

Village of Streamwood Annual Drinking Water Quality Report

For the period of January 1 to December 31, 2015
Streamwood, IL PWS ID#: 0313060

This year as in years past, your tap water met all USEPA and state drinking water health standards. This report summarizes the quality that was provided last year, including details about the water source, what the water contains and how it compares to the standards set by regulatory agencies. **We are pleased to report that Streamwood had no violation of a contaminant level or of any other water quality standard.**

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúscalo o hable con alguien que lo entienda bien. ("This report contains very important information. Translate it, or speak with someone who understands it.")

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 meetings. Board meetings are normally the first and third Thursday of each month. See www.streamwood.org for meeting times. For more information regarding this report, contact water department operator Tom Salzmann at (630) 736-3850. 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 Public Works or call the water operator at (630) 483-4491. 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 www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl.

Source of Drinking Water

The source of drinking water used by Streamwood is purchased surface water from the City of Chicago (Lake Michigan). The City of Chicago utilizes Lake Michigan as its source water via two water treatment plants. The Jardine Water Purification Plant serves the northern areas of the City and suburbs, including Streamwood. Lake Michigan is the only Great Lake that is entirely contained within the United States. It borders Illinois, Indiana, Michigan, and Wisconsin, and is the second largest Great Lake by volume with 1,180 cubic miles of water and third largest by area. 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 radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Possible 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 waste water 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.

In order to ensure that tap water is safe to drink, the USEPA 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. 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. Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, and 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 and their health effects are available from the USEPA's Safe Drinking Water Hotline (800-426-4791).

The Village maintains ground water wells for emergency backup purposes. These wells are exercised on a monthly basis and water samples are taken to meet IEPA quality standards. Activation of the emergency wells was not required in 2015.

Source Water Assessment – Susceptibility to Contamination

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. The source water assessment for our supply purchased from the City of Chicago has been completed by the IEPA. If you would like a copy of this information, please visit the Public Works Department at 565 S. Bartlett Road or call the water department at (630) 736-3850. Information is also available from the IEPA at <http://dataservices.epa.illinois.gov/swap/factsheet.aspx>. 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.

2015 Voluntary Monitoring

The City of Chicago Department of Water Management (CDWM) 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 2010 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. Also in compliance with Long Term 2 Enhanced Surface Water Treatment Rule Round 2, the City of Chicago has started the 24-months long monitoring program, in April 2015, collecting samples from its source water once per month to monitor for Cryptosporidium, Giardia, E. Coli, and turbidity.

In 2015, CDWM has also 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's website at www.cityofchicago.org/city/en/depts/water/supp_info/water_quality_resultsandreports/city_of_chicago_emergincontaminantstudy.html

2015 Violation Summary – City of Chicago (IL PWS ID#0316000)

The City of Chicago recorded no violations in 2015.

Source Water Information

Source Water Name

REPORT STATUS, TYPE OF WATER, LOCATION

INTAKE (00104) JARDINE SHORE INTAKE; LAKE MICHIGAN WATER; SW
INTAKE (00105) SOUTH PLANT SHORE; LAKE MICHIGAN WATER; SW
INTAKE (01305) DUNNE INTAKE CRIB; LAKE MICHIGAN WATER; SW; SOUTH PLANT 68TH ST.
INTAKE (01306) JARDINE DEVER INTAKE; LAKE MICHIGAN WATER; SW

Year 2015 Regulated Contaminants Detected: Streamwood

Contaminant	Unit	Year Sampled	MCLG Health Goal	MCL USEPA's Limits	Level Detected	Range Detected	Violation	Typical Source
Microbial Contaminants								
Total Coliform Bacteria	% pos/ month	2015	0%	5%	0%	N/A	NO	Naturally present in the environment
Disinfectants and Disinfection By-Products								
Chlorine	ppm	2015	MRDLG=4	MRDL=4	0.8	0.6-0.8	NO	Water additive to control microbes
Haloacetic Acids (HAAs)	ppb	2015	N/A	60	17	10.94-24.1	NO	By-product of drinking water disinfection
Total Trihalomethanes (TTHMs)	ppb	2015	N/A	80	32	18.59-38.9	NO	By-product of drinking water disinfection
Lead and Copper								
Lead	ppb	2013	0	15=AL	0	0 sites detected	NO	Corrosion of household plumbing systems; erosion of natural deposits
Copper	ppm	2013	1300	1300=AL	120	0 sites above Action Level (AL)	NO	Corrosion of household plumbing systems erosion of natural deposits; leaching from wood preservatives

UCMR3 Compliance Reporting

In compliance with the Unregulated Contaminant Monitoring Rule 3 (UCMR3) as required by the EPA, the Village of Streamwood has monitored for 21 contaminants in 2015 suspected to be present in drinking water, but that do not have health-based standards set under the Safe Drinking Water Act. The monitoring results were reported to the EPA. The list of UCMR3 contaminants that we have monitored included volatile organic chemicals, metals, perfluorinated compounds, 1,4-dioxane, chromium and chlorate. The contaminants that were detected in this monitoring program are listed below.

