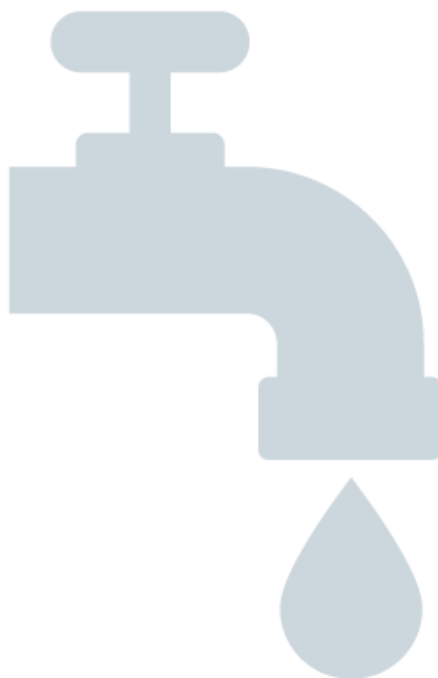




2019 Water Quality Report

Public Works Department

Water Division



Village of Clarendon Hills
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Clarendon Hills, IL 60514
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Report hard copies available at Village Hall 1 N. Prospect Ave and Public Works 452 Park Ave.

The Village of Clarendon Hills wants all of its consumers to be aware of what is being done to insure that the drinking water is safe for you and your family. **The Village of Clarendon Hills currently meets or exceeds all water quality standards established by the United States Environmental Protection Agency and Illinois Environmental Protection Agency.** This report summarizes the quality of water that we provided beginning January 1, 2018 and ending December 31, 2018. Additionally this report will not be mailed but copies will be available upon request at the Village Hall or Public Works. This report is mandated by the EPA and will be released annually by July 1. Included in these details are: where your water comes from, what may be in your water, and how it compares to standards set by regulatory agencies. We are committed to providing the safest drinking water possible.

Who should I contact with questions?

If you have any questions about this report, any questions concerning your water system or would like to participate with drinking water quality please contact Joe Ferrel at (630) 286-4750. Joe Ferrel is available to answer any questions about this report or questions about the way we operate the water system. This report will also be posted on the Village website at <https://www.clarendonhills.us/waterquality> To participate in discussions of water quality, the Village of Clarendon Hills board meetings are the 1st and 3rd Monday of every month.



Where does the water come from?

Lake Michigan is the sole source of water used to provide drinking water for Chicago and many other suburban communities. The Village of Clarendon Hills purchases 100% Lake Michigan water from the DuPage Water Commission and delivers only 100% Lake Michigan water to its customers. The DuPage Water Commission purchases its water from the City of Chicago's Jardine Water Purification Plant, which is a surface water treatment plant.

Since the quality of the raw water source is good, conventional treatment methods of disinfection, coagulation and sedimentation, and sand filtration are adequate for producing water that is free of harmful contaminants. In order to ensure that tap water is safe to drink, USEPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations also establish limits for contaminants in bottled water, which must provide the same protection for public health. The regulations in place restrict the industrial and sewage treatment plant effluents from entering Lake Michigan, thereby reducing the risk of having these contaminants in the water.

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 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, marina's and shoreline point sources due to the influx of groundwater to the lake. Throughout history there have been extraordinary steps taken to assure a safe source of drinking water in the Chicagoland area. From the building of the offshore cribs and the introduction of interceptor sewers to the lock-and-dam system of Chicago's waterways and the city's Lakefront Zoning Ordinance. Lake Michigan has a variety of organizations and associations that are currently working to either maintain or improve water quality.

Finally, one of the best ways to ensure a safe source of drinking water is to develop a program designed to protect the source water against potential contamination on the local level. Since the predominant land use within Illinois' boundary of Lake Michigan watershed is urban, a majority of the watershed protection activities in this document are aimed at this purpose. Citizens should be aware that everyday activities in an urban setting might have a negative impact on their source water. Efforts should be made to improve awareness of storm water drains and their direct link to the lake within the identified local source water area. A proven best management practice (BMP) for this purpose has been the identification and stenciling of storm water drains within a watershed. Stenciling along with an educational component is necessary to keep the lake a safe and reliable source of drinking water.



