

Annual Water Quality Report

Water testing performed in 2020



The Village of Oak Park
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Spanish—Este informe contiene información muy importante. Tradúscalo ó hable con alguien que lo entienda bien. (This report contains very important information. Translate it, or speak with someone who understands it.)

Introduction

Each year the Village of Oak Park provides residents with a report on the quality of their drinking water. This year's report is for water tested from January 1, 2020 through December 31, 2020. The report includes drinking water facts and information on violations and contaminants detected in the drinking water supply.

The Village is dedicated to supplying drinking water that exceeds all state and federal standards. As new challenges to drinking water safety emerge, the Village remains vigilant in source water protection, conservation and community education, while continuing to serve the needs of all water users.

Informed customers are our best allies. Questions and comments are welcome. For more information regarding the content of this report or to request a printed copy, please contact the Mike Bills, Water & Sewer Superintendent, at 708.358.5730 or email publicworks@oak-park.us.

2020 Violation Summary

The Village of Oak Park is proud to report that no violations were received in the 2020 sampling year.

Community Participation

Village Board meetings are held at 7:30 p.m. on the first and third Monday of each month in Village Hall, 123 Madison St. Meetings also are streamed live and archived at www.oak-park.us/boardtv. Residents are invited to follow us at twitter.com/vopnews and facebook.com/vopnews and to sign up for news via email at www.oak-park.us/enews.

Lead and Drinking Water

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 lead service lines and home plumbing. The Village of Oak Park is responsible for providing high quality drinking water, but cannot control the variety of materials used in interior plumbing components. When water has been sitting for several hours, the potential for lead exposure can be minimized by running the tap for thirty seconds to two 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 at 1.800.426.4791 or www.epa.gov/safewater/lead. For more information, please visit the Village's Frequently Asked Questions webpage regarding Oak Park's drinking water at: www.oak-park.us/lead-water-faq.

Source Water Location

Lake Michigan is the sole source of drinking water for the Village of Oak Park. Water arrives pretreated via pipelines from the City of Chicago's two water treatment

plants. Water from Chicago is stored by Oak Park in four underground reservoirs that can hold a combined 12.5 million gallons. The water in the reservoirs remains in constant motion to maintain freshness. Only a small amount of chlorine is added before pumping into the Village's system of 105 miles of water mains. To ensure purity, water samples are routinely gathered throughout the water system, from the source to your home. A state-certified lab tests the samples using equipment that can measure substances down to one part in a billion.

Oak Park began receiving drinking water from Lake Michigan via the City of Chicago in 1912. About 400,000 gallons of water were pumped each day for the Village's 20,000 residents. Today, an average of five million gallons per day is pumped to Oak Park's 52,000 residents. The rate for water in 1912 was about seven cents per 1000 gallons of water. Today, Oak Park's water rate is \$10.10 per 1,000 gallons. Oak Park must continually adjust water rates in response to rate changes imposed by the City of Chicago and to maintain the Village's water distribution system.

Important Health Information

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. U.S. Environmental Protection Agency (EPA)/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the U.S. EPA's Safe Drinking Water Hotline 1.800.426.4791.

Substances that Might be in Drinking Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. 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 U.S. EPA's Safe Drinking Water Hotline (1.800.426.4791). The sources of drinking water (both bottled and tap water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it can dissolve naturally occurring minerals, in some cases radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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 or wildlife;
- **Inorganic contaminants**, such as salts and metals, which can be naturally occurring or may 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 use;

- **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 storm water runoff, and septic systems;
- **Radioactive Contaminants**, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at 1.800.426.4791

2020 Voluntary Monitoring and Cryptosporidium

The City of Chicago monitors for Cryptosporidium, Giardia and E. coli in its source water as part of its water quality program. Cryptosporidium has not been detected in these samples, but Giardia was detected in September 2010 in one raw lake water sample collected. Treatment processes have been optimized to provide effective removal of Cryptosporidium and Giardia from the source water, effectively removing these organisms in the treatment process. By maintaining low turbidity through the removal of particles from the water, the possibility of such organisms entering the drinking water system is greatly reduced.

In 2020, the City of Chicago continued monitoring for hexavalent chromium, also known as Chromium-6. U.S. EPA has not yet established a standard for Chromium-6, a contaminant of concern which has both natural and industrial sources. Chromium-6 sampling data is posted on the City of Chicago's website at: www.chicago.gov/city/en/depts/water/supp_info/water_quality_resultsandreports.html.

Any questions or concerns should be addressed to the Chicago Department of Water Management at 312.742.7499.