CHROMIUM	ppb	2015	100	100	0.4	0.03-0.4	NO	Discharge from steel and pulp mills; erosion of natural deposits
MOLYBDENUM	ppb	2015	N/A	N/A	1.1	1.0-1.1	NO	Naturally-occurring element found in ores and present in plants, animals and bacteria; commonly used form molybdenum trioxide
STRONTIUM	ppb	2015	N/A	N/A	125.7	113.2-125.7	NO	Naturally-occurring element; has been used in cathode-ray tube TVs to block x-ray emissions
CHROMIUM-6 or HEXAVALENT CHROMIUM	ppb	2015	N/A	N/A	0.16	0.03-0.16	NO	Naturally-occurring element; used in making steel and alloys

Inorganic/Radioactive/Synthetic Organic Contaminants Detected in Standby Wells (Standby well water was not activated in 2015)

Inorganic Contaminants								
Arsenic	ppb	2015	0	10	1.13	0-1.13	NO	Erosion of natural deposits, runoff from orchards; runoff from glass and electronics production waste.
Barium	ppm	2015	2	2	0.429	0.0653-0.429	NO	Discharge of drilling wastes, discharge from metal refineries; erosion of natural deposits
Fluoride	ppm	2015	4	4	1.21	0.27-1.21	NO	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Iron	ppm	2015	N/A	1.0	2.93	0.114-2.93	NO	This contaminant is not currently regulated by the USEPA. However, the state regulates erosion of natural deposits
Manganese	ppb	2015	150	150	45.3	0-45.3	NO	This contaminant is not currently regulated by the USEPA. However, the state regulates erosion of natural deposits
Sodium	ppm	2015	N/A	N/A	33.1	16.2-33.1	NO	Erosion of natural deposits, used in water softener regeneration
Radioactive Contaminants								
Combined Radium 226/228	pCi/L	7/24/2013	0	5	10.5	0.58-10.5	NO	Erosion of natural deposits
Gross alpha excluding radon and uranium	pCi/L	7/24/2013	0	15	29.3	0-29.3	NO	Erosion of natural deposits
Synthetic Organic Contaminants Including Pesticides and Herbicides								
Benzo(a)pyrene	ppt	2015	0	200	167	0-167	NO	Erosion of natural deposits
Di (2-ethylhexyl) phthalate	ppb	2015	0	0	3.84	0-3.84	NO	Erosion of natural deposits

Water Quality Data Table Footnotes

Turbidity: Turbidity is a measure of cloudiness of water. It is measured because it is a good indicator of water quality and the effectiveness of filtration systems 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. The Village of Streamwood 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 at (800) 426-4791 or by visiting <http://www.epa.gov/safewater/lead>.

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 the 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 0.90mg/l to 1.2 mg/l.

Sodium: There is not a 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.

2015 Regulated Contaminants Detected: City of Chicago

Turbidity	MCLG	MCL	Level Detected	Range of Detections	Violation	Likely Source of Contamination		
NTU/Lowest Monthly %≤0.3NTU Measurement	N/A	TT(95% ≤0.3NTU)	Lowest Monthly % 99.7%	99.7%-100%	NO	Soil runoff		
NTU/Highest Single Measurement	N/A	TT(1NTU max)	0.45	N/A	NO	Soil runoff		
Contaminants	Collection Date:	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
State Regulated								
Fluoride	2015	1.01	0.76-1.01	4	4	ppm	NO	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Inorganic Contaminants								
Barium	2015	0.0201	0.0193-0.0201	2	2	ppm	NO	Discharge of drilling wastes, discharge from metal refineries; erosion of natural deposits
Nitrate(measured as Nitrogen)	2015	0.30	0.28-0.30	10	10	ppm	NO	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Total Nitrate and Nitrite	2015	0.30	0.28-0.30	10	10	ppm	NO	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Unregulated Contaminants								
Sodium (Unregulated)	2015	8.48	8.04-8.48	N/A	N/A	ppm	NO	Erosion from naturally occurring deposits; used in water softener regeneration
Sulfate (Unregulated)	2015	27.2	18.8-27.2	N/A	N/A	ppm	NO	Erosion of natural deposits
Radioactive Contaminants								
Combined Radium 226/228	2/11/2014	0.84	0.50-0.84	0	5	pCi/L	NO	Decay of natural and man-made deposits
Gross alpha excluding radon and uranium	2/11/2014	6.6	6.1-6.6	0	15	pCi/L	NO	Decay of natural and man-made deposits
Total Organic Carbon (TOC)	The percentage of Total Organic Carbon removal was measured each month and the system met all TOC removal requirements set by the IEPA.							

