Annual Drinking Water Quality Report
Village of Niles
Utility Number IL0312010

Annual Water Quality Report for the period of January 1 to December 31, 2016

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 source of drinking water used by the Village is Niles is Lake Michigan and is purchased through the City of Chicago. 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 pickup 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 serous 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 Assessment Summary

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 Village Board meetings held at 1000 Civic Center Drive. The regular meetings of the Village Board of Trustees is 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 Services 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: Chicago - The Illinois EPA considers all surface water sources of 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 for 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.

2016 Regulated Contaminants Detected

Village of Niles Water System

Water Quality Test Results

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

- Maximum Contaminant Level Goal (MCLG): 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.
- Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the Maximum Contaminant Level Goal as feasible using the best available treatment technology.
- Highest Level Detected: This column represents the highest single sample reading of a contaminant of all the samples collected in 2015 except where a specific date is indicated.
- Range of Detections: This column represents a range of individual sample results, from lowest to highest that were collected during the CCR calendar year.
- Date of Sample: If a date appears in this column, the Illinois EPA requires monitoring for this contaminant less than once per year because concentrations do not frequently change. If no date appears in the column, monitoring for this contaminant was conducted during the Consumer Confidence Report calendar year.
- Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.
- ND: Contaminant Not Detected at or above the reporting or testing limit.
- N/A: Not applicable
- Maximum Residual Disinfectant Level (MRDL): The highest 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 (MRDLG): The level of disinfectant in drinking water 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.

Unit of Measurement

- 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.
- NTU – Nephelometric Turbidity Unit, used to measure cloudiness in drinking water.
- %<0.3 NTU – Percent of samples less than or equal to 0.3 NTU
- pCi/L – Picocuries per liter, used to measure radioactivity
- Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.

Lead and Copper

Definitions:

- Action Level (AL): 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 a contaminant in drinking water below which there is no known or expected risk to health. ALG's allow for a margin of safety.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Lead	7/21/2014	0	15	8.66	1	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Regulated Contaminants

Disinfectants & Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
Chlorine	12/31/2016	1	0.8 – 1	MRDLG = 4	MRDL = 4	ppm	No	Water additive used to control microbes.
Haloacetic Acids (HAA5)*	2016	15	10.12 – 19.63	No goal for the total	60	ppb	No	By-product of drinking water disinfection
TTHMs (Total Trihalomethanes)	2016	34	17.42 – 40.6	No goal for the total	80	ppb	No	By-product of drinking water disinfection

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

2016 Regulated Contaminants Detected - City of Chicago Water System

Turbidity Data	MCLG	MCL	Highest Level Detected	Range of Levels Detected	Violation	Likely Source of Contamination
Turbidity (NTU/ Lowest Monthly % ≤ 0.3 NTU)	N/A	TT (Limit 0.3 NTU)	100%	100.0%– 100.0%	No	Soil runoff. Lowest monthly percent meeting limit.
Turbidity (NTU Highest Single measurement)	N/A	TT (Limit 1NTU)	0.16	N/A	No	Soil runoff. Highest single measurement.

Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
Barium	2016	0.0206	0.0196 – 0.0206	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Nitrate [as Nitrogen]	2016	0.46	0.40 - 0.46	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Total Nitrate & Nitrite (as Nitrogen)	2016	0.46	0.40 – 0.46	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; 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 set by IEPA.

Unregulated Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
Sulfate	2016	25.7	25.0 – 25.7	N/A	N/A	ppm	N	Erosion of naturally occurring deposits.
Sodium	2016	8.92	8.49 – 8.92	N/A	N/A	ppm	N	Erosion from naturally occurring deposits: Used in water softener regeneration.

State Regulated Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
Fluoride	2016	0.78	0.62 – 0.78	4	4	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source Of Contaminant
Combined Radium 226/228	2/11/2014	0.84	0.50 – 0.84	0	5	pCi/L	N	Erosion of natural deposits.
Gross alpha excluding radon and uranium	2/11/2014	6.6	6.1 – 6.6	0	15	pCi/L	N	Erosion of natural deposits