

Introduction



The Village of Oak Park is proud to provide residents with this annual water quality report. This year's edition covers water tested from January 1 through December 31, 2014. 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, we remain vigilant in source protection, conservation and community education, while continuing to serve the needs of all water users.

Informed customers are our best allies. We welcome any questions or comments. Call Darrell A. King, 708.358.5746 or email publicworks@oak-park.us.

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. Follow us at twitter.com/vopnews, be a fan at facebook.com/vopnews and sign up for news via email at www.oak-park.us.

Downspout Disconnects — Storm Water Management



With the goal of reducing the chances of basement flooding during heavy rainfalls, the Village of Oak Park encourages property owners to disconnect their gutter downspouts from

the municipal sewer system. Storm water from roof gutters is not a problem during normal flow days with minimal precipitation. However, during heavy rain events or rapid snowmelts, the main sewer system can become overwhelmed by the water from gutters, sometimes causing sewage and storm water to back up into basements. Simply by eliminating the water from gutters, property owners can help reduce the chances of backups. A one-inch rainfall can produce approximately 600 gallons of water draining from your roof into your sewer. Diverting this water to rain barrels, grassy areas and rain gardens will reduce the chances of basement flooding. The Village of Oak Park offers a Sewer Backup Protection Grant Program that was established to provide financial assistance to homeowners who install systems to protect their homes from backups during heavy rain events. Information on this program can be found at www.oak-park.us/sewergrant.

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 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 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 www.epa.gov/safewater/lead.

Presort
Standard
U.S. Postage
PAID
Permit No. 26
Oak Park, IL
Postal Carrier
Pre-Sort

Residential Customer Local
Oak Park, Illinois



Annual Water Quality Report

Water testing performed in 2014



PWS ID#: 0312250

Water Meter Upgrade Program

The Village of Oak Park will begin a new phase of water meter upgrades this fall throughout the community. The new water meters feature integrated radio technology and digital registers that will greatly enhance the efficiency and accuracy of the usage reading, as well as help identify potentially costly leaks. The installation process, which only takes about 30 minutes, is free and does not require any drilling or mounting of devices on the outside of your property. However, access to the inside of your property will be necessary. Should your property be selected for the fall meter change-out program, you will receive a notice in the mail requiring you to schedule an appointment for the work. Appointments will be available Monday through Saturday, with a limited number of evening and weekend time slots. The Village has contracted with Ferguson Waterworks to assist with scheduling. Appointments may be made online at www.fergusonscheduling.com or by calling 877.737.7174.

Water Conservation

The Village Board adopted a Water Conservation and Efficiency Plan in April 2013. The purpose of the plan is to develop an action-based framework for pursuing conservation and efficiency strategies while engaging the Village's stakeholders about the value of water. The plan incorporates water use baseline metrics, reduction goals and strategies to achieve each goal. The plan can be viewed at www.oak-park.us.

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. 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 (1.800.426.4791).



Where Does My Water Come From?

Oak Park began receiving drinking water from Lake Michigan via the City of Chicago in 1912. The average daily pumpage then was about 400,000 gallons per day for its 20,000 residents. Today we pump an average of 5.4 million gallons per day for our 52,000 residents. The rate for water in 1912 was about \$0.07 per 1000 gallons of water. Today, Oak Park's water rate is \$8.37 per 1000 gallons. Oak Park must continually adjust water rates to remain fiscally responsible for the maintenance of the water system and to account for increases in water rates from the City of Chicago.

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 Jardine Water Purification Plant, which is the largest water treatment plant in the world. Water received from Chicago is stored in four underground reservoirs totaling 12.5 million gallons. The water in the reservoirs remains in constant motion to maintain freshness. Only a small amount of chlorine needs to be added before pumping the water 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, right to your home. A state-certified lab tests the samples using equipment that can measure substances down to one part in one billion!

2014 Violation Summary

We are proud to report that no violations were received in the 2014 sampling year.

What's in My Water?

The City of Chicago Department of Water Management routinely monitors our drinking water for contaminants according to federal and state laws. The Village of Oak Park collects 60 bacteriological samples each month along with quarterly disinfectant bi-product sampling. The tables at right illustrate substances detected in our water for the period of January 1 through December 31, 2014. Although all of the substances listed are under the Maximum Contaminant 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 change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

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 USEPA's Safe Drinking Water Hotline (1.800.426.4791). The presence of these contaminants does not necessarily indicate that the water poses a health risk. 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 dissolves 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 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 agriculture, urban stormwater runoff, and residential use;
- **Organic Chemical Contaminants**, including synthetic and volatile organic chemicals, which are bi-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater 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 800.426.4791.

2014 Voluntary Monitoring and Cryptosporidium

The City of Chicago has continued monitoring for Cryptosporidium, Giardia and E. coli in its source water as part of its water quality program. To date, Cryptosporidium has not been detected in these samples, but Giardia was detected in one raw lake water sample collected in September 2010. Treatment processes have been optimized to provide effective barriers for removal of Cryptosporidium oocysts and Giardia cysts in 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 Cryptosporidium and Giardia organisms getting into the drinking water system is greatly reduced. For more information on Cryptosporidium, please visit www.cdc.gov/parasites/crypto/.

