WATER QUALITY REPORT

REPORTING YEAR 2024

Provided by the Village of Algonquin

PWS ID#: 111-00-50

Our Commitment

We are pleased to present to you this year's annual water quality report. This report is a snapshot of last year's water quality covering all testing performed between January 1 and December 31, 2024. Included are details about your source of water, what it contains, and how it compares to standards set by regulatory agencies. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water and providing you with this information because informed customers are our best allies.

Where Does Algonquin's Water Come From?

The Village of Algonquin currently draws water from nine wells. Wells 5, 6, 7, and 11 are all shallow wells located on the east side of the Fox River. Water from these wells is treated at Water Treatment Plant 1, on Souwanas Trail. Wells 8 and 9 are shallow wells that provide water to Water Treatment Plant 2, on Wynnfield Drive on the west side of the Fox River in Willoughby Farms Subdivision. Well 10 is a deep well (approximately 1,300 feet) that also provides water to Water Treatment Plant 2. Wells 13 and 15 are shallow wells that provide water to Water Treatment Plant 3, on the corner of Square Barn Road and Academic Drive on the far west side of town. The combined capacity of the three water treatment facilities is 11 million gallons per day.

How Long Can I Store Drinking Water?

The disinfectant in drinking water will eventually dissipate even in a closed container. If that container housed bacteria prior to filling up with the tap water the bacteria may continue to grow once the disinfectant has dissipated. Some experts believe that water could be stored up to six months before needing to be replaced. Refrigeration will help slow the bacterial growth.

Lead in Home Plumbing

If present, elevated levels of 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. We are responsible for providing high-quality drinking water, but we cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at (800) 426-4791 or www.epa.gov/safewater/lead

Community Participation

The public is encouraged to attend Algonquin Village Board meetings, which are held on the first and third Tuesday of each month at 7:30 p.m. at the Village Boardroom, 2200 Harnish Drive.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. Environmental Protection Agency (EPA)/ Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or http://water.epa.gov/ drink/hotline.

PFAS Sampling Initiative

In 2023 our public water system was sampled as part of the State of Illinois PFAS Statewide Investigation. After receiving this result, we retested the well and it is back in service. Follow up monitoring is being conducted. For more information about PFAS health advisories, visit https://epa.illinois.gov/ topics/water-quality/pfas.html.

Questions?

For more information about this report, or for any questions relating to your drinking water, please call Jason Meyer, Chief Water Operator, at **(847) 658-2754, ext. 4420.**

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk. 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, in some cases radioactive material, and substances resulting from the presence of animals or from human activity.

Substances that may be present in source water include:
Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife; Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater 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 agriculture, urban stormwater runoff, and residential uses; Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and may also come from gas stations, urban stormwater runoff, and septic systems; Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities. These substances are the reason your water is meticulously tested and treated by the Village. For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Tip Top Tap

The most common signs that your faucet or sink is affecting the quality of your drinking water are discolored water, sink or faucet stains, a buildup of particles, unusual odors or tastes, and a reduced flow of water. The solutions to these problems may be in your hands.

Kitchen Sink and Drain

Hand washing, soap scum buildup, and the handling of raw meats and vegetables can contaminate your sink. Clogged drains can lead to unclean sinks and backed up water in which bacteria (i.e., pink- and black-colored slime growth) can grow and contaminate the sink area and faucet, causing a rotten egg odor. Disinfect and clean the sink and drain area regularly. Also, flush regularly with hot water.

Faucets, Screens, and Aerators

Chemicals and bacteria can splash and accumulate on the faucet screen and aerator, which are located on the tip of faucets, and can collect particles like sediment and minerals resulting in a decreased flow from the faucet. Clean and disinfect the aerators or screens on a regular basis. Check with your plumber if you find particles in the faucet screen as they could be pieces of plastic from the hot water heater dip tube. Faucet gaskets can break down and cause black, oily slime. If you find this slime, replace the faucet gasket with a higher-quality product. White scaling or hard deposits on faucets and showerheads may be caused by hard water or water with high levels of calcium carbonate. Clean these fixtures with vinegar or use water softening to reduce the calcium carbonate levels for the hot water system.

Source Water Assessment

Based on information obtained in a well site survey published in 1990 by the Illinois EPA, 12 possible problem sites were identified within the survey area of Algonquin. Furthermore, information provided by the Leaking Underground Storage Tank and Remedial Project Management Sections of the Illinois EPA indicated several additional sites with ongoing remediation that may be of concern. The Illinois EPA has determined that Algonquin's source water is not susceptible to contamination. This determination is based on a number of criteria: monitoring conducted at the wells, monitoring conducted at the entry point to the distribution system, and the available hydrogeologic data. The Illinois Environmental Protection Act provides minimum protection zones of 200 feet for Algonquin's wells. The Illinois EPA regulates minimum protection zones. To further minimize the risk to Algonquin's groundwater supply, the Illinois EPA recommends three additional activities.