Source Water Assessment Summary

The Illinois EPA implemented a Source Water Assessment Program (SWAP) to assist with watershed protection of public drinking water supplies. The SWAP inventories potential sources of contamination and determined the susceptibility of the source water to contamination. The Illinois EPA has completed the Source Water Assessment Program for the City of 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 other than dilution. This is the reason for mandatory treatment of all surface water supplies in Illinois. Chicago's offshore intakes are located at a distance great enough 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 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. Chicago has taken extraordinary steps to ensure a safe source of drinking water in the area, from the building of the offshore cribs and the introduction of interceptor sewers to the lock-and-dam system of Chicago's water ways and the city's Lakefront Zoning Ordinance. The City now looks to the Department of Water Management and the Metropolitan Water Reclamation District of

Greater Chicago (MWRDGC) to ensure the safety of the city's water supply. Also, Lake Michigan has a variety of organizations and associations that are currently working to either maintain or improve water quality. Further information on our community water supply's Source Water Assessment Program is available by calling the City of Chicago, Department of Water Management, at 312.744.2406 or by going online at dataservices.epa.illinois.gov/swap/factsheet.aspx.

Unregulated Contaminant Monitoring Rule Fourth Edition (UCMR4)

The 1996 amendments to the Safe Drinking Water Act require that once every five years, the U.S. EPA issue a new list of no more than thirty unregulated contaminants to be monitored by public water supplies. The Unregulated Contaminant Monitoring Rule (UCMR) provides the U.S. EPA with scientifically valid data on the occurrence of contaminants in drinking water. This national survey is one of the primary sources of information on occurrence and levels of exposure that the Agency uses to develop regulatory decisions for contaminants in the public drinking water supply. In compliance with UCMR4, samples were collected at the Village's entry point for the distribution system; the samples were analyzed for all contaminant groups except for Haloacetic Acids (HAAs), which were sampled from the distribution system. The chart below addresses the Village's UCMR4 monitoring results of detected unregulated contaminants.

What's in My Water?

The City of Chicago Department of Water Management routinely monitors drinking water for contaminants according to federal and state laws. The Illinois EPA collected finished water samples from Chicago's water system on October 29, 2020 and analyzed the samples for a total of eighteen Per- and Polyfluoroalkyl substances. In its notification to Chicago, the Illinois EPA stated that these contaminants were not present in Chicago's drinking water at concentrations greater than or equal to the minimum reporting levels.

The Village of Oak Park collects 60 bacteriological samples each month along with quarterly disinfectant by-product sampling. The charts below illustrate substances detected in our water for the period of January 1 through December 31, 2020. Although all of the substances listed are below the Maximum Concentration Level (MCL) set by the U.S. EPA, we feel it is important that you know exactly what was detected and how much of the substance was present in the water.

The Illinois EPA requires the Village to monitor for certain substances less than once per year because the concentrations of these substances do not frequently change. In these cases, the most recent sample data are included, along with the year in which the sample was collected.

DETECTED REGULATED SUBSTANCES

SUBSTANCE (UNITS OF MEASURE)	YEAR SAMPLED	MCL (MRDL)	MCLG (MRDLG)	Village of Oak Park		City of Chicago		VIOLATION	TYPICAL SOURCE OF CONTAMINATION
				HIGHEST LEVEL DETECTED	RANGE LOW-HIGH	HIGHEST LEVEL DETECTED	RANGE LOW-HIGH		
				Barium (ppm)	2020	2	2		
Chlorine (ppm)	2020	4	4	1.1	1 to 1.3	N/A	N/A	No	Water additive used to control microbes
Combined Radium 226/228 (pCi/L)**	2/4/2020	5	0	N/A	N/A	0.95	0.83–0.95	No	Erosion of natural and man made depositss
Flouride (ppm)	2020	4	4	N/A	N/A	0.75	0.65–0.75	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Gross alpha excluding radon and uranium (pCi/L)**2/4/2020		15	0	N/A	N/A	3.1	2.8–3.1	No	Erosion of natural and man made deposits
Haloacetic acids [HAA5] (ppb)*	2020	60	No goal for the total	18	8.57–25.7	N/A	N/A	No	By-products of drinking water disinfection
Total Trihalomethanes [TTHM] (ppb)*	2020	80	No goal for the total	38	17.04–56.7	N/A	N/A	No	By-products of drinking water disinfection
Total Coliform Bacteria (% positive samples)	2020	5% of monthly samples are positive	0	4.3	0–4.3	N/A	N/A	No	Naturally present in the environment
Number of Positive E. Coli or Fecal Coliform Samples	2020	0	0	ND	ND	N/A	N/A	No	Human and animal fecal waste
Total Nitrate & Nitrite (as Nitrogen) (ppm)	2020	10	10	N/A	N/A	0.42	0.35–0.42	No	Runoff from fertilizer use; Leaching from septic tanks, sewage. Erosion from natural deposits.
Nitrate (as Nitrogen) (ppm)	2020	10	10	N/A	N/A	0.42	0.35–0.42	No	Runoff from fertilizer use; Leaching from septic tanks, sewage. Erosion from natural deposits.
Turbidity (NTU) (Highest single measurement)	2020	TT (Limit 1 NTU)	N/A	N/A	N/A	0.16	N/A	No	Soil runoff
Turbidity %≤0.3 NTU (Lowest % of samples meeting limit)	2020	TT (Limit 95% ≤ 0.3 NTU)	N/A	N/A	N/A	Lowest Monthly %: 100%	100% to 100%	No	Soil runoff