In 2014, the Chicago Department of Water Management (CDWM) continued monitoring for hexavalent chromium, also known as Chromium-6. USEPA has not yet established a standard for Chromium-6, a contaminant of concern which has both natural and industrial sources. Please address any questions or concerns to CDWM's Water Quality Division at 312.742.7499. Data reports on the monitoring program for chromium-6 are posted on the City of Chicago's website which can be accessed at: http://www.cityofchicago.org/city/en/depts/water/supp_info/water_quality_resultsandreports/city_of_chicago_emergincontaminantstudy.html.

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.
Amount Detected: This column represents the highest single sample reading of a contaminant of all the samples collected in this 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.

REGULATED SUBSTANCES

SUBSTANCE (UNITS OF MEASURE)	YEAR SAMPLED	MCL (MRDL)	MCLG (MRDLG)	Village of Oak Park		City of Chicago		VIOLATION	TYPICAL SOURCE
				AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH		
Barium (ppm)	2014	2	2	NA	NA	0.0227	0.0223 - 0.0227	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Arsenic (ppb)	2013	10	0	NA	NA	0.77	0.519 - 0.767	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production waste
Chlorine (ppm)	2014	4	4	1	1 - 1	1	1 - 1	No	Water additive used to control microbes
Combined Radium 226/228 (pCi/L)	2014	5	0	NA	NA	0.84	0.50 - 0.84	No	Erosion of natural deposits
Flouride (ppm)	2014	4	4	NA	NA	0.98	0.94 - 0.98	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)	2014	15	0	NA	NA	6.6	6.1 - 6.6	No	Erosion of natural deposits
Haloacetic Acids* [HAA] (ppb)	2014	60	NA	15	5.59 - 19.5	11	0 - 17.6	No	By-products of drinking water disinfection
*Highest Running Annual Average Computed									
TTHMs [Total Trihalomethanes] (ppb)	2014	80	NA	31	14.59 - 36.7	22	9.7 - 34.8	No	By-products of drinking water disinfection
Total Coliform Bacteria (% positive samples)	2014	5% of monthly samples are positive	0	ND	NA	0.6	0 - 0.6	No	Naturally present in the environment
Total Nitrate + Nitrite (ppm)	2014	10	10	NA	NA	0.31	0.30 - 0.31	No	Runoff from fertilizer use; Leaching from septic tanks, sewage;
Nitrate (as Nitrogen)(ppm)	2014	10	10	NA	NA	0.31	0.30 - 0.31	No	Erosion from natural deposits
Turbidity (NTU) (Highest single measurement)	2014	TT=1NTU max	NA	NA	NA	0.18	NA	No	Soil runoff
Turbidity %<0.3 NTU (lowest monthly % of samples meeting limit)	2014	TT	NA	NA	NA	100%	100% - 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	AMOUNT DETECTED (90th %TILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2012	1.3	1.3	0.111	0/30	No	Corrosion of household plumbing systems; erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	2012	15	0	ND	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits

UNREGULATED SUBSTANCES (CITY OF CHICAGO RESULTS)

SUBSTANCE (UNITS OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Selenium (ppb)	2013	2.48	0 - 2.48	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Sodium ¹ NA (ppm)	2014	10.0	9.53 - 10.0	Erosion of naturally occurring deposits; Used in water softener regeneration
Sulfate SO ₄ (ppm)	2014	35.5	20.9 - 35.5	Erosion of naturally occurring deposits
Hardness CaCO ₃ (mg/L)	2012	138	120 - 180	The 120 - 180 range is considered to be "hard" water. Hard water is the result of Calcium and Magnesium naturally dissolved in water. The term "hard" water is typical of the lack of suds from soap in water.

¹Sodium is not currently regulated by the U.S. EPA. However, the State of Illinois has set an MCL for this contaminant for supplies serving a population of 1,000 or more. The purpose of unregulated contaminant monitoring is to assist the U.S. EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

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.

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

Units of Measurement

AL Action Level
 TT Treatment Technique
 NTU: Nephelometric Turbidity Unit

pCi/L, picocuries per liter (a measure of radioactivity)
 ppm parts per million, or milligrams per liter (mg/l)

ppb parts per billion, or micrograms per liter (ug/l)
 %<0.3 NTU: Percent of samples less than or equal to 0.3 NTU

