

Annual Drinking Water Quality Report

Village of Niles

Utility Number IL0312010

Annual Water Quality Report for the period of January 1 to
December 31, 2021

This report is intended to provide you with important information about your drinking water and the efforts made by the Village of Niles water system to provide safe drinking water. The Village of Niles receives water from Lake Michigan through the Morton Grove Niles Water Commission, which in turn receives water from the City of Evanston. For more information regarding this report contact Jack Grana at (847) 588-7900.

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



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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 EPA's 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).

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>.

Source Water Information

Source Water Name	Type of Water	Report Status	Location
CC02-MAIN PS WATER FROM MG-N WATER	SW		
CC03-NAGLE AVE PS. WATER FROM MG-N	SW		

Source Water Assessment Summary

We want our valued customers to be informed about their water quality. The public is welcome to attend our regularly scheduled Village Board meetings held at 1000 Civic Center Drive. Regular meetings of the Village Board of Trustees are held on every fourth Tuesday of each calendar month except in November, when it is held on the third Tuesday of the month, unless the third Tuesday is the week of Thanksgiving, then it is held on the fourth Tuesday, and December when the meeting is held on the second Tuesday, at 7:00 p.m. 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 Niles Public Works Department or call our Water Plant Supervisor at 847-588-7900. 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>.

Source of Water: EVANSTON

The Illinois EPA considers all surface water sources of community water supply to be susceptible to potential pollution. The very nature of surface water allows contaminants to migrate into the intakes with no protection only dilution, which is the reason for mandatory treatment for all surface water supplies in Illinois. All three of Evanston's intakes are located far enough offshore that shoreline impacts are not considered a factor on water quality. However, at certain times of the year the potential for contamination exists due to the proximity of the North Shore Channel and wet-weather flows. In addition, the proximity to a major shipping lane adds to the susceptibility of these three intakes.

Water supply officials from Evanston are active members of the West Shore Water Producers Association. Coordination regarding water quality situations (i.e., spills, tanker leaks, exotic species, etc.) is frequently discussed during the association's quarterly meetings. In addition, the Evanston Water Utility also receives Hazardous Materials Incident Report notifications from the Illinois Emergency Management Agency (IEMA) whenever Lake Michigan is impacted. Lake Michigan, as well as all the great lakes, has many different organizations and associations that are currently working to either maintain or improve water quality. Since the predominant land use within Illinois' boundary of Lake Michigan watershed is urban, a majority of watershed protection activities in the IEPA Source Water Assessment document are aimed at this purpose. Finally, the Evanston Water Utility is in the process of identifying a professional engineering consultant to develop a Source Water Protection Plan (SWPP).

DEFINITIONS

- MCLG - Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.
- MCL - Maximum Contaminant Level: The highest level of a known contaminant allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology.
- 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.
- 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.
- "Range of Detection" represents a range of individual sample results, from lowest to highest, taken during the CCR calendar year.

- “Date of Sample” represents whether the sample was collected during the CCR calendar year or the last time IEPA required samples to be collected. If no date appears, then the sample was collected during the reporting year.
- ppm - Parts Per Million (same as mg/l) – or one ounce in 7,350 gallons of water.
- ppb - Parts Per Billion (same as ug/l) – or one ounce in 7,350,000 gallons of water.
- ppt - parts per trillion
- pCi/L - picocuries per liter of air – the measure of the rate of radioactive decay of radon.
- mrem - millirems per year (a measure of radiation absorbed by the body)
- #pos/mo - This represents the number of positive samples per month.
- %pos/mo - This represents the percentage of positive samples per month.
- AL - Action Level: The level of a contaminant above which certain prescribed treatment techniques must be employed to reduce contaminant risk.
- ND - Not Detectable: Not found at the testing limits.
- NA - Not Applicable.
- TT - Treatment Technique or a required process intended to reduce the level of a contaminant in drinking water.
- %<0.5 NTU - Percent of samples less than .5 NTU.
- “Amount” column is an average of all sample result data collected during the CCR calendar year.
- NTU - Nephelometric Turbidity Unit, used to measure cloudiness in the drinking water.
- 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.

