



**MCHENRY
IL1110600**

**Annual Water Quality
Report for the period
of
January 1, 2024, to
December 31, 2024**

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

The source of drinking water used by MCHENRY is Ground Water.

For more information regarding this report, please contact:

**Name: Russell Ruzicka
Phone: 815-578-1303**

*Este informe contiene información muy importante sobre el agua que usted bebe.
Tradúzcalo ó hable con alguien que lo entienda bien.*

City of McHenry 2025 Annual Drinking Water Quality Report

Source of 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.

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 about contaminants and potential health effects can be obtained by calling the EPAs 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. Some people may be more vulnerable to contaminants 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 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 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. The drinking water supplier is 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 Standard Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water, you may wish to have your water tested, contact Russell Ruzicka at (815-578-1303).

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>.

SOURCE WATER INFORMATION

Source Water Name	Type of Water	Location
Well 2 (20207)	Groundwater	105 N. Green Street
Well 3 (20208)	Groundwater	S. Green Street at Iron Removal Plant
Well 5 (20210)	Groundwater	1401 Beach Road
Well 6 (20211)	Groundwater	Approximately 100 feet east of Tap 02
Well 7 (00214)	Groundwater	115 S. Crystal Lake Road outside of Water Plant
Well 8 (00674)	Groundwater	W Plant 3 Approximately 105 feet on Malibu Court
Well 9 (00874)	Groundwater	150' E of Water Plant 4
Well 10 (01099)	Groundwater	2007 Pine Street

SOURCE WATER ASSESSMENT

We want our valued customers to be informed about their water quality. If you would like to learn more, please feel welcome to attend any of our regularly scheduled meetings. The source water assessment for our supply has been completed by the Illinois EPA. If you would like a copy of this information, please stop by the City Municipal Center or call our Water Division at 815-578-1303. 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>.

VULNERABILITY WAIVER

Due to favorable monitoring history, aquifer characteristics, and inventory of potential sources of contamination, our water supply was issued a **Vulnerability Waiver Renewal** for **TP05** (WL00214+WL00674) and **TP06** (WL00874+WL01099). **The Vulnerability Waiver is in effect from January 1, 2023, to December 31, 2025.** The renewal of this waiver is conditional upon required sampling and sample results.

WATER QUALITY TEST RESULTS

Definitions: The following table contains scientific terms and measures, some of which may require explanation.

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

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

Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

Maximum Contaminant Level or 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 Contaminant Level or 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 or 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 or 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 contaminants.

MREM: millirems per year (a measure of radiation absorbed by the body).

N/A: not applicable.

ppm: milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

ppb: micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

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

2024 REGULATED CONTAMINANTS DETECTED

LEAD AND COPPER

Health Effects: 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. The City of McHenry is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize 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>

Copper Range: 24 ppb to 1600 ppb

Lead Range: <1.0 ppb to 20 ppb

To obtain a copy of the system's lead tap sampling data: rruzicka@cityofmchenry.org 815-578-1303

Our Community Water Supply has developed a service line material inventory.

To obtain a copy of the system's service line inventory: https://www.cityofmchenry.org/your_government/departments/public_works/lead_service_line.php

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90 th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	09/13/2023	1.3	1.3	1	2	ppm	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	09/13/2023	0	15	3	1	ppb	No	Corrosion of household plumbing systems; Erosion of natural deposits.

**Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.*

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	No	Naturally present in the environment.

REGULATED CONTAMINANTS

Disinfectants & Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	2024	1	0.9 – 1	MRDLG=4	MRDL=4	ppm	No	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2024	13	1.04 – 11.27	No goal for the total	60	ppb	No	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2024	29	7.22 – 30	No goal for the total	80	ppb	No	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	11/30/2021	1.1	0 - 1.1	0	10	ppb	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2024	0.15	0.078 – 0.15	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2024	0.776	0.534 – 0.776	4	4.0	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Iron	2024	1.3	0 – 1.3	N/A	1.0	ppm	No	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Manganese	2024	19	0 – 19	150	150	ppb	No	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Nitrate [measured as Nitrogen]	2024	0.32	0 - 0.32	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	2024	4.5	0 – 4.5	50	50	ppb	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.

