

SOUTH PALOS TOWNSHIP SANITARY

8102 W 119TH STREET, UNIT 1130 PALOS PARK, ILLINOIS 60464

ANNUAL DRINKING WATER QUALITY REPORT

FOR THE PERIOD OF
JANUARY 1ST, 2019 TO DECEMBER 31ST, 2019



We are pleased to present to you this year's Annual Drinking Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. The source of drinking water used by South Palos Township Sanitary District comes from The City of Chicago via The City of Palos Heights. This report is a snapshot of last year's water quality.

For more information regarding this report, contact Harold Cowger at 708-821-7894 or attend a District Board meeting held on the 3rd Wednesday of each month at the District Office.

Este informe contiene información muy importante sobre el agua que usted bebe.

Traduzcalo o hable con alguien que lo entienda bien.

Celem tego raportu jest dostarczenie ważnych informacji na temat wody pitnej i wysiłków podejmowanych przez system wodny w celu zapewnienia bezpiecznej wody pitnej.

يهدف هذا التقرير إلى تزويدك بمعلومات مهمة حول مياه الشرب والجهود التي يبذلها نظام المياه لتوفير مياه الشرب الآمنة.

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. 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.

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.

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. 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. 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. We cannot control the variety of the materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposures 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.

Source Water Name; CC-1-Meter Vault 133rd Street and 82nd Street FF IL0312370 TP01: Lake
Type: SW

SUSCEPTIBILITY TO CONTAMINATION Source of Water: 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 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.

South Palos Township Sanitary District monitors for constituents in your drinking water according the Federal and Sate Laws. In the following tables you will find may terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions before the water quality date results.

~~DEFINITION OF TERMS~~

Avg: Regulatory compliance with some MCLs are based on running annual averages of monthly samples.

Level 1 Assessment : is a study of the water system to identify potential problems and determine (if possible) why any coliform bacteria have been found in our water system.

Level 2 Assessment : is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. Coli MCL violation has occurred and /or why total coliform bacteria have been found in our water system on multiple occasions.

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.

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.

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

MREM; Millirems per year (a measure of radiation absorbed by the body).

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

ND: Contaminant Not detectable at testing limits.

N/A: Not applicable

2019 REGULATED CONTAMINANTS DETECTED

SPTSD

Lead and Copper

Definitions:

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

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.

Lead & Copper	Date Sampled	MCLG	Action Level (AL)	90 th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	09/28/2018	1.3	1.3	0.049	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

Water Quality Test Results

Definitions: the following tables contain scientific terms and measures, some of which may require explanation.

Maximum Contaminant Level Goal or MCLG: the level of 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 or 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 or 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 or 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.

ppb: micrograms per liter or parts per billion- or one ounce in 7,350,000 gallons of water.

ppm: milligrams per liter or parts per million – or one ounce in 7,350 gallons of water.

na: not applicable.

Regulated Contaminants

Disinfectants & Disinfection	Collection Date	Highest Level	Range of Levels	MCGL	MCL	Units	Violation	Likely Source of Contamination
Chlorine	2019	0.8	0.8 - 0.8	MRDLG=4	MRDLG=4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2019	12	2.09 - 9.37	No goal for the total	60	ppb	N	By-product of drinking water disinfection
Total Trihalomethanes (TTHM)	2019	32	17.05 - 29.04	No goal for the total	80	ppb	N	By-product of drinking water disinfection

Not all sample results may have been used for calculating the highest level detected because some results may be part of an evaluation to determine where compliance sampling should occur on the future.

Violation Summary Table

Haloacetic Acids (HAA5)

Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

Violation Type	Monitoring, Routine (DBP), Major
Violation Explanation	We failed to test our drinking water for the contaminant in period indicated. Because of this failure, we cannot be sure the quality of our drinking water during this period indicated.
Violation Solution	In March 2019 new samples were taken and sent in for testing.
Violation Dates	Violation Start Date 12/01/2018 to Violation End Date 02/28/2019

Total Trihalomethanes (TTHM)

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with

Violation Type	Monitoring, Routine (DBP), Major
Violation Explanation	We failed to test our drinking water for the contaminant in period indicated. Because of this failure, we cannot be sure the quality of our drinking water during this period indicated.
Violation Solution	In March 2019 new samples were taken and sent in for testing.
Violation Dates	Violation Start Date 12/01/2018 to Violation End Date 02/28/2019



One of the main goals of the water department is to keep our valued residents informed about their water quality. The South Palos Township Sanitary District would like to invite you to call Harold "Bud" Cowger, District Water Operator, (708-821-7894) with any questions you might have regarding this report.

Interested in receiving future CCR Reports emailed directly to you? You can contact the District Office, to provide an email address, from 9 a. m. to Noon, Monday through Friday.

Respectively Submitted,

Bud Cowger

Harold "Bud" Cowger,
District Water Operator

2019 Water Quality Data

DATA TABULATED BY CHICAGO DEPARTMENT OF WATER MANAGEMENT
0316000 CHICAGO

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 the samples collected in 2019.