First, the Village may wish to enact a maximum setback zone ordinance. These ordinances are authorized by the Illinois Environmental Protection Act and allow county and municipal officials the opportunity to provide additional protection up to a fixed distance, normally 1,000 feet, from their wells. Algonquin has recently adopted its own set wellhead protection zone ordinance.

Second, the water supply staff may wish to revisit their contingency planning documents, if available. Contingency planning documents are a primary means to ensure that, through emergency preparedness, a Village will minimize its risk of being without safe, adequate water. Algonquin has a current contingency plan document on file.

Finally, the water supply staff is encouraged to review their cross-connection control program to ensure that it remains current and viable. Cross-connections to either the water treatment plant (for example, at bulk water loading stations) or in the distribution system may negate all source water protection initiatives provided by the Village. This past year, the Algonquin Water Department has reviewed and updated our cross-connection control program. This ensures that our water system is receiving the best possible protection from contaminants that could be introduced to our system by backpressure or backsiphoning.

To receive a copy of the source water assessment, contact the Algonquin Village Water Department at **(847) 658-2754.**

Water Filtration/Treatment Devices

A smell of rotten eggs can be a sign of bacteria on the filters or in the treatment system. The system can also become clogged over time so regular filter replacement is important. (Remember to replace your refrigerator filter!)

> "When the well is dry, we know the worth of water."
>
> —*Benjamin Franklin*

Definitions

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 contaminants.

MRDL (Maximum Residual Disinfectant Level): 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.

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

MCL (Maximum Contaminant Level): 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.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

AL (Action Level): The concentration of a contaminant that triggers treatment or other required actions by the water supply.

MCLG (Maximum Contaminant Level Goal): 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.

pCi/L (picocuries per liter): A measure of radioactivity.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NA: Not applicable.

Lead Service Line Removal Progress

In 2018, the Village of Algonquin initiated a proactive effort to improve the safety and quality of its drinking water system by beginning the removal of lead service lines. This project is part of the Village's long-term infrastructure improvement strategy and its commitment to public health. As of today, a total of 146 lead service lines have been successfully removed from the water system. This ongoing effort continues to enhance water safety for residents and supports compliance with state and federal guidelines regarding lead in drinking water.

Replacing Lead Service Line With Copper Service Line

BY THE NUMBERS

5.1 TRILLION
The dollar value needed to keep water, wastewater, and stormwater systems in good repair.

12 THOUSAND
The average amount in gallons of water used to produce one megawatt-hour of electricity.

2
How often in minutes a water main breaks.

47.5 TRILLION
The amount in gallons of water used to meet U.S. electric power needs in 2020.

1.7 TRILLION
The gallons of drinking water lost each year to faulty, aging, or leaky pipes.

33
The percentage of water sector employees who will be eligible to retire in 2033.

Special Notice for Availability of Unregulated Contaminant Monitoring Data

Important Information About Your Drinking Water

Availability of Monitoring Data for Unregulated Contaminants for The Village of Algonquin

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 in examining the results, please contact Jason Meyer at 847-658-1158 or 110 Mitchard Way, Algonquin, Illinois 60102.

This notice is being sent to you by The Village of Algonquin. State Water System ID#: 111-00-50.
Date distributed: 05-21-2025

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels. The percentage of total organic carbon (TOC) removal was measured each month, and the system met all TOC removal requirements set by Illinois EPA. The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

Regulated Contaminants

Contaminant	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	2024	2	1.0-2.0	MRDLG=4	MRDL=4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2024	32	5.58-55.5	No goal for total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2024	74	3.39-87.9	No goal for total	80	ppb	N	By-product of drinking water disinfection.
Barium	2024	0.093	0.093-0.093	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2024	0.603	0.603-0.603	4	4	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Iron	2024	0.18	0-0.18		1	ppm	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Manganese	2024	29	0-29	150	150	ppb	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Nitrate (measured as Nitrogen)	2024	2	0-1.7	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium	2024	47	47-47			ppb	N	Erosion from naturally occurring deposits. Used in water softener regeneration.
Combined Radium (226/228)	2024	3	3.04-3.04	0	5	pCi/L	N	Erosion of natural deposits.
Gross alpha excluding radon and uranium	2024	2	2.46-2.46	10	15	pCi/L	N	Erosion of natural deposits.

Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely source of Contamination
0	1 Positive monthly sample.	1		0	N	Naturally present in the environment.

Lead and Copper

Substance	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2024	1.3	1.3	1.6	8	ppm	N	Corrosion of household plumbing systems; Erosion of natural deposits.
Lead	2024	0	15	4.9	2	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Lead and Copper Definitions:

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

Action Level Goal (ALG): The level of the contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

Our community water supply has developed a service line material inventory. To obtain a copy of the systems service line inventory visit: www.algonquin.org

Notes:

1. Iron is not currently regulated by the U.S. EPA; however, the state has set an MCL for supplies serving a population of 1,000 or more.
2. Manganese is not currently regulated by the U.S. EPA; however the state has set an MCL for supplies serving a population of 1,000 or more.
3. Sodium is not currently regulated by the U.S. EPA; however, the state has set an MCL for this contaminant for supplies serving a population of 1,000 or more.