

# Village of Streamwood Annual Drinking Water Quality Report

For the period of January 1 to December 31, 2014  
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 the 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](http://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](http://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, while the South Water Purification Plant serves the southern areas of the City and suburbs. 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 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.

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. 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 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 2014.

## Source Water Assessment

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 Rd. or call the water department at (630) 736-3850. Information is also available on the IEPA website at <http://dataservices.epa.illinois.gov/swap/factsheet.aspx>.

## 2014 Violation Summary – City of Chicago (IL PWS ID#0316000) The City of Chicago recorded no violations in 2014.

## 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 of 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. 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.

## 2014 Voluntary Monitoring

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 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. In 2014, 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 DWM'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\\_emer\\_gincontaminantstudy.html](http://www.cityofchicago.org/city/en/depts/water/supp_info/water_quality_resultsandreports/city_of_chicago_emer_gincontaminantstudy.html)

## 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 PLAN 68<sup>TH</sup> ST.  
INTAKE (01306) JARDINE DEVER INTAKE; LAKE MICHIGAN WATER; SW

## Year 2014 Regulated Contaminants Detected: Streamwood

Total Coliform Bacteria										
Unit	Maximum Containment Level Goal	Total Coliform Maximum Containment Level MCL (USEPA's Limits)		Level Detected	Range Detected	Violation	Collection Date	Likely Source Of Containment		
% positive per month	0%	5% of monthly Samples are Positive		0%	N/A	N	2014	Naturally present in the environment		
Disinfectants and Disinfection By-Products		Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Collection Date	Units	Violation	Likely Source of Containment
Chlorine (collected 12-31-2014)		ppm	0.8	0.6-1.0	MRDLG=4	MRDL=4	2014	ppm	N	Water additive to control microbes
Haloacetic Acids (HAAs)*		ppb	17.78	7.19-17.78	No goal for total	60	2014	ppb	N	By-product of drinking water disinfection
Total Trihalomethanes (TTHm)		ppb	45.9	19.16-45.9	No goal for total	80	2014	ppb	N	By-product of drinking water disinfection
Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination		
Inorganic/Radioactive/Synthetic Organic Contaminants Detected in Standby Wells (Standby well water was not activated in 2014)										
Arsenic	2013	0.868	0.868-0.868	0	10	ppb	N	Erosion of natural deposits, runoff from orchards; runoff from glass and electronics production waste		
Barium	2013	0.132	0.132-0.132	2	2	ppm	N	Discharge of drilling wastes, discharge from metal refineries; erosion of natural deposits		
Fluoride	2013	0.151	0.151-0.151	4	4	ppm	N	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories		
Iron	2013	3.29	3.29-3.29		1.0	ppm	N	This contaminant is not currently regulated by the USEPA. However, the state regulates erosion of natural deposits		
Manganese	2013	63	63-63	150	150	ppb	N	This contaminant is not currently regulated by the USEPA. However, the state regulates erosion of natural deposits		
Nitrite (measured as Nitrogen)	2013	0.012	0-0.012	10	10	ppm	N	Runoff from fertilizer use, leaching from septic tanks, sewage; Erosion of natural deposits		
Nitrite (measured as Nitrogen)	2014	0.011	0-0.011	1	1	ppm	N	Runoff from fertilizer use, leaching from septic tanks, sewage; Erosion of natural septic		
Sodium	2013	35.2	35.2-35.2			ppm	N	Erosion of natural deposits, used in water softener regeneration		
Radioactive Contaminants										
Combined Radium 226/228	2013	10.5	0.58-10.5	0	5	pCi/L	N	Erosion of natural deposits		
Gross alpha excluding radon and uranium	2013	29.3	0-29.3	0	15	pCi/L	N	Erosion of natural deposits		
Volatile Organic Contaminants										
Toluene	2014	0.00088	0-0.00088	1	1	ppm	N	Discharge from petroleum factories.		

### 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 2014 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.

	MCLG	MCL	Highest Level Detected	Range of Detections	Units	Likely Source of Contamination
CHROMIUM	100	100	0.4	0.3-0.4	ppb	Naturally-occurring element; used in making steel and other alloys
MOLYBDENUM	NA	NA	1.1	ND-1.1	ppb	Naturally-occurring element found in ores and present in plants, animals and bacteria; commonly used form molybdenum trioxide
STRONTIUM	NA	NA	132.9	121.4-132.9	ppb	Naturally-occurring element; has been used in cathode-ray tube TVs to block x-ray emissions
VANADIUM	NA	NA	0.3	ND-0.3	ppb	Naturally-occurring metal; vanadium pentoxide is used as a catalyst and a chemical intermediate
CHROMIUM-6 or HEXAVALENT CHROMIUM	NA	NA	0.20	0.19-0.20	ppb	Naturally-occurring element; used in making steel and alloys