Range of Detections: This column represents a range of individual sample results, from lowest to highest that were collected during the PCR 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 Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

N/A: Not applicable

DETECTED CONTAMINANTS

Contaminant (unit of measurement) Typical source of Contaminant	MCLG	MCL	Highest Level Detected	Range of Detections	Violation	Date of Sample
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Turbidity Data

Turbidity (NTU/Lowest Monthly % ≤0.3 NTU) oil runoff	N/A	TT (Limit: 95%≤0.3 NTU)	Lowest Monthly %: 100%	100% - 100%		
Turbidity (NTU/Highest Single Measurement) oil runoff	N/A	TT (Limit 1 NTU)	0.14	N/A		

Inorganic Contaminants

Barium (ppm) Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	2	2	0.0208	0.0195 – 0.0208		
Nitrate (as Nitrogen) (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	10	10	0.35	0.33 – 0.35		
Total Nitrate & Nitrite (as Nitrogen) (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	10	10	0.35	0.33 – 0.35		

Total Organic Carbon (TOC)

TOC	The percentage of TOC removal was measured each month and the system met all TOC removal requirements set by IFPA					
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Unregulated Contaminants

Sulfate (ppm) Erosion of naturally occurring deposits	N/A	N/A	26.7	25.8 – 26.7		
Sodium (ppm) Erosion of naturally occurring deposits; Used as water softener	N/A	N/A	10.2	8.73 – 10.2		

State Regulated Contaminants

Fluoride (ppm) Water additive which promotes strong teeth	4	4	0.79	0.62 – 0.79		
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Radioactive Contaminants

Combined Radium (226/228) (pCi L) Decay of natural and man-made deposits	0	5	0.84	0.50 – 0.84		02-11-2014
Gross Alpha excluding radon and uranium (pCi L) Decay of natural and man-made deposits	0	15	6.6	6.1 – 6.6		02-11-2014

Units of Measurement

ppm: Parts per million, or milligrams per liter

ppb: Parts per billion, or micrograms per liter

NTU: Nephelometric Turbidity Unit, used to measure cloudiness in drinking water

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

pCi L: Percent of samples less than or equal to 1 pCi L

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 level of 0.7 mg/L with a range of 0.6 mg/L to 0.8 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.

SOURCE WATER ASSESSMENT SUMMARY

Source Water Location

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 Sawyer (formerly 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.

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 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.

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.

2019 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 2019, 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 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_emergincontaminantstudy.html

For more information, please contact
Andrea Putz, Deputy Commissioner, Water Quality - Bureau of Water Supply
at 312-744-8190

Chicago Department of Water Management
Bureau of Water Supply
1000 East Ohio Street
Chicago, IL 60611
Attn: Andrea Putz

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by:
The City of Chicago
Department of Water Management
Water System ID# IL0316000

SOUTH PALOS TOWNSHIP SANITARY DISTRICT
8102 W 119TH STREET, UNIT 1130
PALOS PARK, ILLINOIS 60464
708-448-3166 FAX 708-448-2545
SDISTRICT@SBCGLOBAL.NET

WATER USAGE AND CONSERVATION

Dear SPTSD Water Customer,

The purpose of this page is to provide you with general information regarding water usage and water conservation. Water usage is indicated on your water/sewer bill in thousand gallons. Your usage is recorded by your water meter, which is read by the District Meter Reader once every two months. This page includes information about your meter, typical household water usage, conservation tips and watering restrictions.

WATER METERS

The water meter installed in your home measures the amount of water being used for billing purposes. These meters are owned and maintained by the District. The accuracy of the meter is guaranteed by the manufacturer when it is purchased by the District Water Department. Limits on the accuracy are set by the standards established for the water industry by the American Water Works Association. Today's Water meters are very accurate. The motion of the measuring element inside the meter, called a nutating disc, is transmitted by a magnetic drive to the meter register which records the flow in gallons. When a meter is old, it may under-register or read low. A new replacement meter will read more accurately than an old meter.

LEAK DETECTION

To check for water leaks carefully turn everything off, so no water is being used anywhere in the house. Then check the position of the meter dial for about 15 minutes. If it hasn't moved, congratulations! You have a relatively water-tight home. But if it does move, start checking faucets, toilets, and hose connections.

ESTIMATE YOUR OWN WATER USAGE

Take an actual meter reading at the **same time every day**. Subtract the previous day's reading from the current day's reading; the difference is your **daily usage**. The monitoring period should be a minimum of **two weeks**.

Water usage rates for some typical devices are listed below. You may be surprised at the amount of water some devices use!

~Toilet Flush: 2 to 6 gallons per flush

~Shower: 30 to 50 gallons per shower

~Dishwasher: 20 gallons per run

~Washing Machine: 40 gallons per load

~Sink Faucet: 3 gallons per minute

~Lawn Sprinkling: 600 gallons per hour

~Small Leak: 170 gallons per day

~Large Leak: 1,000 gallons per day