

2023 Water Quality Report City of Arcola - IL0410050

The water you drink

Annual Water Quality Report for the period of January 1 to December 31, 2023.

This report is intended to provide you with important information about your drinking water and the efforts made by the City of Arcola to provide safe drinking water.

Drinking water, including bottled water, may reasonably be 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 and potential health effects can be obtained by calling the EPA Safe Drinking Water Hotline at (800) 426-4791.

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. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Sources of water

The City of Arcola receives water solely from the Champaign Division of Illinois-American Water Company (IAWC) through the Arcola-Tuscola water transmission line.

The Arcola/Tuscola Water Transmission Main receives its water from the Champaign County District of Illinois American Water Co. The source of supply for the Champaign County District is groundwater. Currently 21 wells deliver water for treatment to two lime softening plants: the Mattis Avenue Plant, located in Champaign, and the Bradley Ave plant, located West of Champaign. The wells are primarily located in the Mahomet Sands Aquifer and supply both plants. The wells range from 208 to 366 feet in depth and are protected from surface contamination by geologic barriers in the aquifers. An aquifer is a porous underground formation (such as sand and gravel) that is saturated with water and is protected from surface contamination by geologic barriers.

The Illinois Environmental Protection Agency (IEPA) has determined that Illinois American Company- Champaign wells are not susceptible to IOC, VOC, and SOC contamination. This determination is based on a number of criteria including: monitoring conducted at the wells; monitoring conducted at the entry point to the distribution system; and the available hydro geologic data for the wells.

The Illinois Environmental Protection Agency (IEPA) has completed a source water assessment for the Champaign system and a copy is available upon request by contacting the Customer Service Center for Illinois American Water at 1-800-422-2782. To view a summary version of the completed Source Water Assessments, including importance of Source Water Efforts, you may access the IEPA website at <http://dataservices.epa.illinois.gov/swap/factsheet.aspx>

Information about *all* drinking water

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 activity.

Contaminants 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 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 agriculture, urban storm water runoff and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of 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.

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. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population.

Important Health Information

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 about drinking water from their health care providers. EPA/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 (800-426-4791).

Lead

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 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 2 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 or at <http://www.epa.gov/safewater/lead>.

Your questions are welcome.

The report will not be mailed out. A copy may be obtained by contacting Arcola City Hall at 268-4966. If you have any questions, please contact Darren Poorman at 217-268-4966. The Arcola City Council Meetings are on the 1st and 3rd Monday of the month. Information about contaminants and other water quality issues can be obtained by calling the USEPA's Safe Drinking Water Hotline, 800-246-4791.

How to Read the Following Table

Both IAWC and the City of Arcola conduct extensive monitoring to ensure that your water meets all water quality standards. The results of our monitoring are reported in the data tables. While most monitoring was conducted in 2022, certain substances are monitored less than once per year because the levels do not change frequently.

To view a summary version of the completed Source Water Assessments, including: Importance of Source Water; Susceptibility to Contamination Determination; and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois EPA website at <http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl>.

For help with interpreting these tables, see the "Table Definitions" section and footnotes.

Regulated & Unregulated Substances - This Section data provided by Illinois American Water

Coliform Bacteria	Date Sampled	Maximum Containment Level Goal	Total Coliform Maximum Containment Level	Highest no. of Positive Cases	Fecal Coliform or E. Coli Maximum Containment Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
Coliform Bacteria	2019	0	5% of Monthly sample are positive	0.8	Fecal coliform or E. Coli MCL: a routine sample and a repeat sample are total coliform positive, and one is also fecal coliform or E. Coli positive	1	N	Naturally present in the environment

1. *Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. Illinois American Water (IAWC) found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, IAWC is required to conduct assessments to identify problems and to correct any problems that were found during the assessment. During the past year IAWC was required one Level 1 Assessment. One Level 1 Assessment was completed. In addition, no corrective actions were required. IAWC has reported the highest percentage of positive samples in any month. For the entire year, 0.2% of all samples collected were positive for total coliform.*

Substance (Units)	Date Sampled	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Compliance Achieved	Typical Source
Arsenic (ppb)	2021	1	0-1	0	10	Yes	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Fluoride (ppm)	2021	0.6	0.57-0.60	4	4	Yes	Erosion of natural deposits; Water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

2. *Fluoride is added to the water supply to help promote strong teeth. The Illinois Department of Public Health recommends a fluoride level of 0.7 mg/L.*

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Compliance Achieved	Likely Source of Contamination
Combined Radium 226/228	2018	1.512	1.512-1.512	0	5	pCi/L	Yes	Erosion of natural deposits.
Gross Alpha Excluding Radon and Uranium	2018	1.24	1.24-1.24	0	15	pCi/L	Yes	Erosion of natural deposits.

Substance (Units)	Date Sampled	Highest Level Detected	Range of Detection	Typical Source
Sodium (ppm)	2021	45.1	40.1-45.	Erosion of naturally occurring deposits; Used in water softener regeneration

3. There is no state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult a physician about this level of sodium in the water.