## 2014 Regulated Contaminants Detected: City of Chicago

<b>Turbidity</b>	<b>MCLG</b>	<b>MCL</b>	<b>Level Detected</b>	<b>Range of Detections</b>			<b>Violation</b>	<b>Likely Source of Contamination</b>
NTU/Lowest Monthly %≤0.3NTU Measurement	NA	TT(95% ≤0.3NTU)	Lowest Monthly % 100%	100%-100%			N	Soil runoff
NTU/Highest Single Measurement	NA	TT(1NTU max)	0.11	NA			N	Soil runoff
<b>Contaminants</b>	<b>Collection Date:</b>	<b>Highest Level Detected</b>	<b>Range of Levels Detected</b>	<b>MCLG</b>	<b>MCL</b>	<b>Units</b>	<b>Violation</b>	<b>Likely Source of Contamination</b>
<b>State Regulated</b>								
Fluoride	2014	0.98	0.94-0.98	4	4	ppm	N	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
<b>Inorganic Contaminants</b>								
Barium	2014	0.0227	0.0223-0.0227	2	2	ppm	N	Discharge of drilling wastes, discharge from metal refineries; erosion of natural deposits
Nitrate(measured as Nitrogen)	2014	0.31	0.30-0.31	10	10	ppm	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Total Nitrate and Nitrite	2014	0.362	0.30-0.31	10	10	ppm	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
<b>Unregulated Contaminants</b>								
Sodium (Unregulated)	2014	10.0	9.53-10.0	NA	NA	ppm	N	Erosion from naturally occurring deposits; used in water softener regeneration
Sulfate (Unregulated)	2014	35.5	20.9-35.5	NA	NA	ppm	N	Erosion of natural deposits
<b>Radioactive Contaminants</b>								
Combined Radium 226/228	2014	0.84	0.50-0.84	0	5	pCi/L	N	Decay of natural and man-made deposits
Gross alpha excluding radon and uranium	2014	6.6	6.1-6.6	0	15	pCi/L	N	Decay of natural and man-made deposits
<b>Total Organic Carbon (TOC)</b>	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.

	<b>MCLG</b>	<b>MCL</b>	<b>Highest Level Detected</b>	<b>Range of Detections</b>
<b>CHROMIUM (ppb)</b> Naturally-occurring element; used in making steel and other alloys	100	100	0.3	0.2-0.3
<b>MOLYBDENUM (ppb)</b> Naturally-occurring element found in ores and present in plants, animals and bacteria; commonly used form molybdenum trioxide	NA	NA	1.1	1.0-1.1
<b>STRONTIUM (ppb)</b> Naturally-occurring element; has been used in cathode-ray tube TVs to block x-ray emissions	NA	NA	120	120-120
<b>VANADIUM (ppb)</b> Naturally-occurring metal; vanadium pentoxide is used as a catalyst and a chemical intermediate	NA	NA	0.3	ND-0.3
<b>CHROMIUM-6 or HEXAVALENT CHROMIUM (ppb)</b> Naturally-occurring element; used in making steel and alloys	NA	NA	0.22	0.18-0.22
<b>4-ANDROSTENE-3, 17-DIONE (ppb)</b> Steroidal hormone naturally produced in the human body; and used as an anabolic steroid and a dietary supplement	NA	NA	0.0008	0.0006-0.0008
<b>TESTOSTERONE (ppb)</b> Androgenic steroid naturally produced in the human body; and used in pharmaceuticals	NA	NA	0.0001	0.0001-0.0001

## 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 a 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.

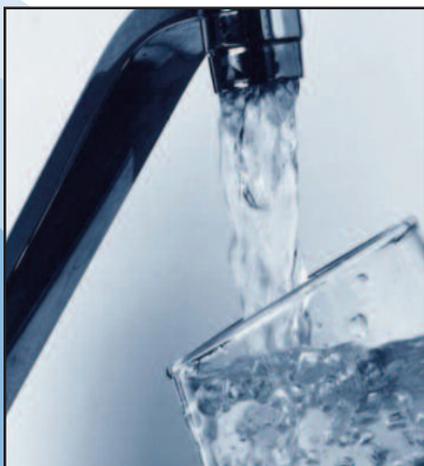
**Fluoride:** Fluoride is added to the water supply to help promote strong teeth, The Illinois Department of Public Health recommends an optimal fluoride range of 0.90mg/l to 1.2 mg/l.

**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.

## Water Quality Test Results Key

<b>Definitions:</b>	The preceding tables contain scientific terms and measures, some of which may require explanation.
<b>Maximum Contaminant Level Goal (MCLG):</b>	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.
<b>Maximum Contaminant Level (MCL):</b>	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.
<b>Maximum Residual Disinfectant Level Goal (MRDLG):</b>	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.
<b>Maximum Residual Disinfectant Level (MRDL):</b>	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.
<b>Action Level (AL)</b>	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
<b>Treatment Technique (TT)</b>	A required process intended to reduce the level of a contaminant in drinking water.
<b>Level Detected</b>	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.
<b>Range of Detections</b>	This column represents a range of individual sample results from lowest to highest that were collected during the CCR calendar year.
<b>% pos/mo</b>	Percent positive samples per month.
<b>Abbreviations</b>	The preceding tables contain scientific terms and measures, some of which have been abbreviated.
<b>N:</b>	No
<b>ppb:</b>	Micrograms per liter of parts per billion – or one ounce in 7,350,000 gallons of water.
<b>ND:</b>	Not Detectable at testing limits
<b>na:</b>	Not applicable.
<b>Avg:</b>	Regulatory compliance with some MCLs are based on running annual average of monthly samples.
<b>ppm:</b>	Milligrams per liter or parts per million – or one ounce in 7,350 gallons of water.
<b>%≤0.3 NTU</b>	Percent of samples less than or equal to 0.3 NTU
<b>NTU (Nephelometric Turbidity Units)</b>	A measure of clarity.
<b>pCi/L or picocuries per liter</b>	A measure of radioactivity.
<b>Date of Sample</b>	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.

## Our Water Is Safe and Clean – Help Keep It That Way!



### Don't Dump into Storm Drains

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. Help keep our streams and lakes clean!

### Bottled versus Tap Water

Village water is as safe and healthful as bottled water – and considerably cheaper! A 24-pack case of bottled water costs around \$3.00. At that rate, you'd spend almost \$950.00 for 1,000 gallons of water, instead of our cost of \$10.66.

### 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 at (630) 736-3850.