UNREGULATED CONTAMINANT MONITORING RULE (UCMR3)¹

SUBSTANCE (UNITS)	YEAR SAMPLED	Village of Oak Park		City of Chicago		TYPICAL SOURCE
		AMOUNT DETECTED (Average)	RANGE	AMOUNT DETECTED (Average)	RANGE	
Chromium (ppb)	2014	0.4	0.3 to 0.5	0.3	0.2-0.3	Naturally occurring element; used in making steel and other alloys; used for chrome plating, dyes, and pigments, leather tanning, and wood preservation
Cobalt (ppb)	2014	< 1	< 1	NA	NA	Naturally-occurring element found in the earth's crust and at low concentrations in seawater, and in some surface and ground water; cobaltous chloride was formerly used in medicine and as a germicide
Molybdenum (ppb)	2014	1.1	1.1-1.2	1.1	1.0-1.1	Naturally-occurring element found in ores and present in plants, animals, and bacteria; commonly used form molybdenum trioxide used as a chemical reagent.
Strontium (ppb)	2014	123.6	119.8 - 125.7	120	110 - 120	Naturally-occurring element; historically, commercial use of strontium has been in the faceplate glass of cathode-ray tube televisions to block x-ray emissions.
Vanadium (ppb)	2014	0.25	0.2-0.3	0.3	ND-0.3	Naturally-occurring elemental metal; used as vanadium pentoxide which is a chemical intermediate and a catalyst.
Chromium 6 (ppb)	2014	0.19	0.15 - 0.21	0.22	0.18 - 0.22	Naturally occurring element; used in making steel and other alloys; used for chrome plating, dyes, and pigments, leather tanning, and wood preservation.
Chlorate (ppb)	2014	< 20	< 20	NA	NA	Agricultural defoliant or desiccant; disinfection byproduct; and used in production of chlorine dioxide.
1,1-Dichloroethane (ppb)	2014	< 0.03	< 0.03	NA	NA	Halogenated alkane, used as a solvent.
1,2,3-trichloropropane (ppb)	2014	< 0.03	< 0.03	NA	NA	Halogenated alkane; used as an ingredient in paint, varnish remover, solvents and degreasing agents
1,3-butadiene (ppb)	2014	< 0.1	< 0.1	NA	NA	Alkene; used in rubber manufacturing and occurs as a gas
Bromochloromethane (ppb)	2014	< 0.06	< 0.06	NA	NA	Used as a fire-extinguishing fluid, an explosive suppressant, and as a solvent in the manufacturing of pesticides.
Bromomethane (ppb)	2014	< 0.2	< 0.2	NA	NA	Halogenated alkane; occurs as a gas, and used as a fumigant on soil before planting, on crops after harvest, on vehicles and buildings, and for other specialized purposes
Chlorodifluoromethane (ppb)	2014	< 0.08	< 0.08	NA	NA	Chlorofluorocarbon; occurs as a gas, and used as a refrigerant, as a low-temperature solvent, and in fluorocarbon resins, especially tetrafluoroethylene polymers.
Perfluorobutanesulfonic acid (PFBS) (ppb)	2014	< 0.09	< 0.09	NA	NA	Manmade chemical; used in products to make them stain, grease, heat and water resistant
Perfluoroheptanoic acid (PFHpA) (ppb)	2014	< 0.01	< 0.01	NA	NA	Manmade chemical; used in products to make them stain, grease, heat and water resistant
Perfluorohexanesulfonic acid (PFHxS) (ppb)	2014	< 0.03	< 0.03	NA	NA	Manmade chemical; used in products to make them stain, grease, heat and water resistant
Perfluorononanoic acid (PFNA) (ppb)	2014	< 0.02	< 0.02	NA	NA	Manmade chemical; used in products to make them stain, grease, heat and water resistant
Perfluorooctanoic acid (PFOA) (ppb)	2014	< 0.02	< 0.02	NA	NA	Perfluorinated aliphatic carboxylic acid; used for its emulsifier and surfactant properties in or as fluoropolymers (such as Teflon), fire-fighting foams, cleaners, cosmetics, greases and lubricants, paints, polishes, adhesives and photographic films
Perfluorooctanesulfonic acid (PFOS) (ppb)	2014	< 0.04	< 0.04	NA	NA	Surfactant or emulsifier; used in fire-fighting foam, circuit board etching acids, alkaline cleaners, floor polish, and as a pesticide active ingredient for insect bait traps; U.S. manufacture of PFOS phased out in 2002; however, PFOS still generated incidentally
1,4-Dioxane (ppb)	2014	< 0.07	< 0.07	NA	NA	Cyclic aliphatic ether; used as a solvent or solvent stabilizer in manufacture and processing of paper, cotton, textile products, automotive coolant, cosmetics, and shampoos, cleaning agent, surface coating, and adhesive agent.
4-Androstene-3, 17-Dione (ppb)	2014	ND	ND	0.0008	0.0006 - 0.0008	Steroidal hormone naturally produced in the human body; and used as an anabolic steroid and a dietary supplement.
Testosterone (ppb)	2014	ND	ND	0.0001	0.0001 - 0.0001	Androgenic steroid naturally produced in the human body; and used in pharmaceuticals.

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. A maximum contaminant level (MCL) for these substances has not been established by either state or federal regulations, nor has mandatory health effects language.

Source Water Assessment



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. Further information on the City of Chicago water supply's Source Water Assessment Program is available by calling the City of Chicago, Department of Water Management at 312-744-6635.

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 for 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 stormwater 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 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 312-744-6635.