Unregulated Contaminant Monitoring Rule 4	Date Sampled	Average Result	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Lithium	2023	11.4	9.10 to 13.7			Ppb	N	Natural occurring metal that may concentrate in brine waters, lithium salts are used in pharmaceuticals, used in electrochemical cells, batteries, and in organic synthesis.
Manganese	2019	4	0 to 19			ppb	N	Naturally-occurring element, largely used in aluminum alloy production. Essential dietary element.

4. Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. An MCL for these substances has not been established by either state or federal regulations, nor has mandatory health effects language.

Inorganic Chemicals – This section provided by the City of Arcola Water Department

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Typical Source
Copper	2023	1.3	1.3	0.0711	0	ppm	N	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems.
Lead	2023	0	15	6.65	1	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Disinfectants/Disinfection By-Product

Disinfectants and Disinfection By-products	Date Sampled	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Typical Source
Chlorine	2023	1.8	0.5 – 2	MRDLG =4	MRDL = 4	ppm	N	Water additive used to control microbes.
Halocetic Acids (HAA5)	2023	18	14 – 24.6	No Goal for the Total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2023	71	58.7 – 84	No Goal for the Total	80	ppb	N	By-product of drinking water disinfection.

5. Chlorine and chloramines are disinfecting agents added to control microbes that otherwise could cause waterborne diseases or other water quality concerns. Most water systems in Illinois are required by law to add either chlorine or chloramines. Levels well in excess of the MDRL could cause irritation of the eyes or nose in some people. The values reported reflect multiple locations in the service area.

Note: The state requires monitoring of certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore some of this data may be more than one year old.

-Footnotes-

Beta/Photon emitters The MCL for Beta/Photon emitters is written as 4 millirem/year (a measure of rate of radioactive decay). The EPA considers 50 pCi/L as the level of concern for beta emitters.

Chlorine and Chloramines are disinfecting agents added to control microbes that otherwise could cause waterborne diseases or other water quality concerns. Most water systems in Illinois are required by law to add either chlorine or chloramines. Levels well in excess of the MCL could cause irritation of the eyes or nose in some people.

Fluoride Fluoride is added to the water supply to help promote strong teeth. The Illinois Department of Public Health recommends an optimal fluoride level of 0.9 mg/L to 1.2 mg/L.

Lead & Copper Compliance with the Lead and Copper Rule (LCR) is determined by the levels of lead and copper found in samples taken from customers' taps. LCR requirements are met if the 90th percentile of all samples taken does not exceed the action level of 15 ppb for lead or 1.300 ppm for copper. The "amount detected" reported in the data table refers to the level at the 90th percentile sample.

Sodium There is no state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult a physician about this level of sodium in the water.

N-Nitro-Pyrrolidine (NYPR) A MCL for this substance has not been established by either state or federal regulations, nor has mandatory health effects language. The purpose for monitoring this substance is to assist the USEPA in determining the occurrence of unregulated contaminants in drinking water, and whether future regulation is warranted.

Unregulated Contaminants A MCL for this substance has not been established by either state or federal regulations, nor has mandatory health effects language. The purpose for monitoring this substance is to assist the USEPA in determining the occurrence of unregulated contaminants in drinking water, and whether future regulation is warranted.

-Definition of Terms-

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

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 using the best available treatment technology.

Maximum Residual Disinfectant Level (MRDL): The highest level of disinfectant allowed in drinking water.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of contaminant in drinking water below which there is no known or expected risk to health. MRDLG's allow for a margin of safety.

Amount Detected: Unless otherwise noted in the footnotes, an average of all sample result of the year, or results from a single sample if only one was collected. If multiple entry points exist, the data from the entry point with the highest value is reported.

Range of Detections: The range of individual sample results, from lowest to highest that were collected during the sample period.

Compliance Achieved: Indicated that the levels found were all within the allowable levels as determined by the EPA.

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

Ppb or ug/l- Parts per billion or micrograms per litre: one ounce in 7,350,000 gallons of water

ppm or mg/l- Parts per million or milligrams per litre: one ounce in 7,350 gallons of water

PCi/l – Picocuries per liter, Measurement of the natural rate of disintegration of radioactive contaminants in water (also beta particles)

nd: Not detected.

n/a: Not applicable.

Violation Table

Consumer Confidence Rule			
The Consumer Confidence Rule requires community water systems to prepare and provide their customers annual consumer confidence reports on the quality of the water delivered by the system.			
Violation Type	Violation Begin	Violation End	Violation Explanation
None			

NOTE: Copies of this report will not be mailed to individual customers this year. Copies are available online at <https://www.arcolaininois.org> or may be picked up at Arcola City Hall, 114 N. Locust, Arcola, IL.

Spanish- Este informe contiene información muy importante. Tradúscalo ó hable con alguien que lo entienda bien.