

Joint Annual Drinking Water Quality Report 2024
Village of Rushville
P.O. Box 51- 1 Main Street Rushville, NY 14544
Federal ID # 3401164
Middlesex Water District # 1
P.O. Box 147- 1216 Route 245 Main Street Middlesex, NY 14507
Federal ID # 6101265

Introduction

To comply with State regulations, the Village of Rushville and the Middlesex Water District #1, 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. For the Village of Rushville 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. The Town of Middlesex is 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 the third quarter of 2024 we did not fully monitor or test for disinfection by-products and, therefore, cannot be sure of the quality of your drinking water during that time. 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 water utility, please contact **for the Village of Rushville Neal Curtis Water System Operator or the Rushville Village office (585-554-3415) for the Middlesex Water District Alan Williams, Water Superintendent (585-554-6952) or the Middlesex Town Office (585-554-3607)**. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled Village of Rushville or Town of Middlesex board meetings. **The Rushville Village Board meetings are held on the second Monday of the month at 7:00 PM at the Village Hall on Main Street in Rushville. The Middlesex Town Board meetings are held the second Thursday of the month at 7:00 PM at the Town Hall corner of Main and Water Streets in Middlesex.**

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.

The Village of Rushville serves a population of over 2300 people through 311 service connections. The Middlesex Water District serves a population of around 480 people through 178 service connections. Our water source for the Village of Rushville which is treated surface water from Canandaigua Lake, treatment starts at the intake which is located on the east shore of the lake on County Road 11. The 12" intake line extends 150 feet into the lake down over a shale rock ledge to a depth of 50 feet. The water temperature averages 38°F to 40°F. Turbidity at this location is minimized during storm water runoff. Chlorine is added at the intake to control Zebra mussels from plugging the intake. The water is then filtered at the Village's new treatment plant located on County Road 11. The treatment plant is a

Diatomaceous Earth Filtration System. The filters are much like the Diatomaceous Earth filter on a swimming pool only much larger. The filters remove turbidity, micro-organisms, protozoans, viruses, and bacteria that might be present in the raw surface water taken from the lake. Chlorine is also added after the water has been filtered and is usually kept between 1.8 ppm and 2.0 ppm. Chlorine and Turbidity levels are monitored on continuous basis at the plant prior to distribution. This insures the water you receive is top quality every day.

Middlesex Water District #1 purchases it's water from the Village of Rushville. In addition to the tests Rushville performs, the Middlesex Water District #1 also performs weekly tests for Chlorine in our own distribution system to ensure excellent water quality.

The State has completed a source water assessment for this source. This assessment found a moderate susceptibility to contamination for this source of drinking water. The amount of agricultural lands in the assessment area results in elevated potential for protozoa, phosphorus, DBP precursors, and pesticides contamination. There is also a high density of sanitary wastewater discharges which results in elevated susceptibility for numerous contaminant categories. In addition, it appears that the total amount of wastewater discharged to surface water in this assessment area is high enough to further raise the potential for contamination (particularly for protozoa). There are no noteworthy contamination threats associated with other discrete contaminant sources. If you have questions or need a copy of the state report please call the Department of Health Geneva Office 315-789-3030

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, nitrite, 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. 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 Health Department District Office in Geneva at (315-789-3030).**

In order to ensure that tap water is safe to drink, the State and EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The State Health Department's & the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

As the State regulations require, the Village of Rushville and Middlesex Water District #1 routinely test your drinking water for numerous contaminants. These contaminants include: total coliform, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, and synthetic organic compounds. None of the compounds we analyzed for were detected in your drinking water. For your information we have compiled a list in the table below showing what substances were detected in our drinking water during 2024.

TEST RESULTS

	Tested	Violation	Y/N	Detected Level	M.C.L.	M.C.L.G.	Source
Turbidity (NTU)**	Daily	N		.16	TT(<5NTU)	n/a	Soil runoff

Turbidity (NTU)**	Daily	N	100%	TT(95% of samples < 1NTU)	n/a	Soil Runoff
Nitrate (ppm)	12/24	N	.198	10	10	Runoff from fertilizer use, leaching from septic tanks or sewage, erosion of natural deposits.
Chromium (ppm)	7/24	N	<.005	0.1	0.01	Corrosion of metal alloys and Stainless Steel; erosion from Chromium Containing rocks
Coliform: Rushville	Monthly	N	0	n/a	2	Naturally present in the environment.
Coliform: Middlesex(*6)	Monthly	N	positive 10/2/24	n/a	2	Naturally present in the environment.
Barium (ppm)	7/24	N	0.024	2	2	Discharge from metal drilling wastes; discharge from refineries, erosion of natural deposits
Nickel (ppm)	7/24	N	<.005	n/a	n/a	Run off from soil erosion
Fluoride (ppm)	7/24	N	.02	n/a	2.2	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories.
Radium 226 & 228 (pCi/L)	6/18	N	ND	5	0	Erosion of natural deposits
Microcystin (ulg)	8,9/23	N	0	****		Toxin produced by Blue Green Algae

Stage II Testing Middlesex ***

HAA5 (ug/l)	2,5,9,11/24	N	27.5	60	n/a	By product of Chlorination
			(Range of Results 24-34)			
THM (ug/l)	2,5,9,11/24	Y	61	80	n/a	By product of Chlorination
			(Range of results 47-85)			

Stage II Testing Rushville ***

HAA5 (ug/l)	3,6,9,12/24	N	31.25	60	n/a	By product of Chlorination
			(Range of results 26-37)			
THM (ug/l)	3,6,9,12/24	N	59.3	80	n/a	By product of Chlorination
			(Range of results 43-86)			

LEAD & COPPER

Substance (units)	Tested	Action Level	MCLG	Amount Detected	# of sites above Action Level	Typical Source
Lead (ug/l)	7,9/24	15	2.1	6	0*	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	7,9/24	1.3	0.317	1.06	0#	Corrosion of household plumbing;
						Leaching from wood preservatives; erosion of natural deposits

Notes:

** - Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. Our highest single turbidity measurement for the year occurred on (1/26/24) (0.59 NTU). 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. Although (August) was the month when we had the fewest measurements meeting the treatment technique for turbidity, the levels recorded were within the acceptable range allowed and did not constitute a treatment technique violation.

*** This level represents the highest locational running annual average calculated quarterly from data collected.

90 percentile 0 sites out of 10 above the Action Level for Copper (Range of results .03-.53)

* 90 percentile 0 sites out of 10 above the Action Level for Lead (Range of results 1-7)

n/a -not applicable

**** Microcystin is a toxin produced by Blue Green Algae. EPA's 10 day Advisory Level for microcystin is 0.3 ug/L for infants and preschool children. Sampling in 2023 had no detection in finished water.

**** Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

(*6) We had a positive coliform result on 10/2/24. All repeat samples were negative so no further action was required.

Definitions:

Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

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

Maximum Contaminant Level Goal - The "Goal"(MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk 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)

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

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water.

Turbidity in excess of 5 NTU is just noticeable to the average person.

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

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

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. 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. Village of Rushville & Middlesex Water District #1 are 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 **In Rushville call the Village Office (585-554-3415), Neal Curtis Operator**

In Middlesex please call Alan Williams at (585-554-6952), the Middlesex Town Offices at (585-554-3607) or New York State Health Department District Office in Geneva at (315-789-3030). 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>.

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 in Rushville Neal Curtis 585-554-3415 or for Middlesex Water District Alan Williams 585-554-6952.

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; 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 providing your family with clean, quality 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.

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In Middlesex please call Alan Williams at (585-554-6952), the Middlesex Town Offices at (585-554-3607)