Drinking water, including bottled waters, may reasonably be expected to contain at least trace amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling USEPA's Safe Drinking Water Hotline (1-800-426-4791). But, some people may be more vulnerable to contaminants 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. USEPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the USEPA's Safe Drinking Water Hotline at (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>

2018 Water Quality Data Summary

INORGANIC COMPOUNDS	Date Sampled	MCLG	MCL	Highest Level Found	Range Detected	Violation	Likely Sources of Contamination
Copper (ppm) ^{Clarendon Hills}	in 2017	1.3	AL=1.3	0.169 (90th percentile)	0 > AL	None	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
Lead (ppb) ^{*Clarendon Hills}	in 2017	0	AL=15	3.46 (90th percentile)	0 > AL	None	Corrosion of household plumbing systems; Erosion of natural deposits.
Arsenic (ppb)	in 2018	0	10	1.45	0.0 - 1.45	None	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium (ppm) ^{Clarendon Hills}	in 2017	2	2	0.0314	0.0242 - 0.0314	None	Erosion of natural deposits; Discharge of drilling wastes; discharge from metal refineries.
Barium (ppm) ^{Chicago}	in 2018	2	2	0.0214	0.0203 - 0.0214	None	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Iron (ppm) ^{Clarendon Hills}	in 2018	n/a	1.0	1.19	0.7 - 1.19	None	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Manganese (ppb)	in 2018	150	150	42.8	20.6 - 42.8	None	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Total Nitrate & Nitrite (as Nitrogen) (ppm) ^{Chicago}	in 2016	10	10	0.462	0.405 - 0.462	None	Runoff from fertilizer use; Leaching from septic tanks,sewage; Erosion of natural deposits.
Nitrate (as Nitrogen) (ppm) ^{Chicago}	in 2018	10	10	0.416	0.314 - 0.416	None	Runoff from fertilizer use; Leaching from septic tanks,sewage; Erosion of natural deposits.
DISINFECTANTS/DISINFECTION BY-PRODUCTS							
TTHMs - Total Trihalomethanes (ppb) ^{Clarendon Hills}	In 2018	No goal for the total	80	56	48.5 - 56	None	By-product of drinking water disinfection.
HAA5 - Haloacetic Acids (ppb) ^{Clarendon Hills}	in 2018	No goal for the total	60	28	18.8 - 28	None	By-product of drinking water disinfection.
Chlorine as Cl ₂ (ppm) ^{Clarendon Hills}	in 2018	MRDLG = 4	MRDL = 4	0.9	0.71 - 1	None	Drinking water disinfectant; Water additive used to control microbes.
TTHMs, HAA5, and Chlorine are for the distribution systems. 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. The Highest Running Annual Average Computed is be reported.							
TOC (Total Organic Carbon) ^{Chicago}	in 2018						
The percentage of TOC removal was measured each month and the system met all TOC removal requirements set by the IEPA.							
STATE REGULATED CONTAMINANTS							
Fluoride (ppm) ^{****Clarendon Hills}	in 2018	4	4.0	1.04	0.28 - 1.04	None	Erosion of natural deposits; Water additive that promotes strong teeth
Fluoride (ppm) ^{**** Chicago}	in 2018	4	4.0	0.6	0.601 - 0.617	None	Erosion of natural deposits; Water additive that promotes strong teeth
MICROBIAL CONTAMINANTS							
Turbidity (NTU)*** Highest single measurement. ^{Chicago}	in 2018	n/a	TT=1 NTUmax	0.19	n/a	None	Soil runoff.
Turbidity (%<=0.3 NTU)*** Lowest monthly percent meeting limit. ^{Chicago}	in 2018	n/a	TT(100%<=0.3NTU)	0.2	100%	None	Soil runoff.
Total Coliform Bacteria (# positive/month) ^{Chicago}	in 2018	0	5% of monthly samples positive	0.4	n/a	No	Naturally present in the environment
Total Coliform Bacteria (# positive/month) ^{Clarendon Hills}	in 2018	1	5% of monthly samples positive	1.0	n/a	No	Naturally present in the environment
UNREGULATED CONTAMINANTS							
Sulfate (ppm)	in 2012	n/a	n/a	17.6	13.4 - 17.6	n/a	Erosion of natural occurring deposits.
Sodium (ppm) ^{***Clarendon Hills}	in 2018	n/a	n/a	61.4	48.8 - 61.4	None	Erosion of naturally occurring deposits; Used in water softener regeneration.
Sodium (ppm) ^{**Chicago}	in 2018	n/a	n/a	9	8.14 - 8.89	n/a	Erosion of naturally occurring deposits; Used in water softener regeneration.
RADIOACTIVE CONTAMINANTS							
Combined Radium 226/228 (pCi/L) ^{Clarendon Hillst}	in 2016	0	5	11.8	11.8 - 11.8	None	Erosion of natural deposits.
Gross alpha excluding radon and uranium (pCi/L) ^{Clarendon Hills}	in 2014	0	15	10.2	10.2 - 10.2	None	Decay of natural and man-made deposits.
Combined Radium 226/228 (pCi/L) ^{Chicago}	in 2014	0	5	0.84	0.5 - 0.84	None	Decay of natural and man-made deposits.
Gross alpha excluding radon and uranium (pCi/L) ^{Chicago}	in 2014	0	15	6.6	6.1 - 6.6	None	Decay of natural and man-made deposits.