Turbidity is a measurement of the cloudiness of the water. It is monitored because it is a good indicator of water quality and the effectiveness of the filtration system and disinfectants. During the winter months, your water may appear to be turbid, but in fact only contains air bubbles. This is nothing to be concerned about. Run your tap until your water gets cold or simply let the water stand a few minutes for it to clear up.

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

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

Sodium has no MCL. Monitoring is required to provide information to consumers and health officials concerned about sodium intake due to dietary precautions. However, individuals on a sodium-restricted diet should consider consulting a physician.

2021 Regulated Contaminants Detected

Village of Niles Water System

Lead and Copper

Definitions:

- 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.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90 th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Lead	2021	0	15	8.12	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.
Copper	2021	1.3	1.3	0.157	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems

Water Quality Test Results

Regulated Contaminants

Disinfectants & Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
Chlorine	12/31/2021	1.0	0.9 - 1	MRDLG = 4	MRDL = 4	ppm	No	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2021	17	9.64-19.4	No goal for the total	60	ppb	No	By-product of drinking water disinfection
TTHMs (Total Trihalomethanes)	2021	43	20.85-59.3	No goal for the total	80	ppb	No	By-product of drinking water disinfection

2021 Violation Summary

We are pleased to announce that no monitoring, reporting, maximum residual disinfectant level, or maximum contaminant level violations were recorded during 2021.

Since the Village of Niles purchases Lake Michigan water from the City of Evanston, water system information from Evanston is included in our report.

2021 Regulated Contaminants Detected - City of Evanston Water System

Turbidity Data	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Turbidity (NTU Highest Single measurement)	1 NTU	0.17 NTU	No	Soil runoff.
Turbidity (NTU/ Lowest Monthly % ≤ 0.3 NTU)	0.3 NTU	100%	No	Soil runoff.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Violation	Likely Source of Contamination
Barium (ppm)	2021	0.021	0.021 – 0.021	2	2	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride (ppm)	2021	0.7	0.7 – 0.7	4	4.0	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (measured as Nitrogen) (ppm)	2021	0.3	0.3 – 0.3	10	10	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium (ppm)	2021	8	8.1 – 8.1			No	Erosion from naturally occurring deposits. Used in water softener regeneration.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Violation	Likely Source of Contamination
Combined Radium 226/228 (pCi/L)	01/28/2020	1.02	1.02-1.02	0	5	No	Erosion of natural deposits.
Gross alpha excluding radon and uranium (pCi/L)	01/28/2020	0.72	0.72 – 0.72	0	15	No	Erosion of natural Deposits

Total Organic Carbon

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements unless a TOC violation is noted in the violations section.

PFAS- Perfluoroalkyl Substances

Information Statement:

PFAS- In 2021, our PWS was sampled as part of the State of Illinois PFAS Statewide Investigation. Results from this sampling indicated PFAS were detected in our drinking water. PFOA was detected above the health advisory level and PFOS was detected below the health advisory level established by the Illinois EPA. Follow up monitoring is being conducted.

ppt= parts per trillion.

Results can be found <https://www.cityofevanston.org/government/departments/public-works/public-outreach/historical-pfsa-results>

For more information about PFAS health advisories <https://www2.illinois.gov/epa/topics/water-quality/pfas/Pages/pfas-healthadvisory.aspx>

Contaminant	Collection Date	Highest Level Detected	Range of Levels Detected	IEPA Guidance Level	US EPA Guidance Level	Units	Violation	Likely Source of Contamination
Perfluorooctanesulfonic acid (PFOS) (ppt)	2021	2.4	2.2–2.4	14.0 ppt	70.0 ppt	ppt	N	Surfactant for fire-fighting foam, mist suppressant for metal-plating baths, grease and water resistance to materials such as textiles, carpets, and paper. Production ceased in 2002.
Perfluorooctanoic acid (PFOA) (ppt)	2021	2.4	2.2–2.4	2.0 ppt	70.0 ppt	ppt	N	Surfactant for fire-fighting foam, mist suppressant for metal-plating baths, grease and water resistance to materials such as textiles, carpets, and paper. Production ceased in 2015.

Follow up monitoring is being performed quarterly. Additional information can be found at <https://www.cityofevanston.org/pfas>. For more information about PFAS health advisories please visit the following website: <https://www2.illinois.gov/epa/topics/water-quality/pfas/Pages/pfas-healthadvisory.aspx>.