Tap water samples were collected for lead and copper analysis from sample sites throughout the Village of Oak Park

SUBSTANCE (UNITS OF MEASURE)	YEAR SAMPLED	AL	MCLG	LEVEL DETECTED	# OF SITES ABOVE AL	VIOLATION	TYPICAL SOURCE OF CONTAMINATION
				(90th %TILE)			
Copper (ppm)**	2018	1.3	1.3	ND	0	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)**	8/30/2018	15	0	3.64	0	No	Corrosion of household plumbing systems; erosion of natural deposits

UNREGULATED CONTAMINANTS (CITY OF CHICAGO RESULTS)

SUBSTANCE (UNITS OF MEASURE)	YEAR SAMPLED	MCL (MRDL)	MCLG (MRDLG)	HIGHEST LEVEL DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Sodium (ppm)	2020	N/A	N/A	9.55	8.73–9.55	Erosion of naturally occurring deposits. Used in water softener regeneration
Sulfate (ppm)	2020	N/A	N/A	27.8	27.5–27.8	Erosion of naturally occurring deposits

TOTAL ORGANIC CARBON (TOC): The percentage of TOC removal was measured each month and the system met all TOC removal requirements set by IEPA.

UNREGULATED CONTAMINANTS (OAK PARK UCMR4 RESULTS)

SUBSTANCE (UNITS OF MEASURE)	YEAR SAMPLED	MCL (MRDL)	MCLG (MRDLG)	AVERAGE LEVEL DETECTED	HIGHEST LEVEL DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Haloacetic Acids [HAA5] (ppb)***2020		60	No Goal for the Total	13.23	18.02	8.42–18.02	By-products of drinking water disinfection
Haloacetic Acids [HAA6Br] (ppb)	2020	N/A	N/A	9.88	12.1	5.39–12.1	By-products of drinking water disinfection
Haloacetic Acids [HAA9] (ppb)	2020	N/A	N/A	21.96	28.02	17.02–28.02	By-products of drinking water disinfection
Quinoline (ppb)	2020	N/A	N/A	0.024	0.024	0.024	Component of coal
Manganese (ppb)****	2020	150	N/A	0.56	0.56	0.56	Erosion of natural deposits

Definition of Terms

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.

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

Action Level (AL): The concentration of a contaminant that triggers treatment or other required actions by the water supply.

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.

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 contaminants.

Highest Level Detected: This column represents the highest single sample reading of a contaminant of all the samples collected in the CCR calendar year.

Range Low-High: This column represents a range of individual sample results, from lowest to highest that were collected during the CCR calendar year.

Year Sampled: Some contaminants are sampled less frequently than once a year; as a result, not all contaminants were sampled for during the CCR calendar year. If any of these contaminants were detected the last time they were sampled for, they are included in the table along with the date that the detection occurred.

ND: Contaminant Not Detected at or above the reporting or testing limit.

N/A: Not applicable

WATER QUALITY DATA TABLE FOOTNOTES

Turbidity: Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

Unregulated Contaminants: An 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 U.S. EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

Sodium: There is no state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials who have concerns 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.

* Data is expressed as highest Locational Running Annual Average (LRAA). The LRAA is the average of 4 consecutive quarterly results at each monitored sample site. The LRAA should not exceed 80 ppb for TTHM and 60 ppb for HAA5.

** The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, is more than one year old. Compliance monitoring for lead and copper is conducted every 3 years. Radiochemical contaminant monitoring is conducted by the City of Chicago every 6 years.

*** Regulated HAAs (HAA5) were included in UCMR4's monitoring program to gain a better understanding of co-occurrence with currently unregulated disinfection by-products.

**** Manganese: This contaminant is only regulated by the State. No federal MCL exists.

UNITS OF MEASUREMENT

AL: Action Level

pCi/L: Picocuries per liter (a measure of radioactivity)

ppb: Parts per billion, or micrograms per liter (ug/L)

ppm: Parts per million, or milligrams per liter (mg/L)

TT: Treatment Technique

%≤0.3 NTU: Percent of samples less than or equal to 0.3 NTU

NTU: Nephelometric Turbidity Unit