

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 contaminations. The Illinois EPA has completed the Source Water Assessment Program for our supply. 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.

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. Further information regarding the 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 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 (LT2ESWTR) Round 2, the City of Chicago has started the 24 months long monitoring program in April 2013, collecting samples from its source water once per month to monitor for Cryptosporidium, Giardia, E. coli and turbidity. Cryptosporidium and Giardia were not detected in these samples.

In 2016, 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 which can be accessed at the following address below:
http://www.cityofchicago.org/city/en/depts/water/supp_info/water_quality_resultsandreports/city_of_chicago_emergentcontaminantsstudy.html

South Stickney Sanitary District

JOSEPH G. FORD
Trustee
RALPH AGUIRRE
Trustee
JAY GRIDER
Trustee

7801 LAVERGNE AVENUE
BURNBANK, IL 60459
PHONE 708/424-6030 • FAX 708/424-0423

TIM GEARY
Engineer
JASON GUSTAFSON
ADM./Superintendent

CONSUMER WATER QUALITY REPORT FOR 2016

For the period of January 1 to December 31, 2016

This report is intended to provide you with important information about your drinking water and the efforts made by the South Stickney Sanitary District water system to provide safe drinking water. The source of drinking water used by South Stickney Sanitary District is Lake Michigan surface water that we purchase from our parent supplier, the Chicago Water System. This water is treated at Jardine Treatment Plant and enters our system along our town's limits.

Source of Drinking Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

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 EPA's Safe Drinking Water Hotline at (800) 426-4791.

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, EPA 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. 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, some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800) 426-4791.

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. South Stickney Sanitary District 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 <http://www.epa.gov/lead/water/lead>.

We are committed to providing you with this information, because informed customers are our best allies. Regular board meetings are held monthly on the second Thursday at 6:00pm at the District's Office.

If you should have any questions regarding this report, please contact Jason Gustafson, superintendent at South Stickney Sanitary District M-F 8:00am-5:00pm at (708) 424-6030.



SERVICE AND COURTESY TO THE PUBLIC ARE THE GUIDING PRINCIPLES OF THIS OFFICE
WE WELCOME YOUR SUGGESTIONS TO IMPROVE OUR SERVICE

SOUTH STICKNEY

2016 Water Quality Data

Regulated Contaminants Detected in 2016

Definitions:

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. ----- 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. We are responsible for providing high quality drinking water, but we 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 <http://www.epa.gov/safewater/lead>.

Water Quality Test Results

Definitions: The following tables contain scientific terms and measures, some of which may require explanation.
Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the Maximum Contaminant Level Goal as feasible using the best available treatment technology.
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.

ppb: milligrams per liter or parts per million - or one ounce in 7,350,000 gallons of water.
ppm: micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.
 na: not applicable.

Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.
Maximum Residual Disinfectant Level (MRDL): The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
Maximum Residual Disinfectant Level Goal (MRDLG): The level of disinfectant in drinking water 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.

Regulated Contaminants

Disinfectants & Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violations	Likely Source of Contaminant
Chlorine	12/01/2016	1	1 - 1	MRDLG=4	MRDL=4	ppm	No	Water additive used to control microbes.
Halocetic Acids (HAA5)	2016	15	9.88 - 15.46	No goal for the total	50	ppb	No	By-product of drinking water disinfection.
Total Trihalomethanes (THM)	2016	32	12.68 - 30.7	No goal for the total	80	ppb	No	By-product of drinking water disinfection.

2016 Regulated Contaminants Detected

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Range of Positive	MCLG	MCL	Units	Violations	Likely Source of Contaminant
0	1 positive monthly sample	2	0 - 2	0	0	ppb	N	Naturally present in the environment

Lead and Copper

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

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

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violations	Likely Source of Contaminant
Lead	2016	0	15	6.39	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

NO DRINKING WATER QUALITY VIOLATIONS WERE RECORDED FOR SOUTH STICKNEY DURING 2016

Unit of Measurement
 ppm - parts per million, or milligrams per liter
 ppb - Parts per billion, micrograms per liter
 NTU - Nephelometric Turbidity Unit, used to measure cloudiness in drinking water
 %<0.3 NTU - Percent samples less than 0.3 NTU
 pCi/L - Picocurie per liter, used to measure radioactivity

CHICAGO

2016 Water Quality Data

-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.

Highest Level Detected: This column represents the highest single sample reading of a contaminant of all samples collected 2012.
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.
Treatment Technology (TT): A required process intended to reduce the level of a contaminant in drinking water.
 na: Not detectable at testing limits na: Not applicable

Detected Contaminants

Contaminant (Unit of Measurement)	Typical Source of Contaminant	MCLG	MCL	Highest Level Detected	Range of Detections	Date of Sample
Turbidity Data						
TURBIDITY (NTU) Lowest Monthly %	N/A	N/A	TT(Limit 0.3 NTU)	100%	100% - 100%	
Soil runoff.						
TURBIDITY (NTU) Highest Single Measurement	N/A	N/A	TT(Limit 1 NTU)	0.16	N/A	
Soil runoff.						

Inorganic Contaminants

Barium (ppm)		2	2	0.0206	0.0196 - 0.0206	
Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.						
NITRATE (AS NITROGEN) (ppm)		10	10	0.46	0.40 - 0.46	
Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.						
TOTAL NITRATE & NITRITE (AS NITROGEN) (ppm)		10	10	0.46	0.40 - 0.46	
Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.						

Total Organic Carbon

TOC (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 EPA.

Unregulated Contaminants

SULFATE (ppm) Erosion of naturally occurring deposits.	N/A	N/A	N/A	25.7	25.0 - 25.7	
SODIUM (ppm) Erosion of naturally occurring deposits; Used as water softener.	N/A	N/A	N/A	8.92	8.49 - 8.92	

State Regulated Contaminants

FLUORIDE (ppm) Water additive which promotes strong teeth.	4	4	4	0.78	0.82 - 0.78	
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Radioactive Contaminants

COMBINED RADIUM (226/228) (pCi/L) Decay of natural and man-made deposits.	0	5	0.84	0.84	0.80 - 0.84	2/11/2014
GROSS ALPHA excluding radon and uranium (pCi/L) Decay of natural and man-made deposits.	0	15	6.6	6.6	6.1 - 6.6	2/11/2014

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 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.

2016 Violation Summary Table

No drinking water quality violations were recorded during 2016.