

WATER QUALITY REPORT

2023



Source Water Assessment Summary

The Village of Plainfield purchases Lake Michigan Water from the City of Chicago. We want our valued customers to be informed about their water quality. If you would like to learn more, please attend one of the Village's regularly scheduled board meetings at 7:00 p.m. on the first and third Monday of each month, at the Village Hall, 24401 W. Lockport Street, in Downtown Plainfield. If you have questions or concerns regarding this information, please contact the Water Division at (815) 436-3577.

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 Environmental Protection Agency (IEPA) website at epa.illinois.gov/topics/water-quality/swap.html.

The Illinois Environmental Protection Agency (IEPA) considers all surface water sources of the community water supply to be susceptible to potential pollution problems. The very nature of surface water allows contaminants to migrate into the intake with no protection only dilution. This is the reason for mandatory treatment of all surface water supplies in Illinois. Chicago's offshore intakes are located at a distance that shoreline impacts are not usually considered a factor on water quality. At certain times of the year, however, the potential for contamination exists due to wet-weather flows and river reversals. In addition, the placement of the crib structures may serve to attract waterfowl, gulls, and terns that frequent the Great Lakes area, thereby concentrating fecal deposits at the intake and thus compromising the source water quality. Conversely, the shore intakes are highly susceptible to storm water runoff, marinas, and shoreline point sources due to the influx of groundwater to the lake.

Educational Statements for Plainfield's 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, inorganic contaminants, pesticides and herbicides, organic chemical contaminants, and radioactive contaminants.

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 EPA's Safe Drinking Water Hotline at (800) 426-4791. In order to ensure that tap water is safe to drink, the 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.

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 compounds associated with service lines and home plumbing. The Village of Plainfield 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 are available from the Safe Drinking Water Hotline and online at [epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water](https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water).

Water Quality Table Definitions

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers additional treatment measures by the public water system.

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 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 high level of 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 contaminants.

Nephelometric Turbidity Unit (NTU): Used to measure the cloudiness of water.

pCi/l: Picocuries per liter.

ppb: Parts Per Billion. One part per billion is comparable to one penny in \$10,000,000.

ppm: Parts Per Million. Equivalent to milligrams per liter. One part per million is comparable to one penny out of \$10,000.

ug/l: Unigrams per liter.

Water Quality Table

Educational Footnotes

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

Radium/Gross Alpha: May be naturally occurring or the result of oil and gas production and mining activities.

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 the level of sodium in the water.

Turbidity: Turbidity is a measurement of the cloudiness of water. It is monitored because it is a good indicator of water quality and the effectiveness of the filtration system and disinfectants.

Violation Table for Lead and Copper Rule

The lead and copper rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.

Violation Type: Lead consumer notice

Violation Begin: 1/13/2022

Violation End: 3/30/2022

The Village did not provide the results of lead tap water monitoring to consumers at the location the water was tested. Samples will be collected in 2024.



Emergency Wells

The Village of Plainfield maintains emergency wells in the event of a catastrophic loss of our water supply from Lake Michigan. The emergency wells are tested monthly but are not pumped into the drinking water system. None of the Village's wells were utilized as a source of drinking water in 2023. To request a copy of the well test data, please call (815) 436-3577.

2023 Test Data Lake Michigan Test Results

Substance	Highest level or 90th percentile	Range	Units	MCLG	MCL Action Level	Action Level Violation?	Possible source
Barium	0.0195	0.0192-0.0195	ppm	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride	.7	0.65-0.72	ppm	4	4	No	Water additive that promotes strong teeth.
Radium Combined (pCi/L)	0.95	0.83-0.95		0	5	No	Erosion of natural deposits.
Gross Alpha (pCi/L)	3.1	2.8-3.1		0	15	No	Decay of natural and man-made deposits.
Nitrate-Nitrite	.33	0.29-0.33	ppm	10	10	No	Run off from fertilizer use; leaching from septic tanks; erosion of natural deposits.
Nitrate as N	.33	0.29-0.33	ppm	10	0	No	Run off from fertilizer use; leaching from septic tanks; erosion of natural deposits.
Sodium*	8.71	8.43-8.71	ppm	n/a	n/a	No	Erosion of natural deposits; product of water softening
Sulfate	27.8	25.0-27.8	ppm	n/a	n/a	No	Erosion of natural deposits.
Turbidity (NTU/lowest monthly % <0.3 NTU)	Lowest % 100%	100%-100%	NTU	n/a	TT (limit:95% 0.3 NTU)	No	Soil runoff.
Turbidity (NTU/highest single measurement)	0.25	n/a	NTU	n/a	TT (limit 1 NTU)	No	Soil runoff.

*Sodium: This substance is naturally occurring and presently does not have an ideal goal level. The numbers are provided for informational purposes.

2023 Test Data Village of Plainfield Distribution Test Results

Copper and Lead	90th percentile	Date sampled	Units	MCLG	Action Level (AL)	Violation	# sites over AL	Likely source of contamination
Copper	0	2021	ppm	1.3	1	No	2	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems.
Lead	0	2021	ppb	0	15	No	3	Corrosion of household plumbing systems; erosion of natural deposits.

Disinfectants & Disinfection By-products	Highest level detected	Collection date	Range of levels detected	Units	MCLG	MCL	Violation	Likely source of contamination
Chlorine	1.2	2023	1.0-1.3	ppm	MRDLG=4	MRLD=4	No	Water additive used to control microbes.
Haloacetic Acids (HAA5)	18.4	2023	7.7-18.4	ppb	n/a	60	No	By-product of drinking water chlorination.

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.

Total Trihalomethanes (TTHm)	79.8	2023	16.8-79.8	ppb	n/a	80	No	By-product of drinking water chlorination.
------------------------------	------	------	-----------	-----	-----	----	----	--

Village of Plainfield Coliform Bacteria 2023

MCLG	Total Coliform MCL	Highest Number of Positive	Fecal Coliform or E. Coli MCL	Total number of positive E. Coli or Fecal Coliform Samples	Violation	Likely source of contamination
0	5% of monthly samples are positive	4		0	No	Naturally present in the environment.

Water Conservation

The Village of Plainfield's year-round ordinance for outside water use/lawn sprinkling is as follows:

- Lawn sprinkling for even numbered addresses on even numbered calendar days is permitted between the hours of 6–10 a.m. and/or 6–10 p.m.
- Lawn sprinkling for odd numbered addresses on odd numbered calendar days is permitted between the hours of 6–10 a.m. and/or 6–10 p.m.
- The watering of gardens, trees, shrubs, and flowers (by use of a handheld hose or watering can) is permitted anytime.

If there are any questions concerning these water restrictions, please call the Public Works Department at (815) 436–3577.



Village of Plainfield

24401 W. Lockport Street
Plainfield, IL 60544
815-436-7093
plainfieldil.gov

Please contact the Plainfield Public Works Department at (815) 436-3577 with any questions regarding this report.