UCMR3 Compliance Reporting

In compliance with the Unregulated Contaminant Monitoring Rule 3 (UCMR3) as required by the EPA, the City of Chicago has monitored for 28 contaminants suspected to be present in drinking water, but that do not have health-based standards set under the Safe Drinking Water Act. The monitoring results were reported to the EPA. The list of UCMR3 contaminants that we have monitored included volatile organic chemicals, metals, perfluorinated compounds, 1,4-dioxane and chlorate. The contaminants that were detected in this monitoring program are listed below.

	MCLG	MCL	Highest Level Detected	Range of Detections
CHROMIUM (ppb) Naturally-occurring element; used in making steel and other alloys	100	100	0.3	0.3-0.3
MOLYBDENUM (ppb) Naturally-occurring element found in ores and present in plants, animals and bacteria; commonly used form molybdenum trioxide	N/A	N/A	1.1	1.0-1.1
STRONTIUM (ppb) Naturally-occurring element; has been used in cathode-ray tube TVs to block x-ray emissions	N/A	N/A	120	110-120
VANADIUM (ppb) Naturally-occurring metal; vanadium pentoxide is used as a catalyst and a chemical intermediate	N/A	N/A	0.2	0.2-0.2
CHROMIUM-6 or HEXAVALENT CHROMIUM (ppb) Naturally-occurring element; used in making steel and alloys	N/A	N/A	0.19	0.18-0.19

Water Quality Test Results Notes

Definitions:	The preceding 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. 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.
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 disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
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.
Level Detected	This column represents an average of sample result data collected during Consumer Confidence Report (CCR) calendar year. For well samples it may represent the highest level as often a single 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.
% pos/mo	Percent positive samples per month.
Abbreviations:	The preceding tables contain scientific terms and measures, some of which have been abbreviated.
AL	Action Level: The concentration of a contaminant which if exceeded triggers treatment or other requirements which a water system must follow.
ppm:	Milligrams per liter or parts per million – or one ounce in 7,350 gallons of water.
ppb:	Micrograms per liter of parts per billion – or one ounce in 7,350,000 gallons of water.
ppt:	Micrograms per liter of parts per trillion – or one ounce in 7,350,000,000 gallons of water.
ND:	Not Detectable at testing limits.
NA:	Not applicable.
Avg:	Regulatory compliance with some MCLs are based on running annual average of monthly samples.
%≤0.3 NTU	Percent of samples less than or equal to 0.3 NTU.
NTU (Nephelometric Turbidity Units)	A measure of clarity.
pCi/L or picocuries per liter	A measure of radioactivity.
Date of Sample	If a date appears in this column that is not the Consumer Confidence Report (CCR) reporting year, the IEPA requires monitoring for this contaminant less than once per year because concentrations do not frequently change. If year sampled is previous calendar year then monitoring for this contaminant was conducted during the attached CCR reporting year.

Help Keep Our Water Clean!

Keep Storm Drains Clear and Clean

When rain falls or when the snow melts only some soaks into the ground. The rest of the water flows over the land, heading downhill to the nearest stream. This is called storm water runoff.

Areas with a lot of pavements, such as driveways, streets and sidewalks, have more storm water runoff since there's less open space to absorb the water. The water flows down toward the streets into a storm drain. Storm drains connect to pipes, which carries the water directly to our ponds, streams and rivers.

If you dump oil or garbage into a storm drain, it's just like dumping it straight into a river. Please don't dump anything into the storm sewers. If you see someone pouring a substance into an inlet or waterway in Streamwood that you suspect is a pollutant, contact the Village Public Works Department, Monday through Friday, 8:00 am- 4:30 pm, at (630) 736-3850, or after hours and on weekends, call the Police non-emergency line at (630) 736-3700. Help keep our streams and lakes clean!

Clean Up After Animals

Cleaning up after animals also keeps our water safe. Animal waste left in your yard or in our parks eventually runs off into the nearest body of freshwater after it rains. Poop not properly disposed of moves through the storm sewer system and into nearby creeks, rivers and streams. Scientists have discovered that pet waste is a major cause of water pollution.



Water Fun Facts

- Did you know that the Village has four water towers?
- Did you know that the letters in "Streamwood" on the Lake Street water tower are 12 feet tall?
- The smallest sewer in Streamwood is only six inches in diameter. The biggest is 60 inches!
- On average, Streamwood uses 3,100,000 gallons of water per day!
- Our connection to Lake Michigan starts near O'Hare Airport with a 90 inch pipe.
- Streamwood has over 100 miles of water main!
- Did you know that the Village has 1,600 fire hydrants?



Water Use Restrictions

Remember that lawn and garden watering is only allowed between the hours of 6:00 pm and 11:00 am, unless new sod or gardens have been installed. For details, please contact Public Works.