Sodium	2024	92	15 – 92	N/A	N/A	ppb	No	Erosion from naturally occurring deposits; Used in water softener regeneration.
Zinc	2024	0.016	0 - 0.016	5	5	ppm	No	This contaminant is not currently regulated by the USEPA. However, the state regulates. Naturally occurring; discharge from metal
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contamination
Combined Radium 226/228	2024	1	1 – 1	0	5	pCi/L	No	Erosion of natural deposits.
Gross alpha excluding radon and uranium	2024	7.23	7.23 – 7.23	0	15	pCi/L	No	Erosion of natural deposits.
Volatile Organic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contamination
Carbon Tetrachloride	2020	0.97	0 – 0.97	0	5	ppb	No	Discharge from chemical plants and other industrial activities.
Unregulated Contaminant Monitoring Rule (UCMR5)	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contamination
PFBS	2023	0.0039	0.0027 – 0.0039	See Footnote 3	See Footnote 6	ppt	No	PFAS are a group of synthetic chemicals used in a wide range of consumer products and industrial applications including non-stick cookware, water-repellent clothing, stain resistant fabrics and carpets, cosmetics, firefighting foams, electroplating, and products that resist grease, water, and oil. PFAS are found in the blood of people and animals and in water, air, fish, and soil at locations across the United States and world.

FOOTNOTES

1. Not all sample results may have been used for calculating the "Highest Level Detected" because some results may be part of an evaluation to determine where compliance sampling should occur in the future.
2. 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.
3. Unregulated Contaminants - A maximum contaminant level (MCL) for this contaminant has not been established by either state or federal regulations, nor has mandatory health effects language been set. The purpose of unregulated contaminant monitoring is to assist USEPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.
4. Sodium - There is not a 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.
5. The source water assessment for our supply has been completed by the Illinois EPA. If you would like a copy of this information, please call our Water Division at 815-363-2186. To view a summary version of the completed Source Water Assessments, including the 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>
6. There are regularly scheduled City Council Meetings held on Mondays at 7:00 p.m. for public participation in the decision making process that may affect the quality of the water. These meetings are held at the Municipal Center located at 333 S. Green Street. Please contact the Municipal Center at 815-363-2100 for dates and agenda schedules.
7. All raw water sampling data is available upon request. This data is for emergency back wells not used in normal operations.
8. All sample results are available upon request.

PFAS

In 2020/2021, our Community Water System (CWS) was sampled as part of the ongoing State of Illinois PFAS Statewide Investigation. Results from this sampling indicated PFAS were detected in our drinking water well below the health advisory level established by the Illinois EPA. Follow-up monitoring is being conducted. For more information about PFAS health advisories, please visit www2.illinois.gov/epa/topics/water-quality/pfas/Pages/pfas-healthadvisory.aspx

APPENDIX A

TP01 – Sampled 2/9/2022		
PFAS Analyte (Acronym)	Guidance Level	Sample Results
Perfluorobutanesulfonic acid (PFBS)	140,000 ng/L (0.14 mg/L)	2.6
Perfluoroheptanoic acid (PFHpA)	----- ^a	ND
Perfluorohexanesulfonic acid (PFHxS)	140 ng/L (0.00014 mg/L)	ND
Perfluorononanoic acid (PFNA)	21 ng/L (0.000021 mg/L)	ND
Perfluorooctanesulfonic acid (PFOS)	14 ng/L (0.000014 mg/L)	ND
Perfluorooctanoic acid (PFOA)	2 ng/L (0.000002 mg/L)	ND
Perfluorodecanoic acid (PFDA)	----- ^a	ND
Perfluorododecanoic acid (PFDoA)	----- ^a	ND
Perfluorohexanoic acid (PFHxA)	560,000 ng/L (0.56 mg/L)	ND
Perfluorotetradecanoic acid (PFTA)	----- ^a	ND
Perfluorotridecanoic acid (PFTrDA)	----- ^a	ND
Perfluoroundecanoic acid (PFUnA)	----- ^a	ND
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	----- ^a	ND
9-chlorohexadecafluoro-3-xanone-1-sulfonic acid (9Cl-PF3ONS)	----- ^a	ND
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	----- ^a	ND
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	----- ^a	ND
Hexafluoropropylene oxide dimer acid (HFPO-DA)	560 ng/L (0.00056 mg/L)	ND
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	----- ^a	ND

^a No toxicity criteria available

Minimum Reporting Level (MRL) = 2.0 ng/L

ND = Not Detected

Nanograms per Liter (ng/L) = Part per Trillion (ppt)