Understanding the Summary Results. The following information is included to help you understand the water quality results presented. The sources of drinking water (both tap and bottled water) include surface water and well water. As water travels over the surface of the land or through the ground, it can dissolve 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 may be naturally-occurring or result from urban stormwater 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 agricultural, urban stormwater runoff, and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff, and septic systems.
- **Radioactive contaminants**, which may be naturally-occurring or the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, USEPA prescribes regulations which limit the amount of certain contaminants in the water provided by public water systems. Food and Drug Administration(FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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 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.

Level Found: This column represents an average of sample result data collected during the CCR calendar year. In some cases, it may represent a single sample if only one sample was collected.

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 the 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.

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

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

n/a - not applicable

nd - non-detected

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 disinfectants are to control microbial contaminants.

Maximum Residual Disinfectant Level (MRDL): The highest level of a drinking water disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminates.

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

AVG: Regulatory compliance with some MCLs are based on a running annual average.

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

Level 2 Assessment: a very detailed study of the water system to identify potential water 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.

ppm - parts per million, or or milligrams per liter or one ounce in every 7,350 gallons

ppb - parts per billion, or micrograms per liter or one ounce in every 7,350,000 gallon

pci/l - Pico curies per liter used to measure radioactivity

pos/mo - Number of positive samples per month

NTU - Nephelometric Turbidity Unit, used to measure cloudiness in drinking water.

% < 0.3 NTU - Percent of samples less than 0.3 NTU

TT - Treatment Technique or a required process intended to reduce the level of a contaminant in drinking water. TT is equal to 1 NTUmax for Turbidity.

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. The purpose of monitoring this contaminant is to assist USEPA in determining the occurrence of unregulated contaminants in drinking water, and whether future regulation is warranted.

^{Clarendon Hills} Contaminants tested by the Village of Clarendon Hills. The City of Chicago tested for the remainder of the other compounds and contaminants listed.

Turbidity - Turbidity is a measure of cloudiness of water. Chicago monitors this because it is a good indicator of water quality and the effectiveness of their filtration and disinfectants.

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. Clarendon Hills 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 the potential for lead exposure by flushing your tap for 30seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead levels in your home's water, you may wish to have it 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 - Copper is an essential nutrient, but some people who drink water-containing copper in excess of the "Action Level" over a relatively short amount of time could experience gastrointestinal distress, or could suffer kidney and liver damage. People with Wilson's disease should consult their physician for recommended action. Flushing your tap for 30 seconds to 2 minutes will reduce copper levels caused by water remaining motionless for long periods in household plumbing systems.

Fluoride - The City of Chicago adds fluoride to the source water. It is added as a health benefit to reduce dental decay and the City of Chicago monitors compliance with the Safe Drinking Water Act. The Illinois Departmentof Public Health recommends an optimal fluoride range of 0.9 mg/l to 1.2 mg/l until November of 2015. As of November 2015, the new recommendation is an optimal fluoride level of 0.7 mg/l.

Barium - Some people who drink water-containing barium in excess of the MCL over many years could experience an increase in their blood pressure.

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

VIOLATION SUMMARY - There Were No Violations for the Village of Clarendon Hills Water Facility During 2018.