion of mineral deposits
NITRATE	NO	5/8/2024	0.32	mg/L	10	MCL=10 mg/L	Runoff from fertilizer, septic tank leaching, erosion of natural deposits
COPPER	NO	8/12/2023 - 8/17/2023	.036 [2] (0.02 - 0.061)	mg/L	1.3	AL=1.3	Corrosion of household plumbing, leaching of wood preservatives
LEAD	NO	8/12/2023 - 8/17/2023	4.0 [3] (ND - 6.2)	ug/L	0	AL=15	Corrosion of household plumbing, erosion of natural deposits
CHLORIDE	NO	Monthly	36 (32 - 42)	mg/L	N/A	MCL=250 mg/L	Erosion and runoff, naturally occuring, road salt
RADIUM 228	NO	6/16/2022	0.97 (+/- 0.36)	pCi/L	N/A	MCL=5 pCi/L	Erosion of mineral deposits
HARDNESS (Total)	NO	Monthly	127 (118 - 146)	mg/L	N/A	N/A	Dissolved minerals
PFHpA (Perfluoroheptanoic Acid)	NO	3/21/2024	0.93 [5]	ng/L	N/A	MCL=10 ng/L	Industrial chemicals found in many consumer products
PFHxA (Perfluorohexanoic Acid)	NO	3/21/2024	1.3 [5]	ng/L	N/A	MCL=10 ng/L	Industrial chemicals found in many consumer products
PFOA (Perfluorooctanoic Acid)	NO	3/21/2024	1.5 [5]	ng/L	N/A	MCL=10 ng/L	Industrial chemicals found in many consumer products
PFOS (Perfluorooctanesulfonic Acid)	NO	3/21/2024	1.2 [5]	ng/L	N/A	MCL=10 ng/L	Industrial chemicals found in many consumer products
1-4 DIOXANE	NO	3/21/2024	ND	ng/L	N/A	MCL=1 ug/L	Industrial chemical
DISINFECTION AND DISINFECTION BYPRODUCTS							
CHLORINE RESIDUAL (At Entry Point)	NO	Daily	1.39 (0.44 - 2.29)	mg/L	N/A	MRDL=4.0 mg/L	Disinfectant
CHLORINE DIOXIDE	NO	Daily	0.41 (0.01 - 0.75)	mg/L	N/A	MCL=0.8 mg/L	Residual chlorine dioxide
CHLORITE	NO	Daily	0.48 (0.28 - 0.98)	mg/L	0.8	MCL=1.0 mg/L	Byproduct of drinking water disinfection
TRIHALOMETHANES	NO	Annually	20 [4]	ug/L	N/A	MCL=80 ug/L	Byproduct of drinking water disinfection
HALOACETIC ACIDS	NO	Annually	18 [4]	ug/L	N/A	MCL=60 ug/L	Byproduct of drinking water disinfection

PURCHASE SYSTEM DISINFECTION BYPRODUCTS - Samples Collected Quarterly - Same MCLs as Above

	T/ Albion WD	T/ Barre WD	T/ Carlton WD	T/ Gaines WD	Kendall 6 WD	Murray North WD	Murray South WD	Ridgeway A WD
CHLORINE RESIDUAL (Average mg/L)	0.44	0.49	0.57	0.43	0.14	0.29	0.28	0.55
TRIHALOMETHANES [4]	32	31	15	25	35	25	37	39
HALOACETIC ACIDS [4]	21	25	11	14	3	5	14	17

Notes:

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. Our highest single turbidity measurement 0.1498 NTU for the year occurred on 1/27/2024. State regulations require that turbidity must always be below 1 NTU. The regulations require that 95% of the turbidity samples collected have measurements below 0.3 NTU. The levels recorded were within the acceptable range allowed and did not constitute a treatment technique violation.

2 – The level presented represents the 90th percentile of 30 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 30 samples were collected at your water system and the 90th percentile value was 0.036 mg/L. The action level for copper was not exceeded at any of the sites tested.

3 – The level presented represents the 90th percentile of the 30 samples collected, which is, 4.5 ug/L (0.0045 mg/L). The action level for lead was not exceeded at any of the 30 sites tested.

4 – The Village of Albion, and all of its purchase systems, are on reduced monitoring. Therefore, samples for TTHMs and HAA5s were collected only once in August of 2024. For the Village of Albion and the Town of Barre, the higher of two sample sites is reported.

5 – PFOA (perfluorooctanoic acid) and PFOS (perfluorooctanesulfonic acid), collectively (PFAS), caused a range of health effects when studied in animals at high exposure levels. The most consistent findings were effects on the liver and immune system and impaired fetal growth and development. The United States Environmental Protection Agency considers PFAS as having suggestive evidence for causing cancer based on studies of lifetime exposure to high levels of PFAS in animals.

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).

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.

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 Orleans County Health Department at (585) 589-3278.

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.

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. The Village of Albion 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. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking 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, or 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 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. 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?

During 2024, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

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 Village DPW and/or visiting our website at: https://villageofalbionny.gov

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 ON FLUORIDE ADDITION

Our system is one of the many drinking water systems in New York State that provides 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 0.7 mg/l. During 2024, monitoring showed that fluoride levels in your water were within 0.1 mg/l of the target level. None of the monitoring results showed fluoride at levels that approach the 2.2 mg/l MCL for fluoride.

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.
- 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.

SYSTEM IMPROVEMENTS

In 2024, we completed construction of a new fluoride building. This improvement has greatly improved the overall safety for our operators when working with this treatment process. This year we have also started the process of constructing a new 750,000 gallon storage tank, along with new pumps housed in that booster station. The new tank and pumps will improve the quality of water that we deliver. In our continuing efforts to maintain a safe and dependable water supply it may be necessary to make improvements in your water system. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. In 2025, we have plans to repair or replace, at least one of our sand filters, one HS pump, one LS pump. We are also planning on making improvements to our raw water intake, as well as continuing the process of constructing a new filter building.

CLOSING

Thank you for allowing us to continue to provide 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 our community. Please call our office if you have any questions.