

SOUTH PALOS TOWNSHIP SANITARY

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

ANNUAL DRINKING WATER QUALITY REPORT

FOR THE PERIOD OF
JANUARY 1 ST, 2022 TO DECEMBER 31 ST, 2022



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 loentienda 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 المأمونة.

SOURCE OF DRINKING WATER

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, 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.

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

2022 REGULATED CONTAMINANTS DETECTED

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) | 90th Percentile | # Sites Over AL | Units | Violation | Likely Source of Contamination |
|--------------------------|---------------------|-------------|--------------------------|-----------------------------------|------------------------|--------------|------------------|---|
| Copper | 9/23/2021 | 1.3 | 1.3 | 0.091 | 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

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.

| Disinfectants & Disinfection | Collection Date | Highest Level | Range of Levels | MCGL | MCL | Units | Violation | Likely Source of Contamination |
|------------------------------|-----------------|---------------|-----------------|-----------------------|---------|-------|-----------|---|
| Chlorine | 12/31/2022 | 0.8 | 0.5 - 0.8 | MRDLG=4 | MRDLG=4 | ppm | N | Water additive used to control microbes. |
| Haloacetic Acids (HAA5) | 2022 | 6 | 3.2 - 10.6 | No goal for the total | 60 | ppb | N | By-product of drinking water disinfection |
| Total Trihalomethanes (TTHM) | 2022 | 19 | 13.47 –24.5 | No goal for the total | 80 | ppb | N | By-product of drinking water disinfection |

Violation Summary Table

Consumer Confidence Rule

The Consumer Confidence Rule requires community water systems to prepare and provide to their customers annual consumer confidence reports on the quality of the water delivered by the systems.

The following table lists the violations incurred in 2021. The District had one lead consumer notice violation. Even though this did not impact the quality of your drinking water, as our customers, you have the right to know what happened and what we did to correct the situation.

Lead and Copper Rule

The Lead and Copper Rule Protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and Copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.

| Violation Type | Lead Consumer Notice |
|-----------------------|---|
| Violation Begin | 12/30/2021 |
| Violation End | 01/20/2022 |
| Violation Explanation | We failed to provide the results of lead tap water monitoring to the consumers at the location water was tested. These were supposed to be provided no later than 30 days after learning the results. |
| Violation Solution | The results of the lead tap water monitoring were submitted as required however, due to unexpected delivery delays, were not received with-in the 30 day time frame. |

2022 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.

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 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.

Highest Level Detected: This column represents the highest single sample reading of a contaminant of all the samples collected in 2022, except where a specific date is indicated.

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.

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

ND: Contaminant Not Detected at or above the reporting or testing limit. **N/A:** Not applicable

Locational Running Annual Average (LRAA): The average of 4 consecutive quarterly results at each monitored sample location. The LRAA should not exceed 80 µg/L for TTHM and 60 µg/L for HAA5.

Detected Contaminants

| Contaminant (unit of measurement) Typical Source of Contaminant | MCLG | MCL | Highest Level Detected | Range of Detections | Violation | Date of Sample |
|--|------|---------------------------|---------------------------------------|----------------------|-----------|----------------|
| Microbial Contaminants | | | | | | |
| TOTAL COLIFORM Bacteria (% pos/mo) Naturally present in the environment | 0 | 5% | 0.4% | N/A | N | |
| FECAL COLIFORM AND E. COLI (# pos/mo) Human and animal fecal waste | 0 | 0 | 0 | N/A | N | |
| TURBIDITY (NTU/Lowest Monthly %≤0.3 NTU) Soil runoff | N/A | TT (Limit: 95%≤0.3NTU) | 100% | 100% - 100% | N | |
| TURBIDITY (NTU/Highest Single Measurement) Soil runoff | N/A | TT (Limit: 1 NTU max) | 0.30 | N/A | N | |
| Inorganic Contaminants | | | | | | |
| BARIUM (ppm) Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits | 2 | 2 | 0.0201 | 0.0193 - 0.0201 | N | |
| COPPER (ppm) ** Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives | 1.3 | AL = 1.3 | 0.12 (90 th percentile) | 0 sites exceeding AL | N | 6/1/22-9/30/22 |
| LEAD (ppb) ** Corrosion of household plumbing systems; Erosion of natural deposits | 0 | AL = 15 | 7.7 (90 th percentile) | 1 site exceeding AL | N | 6/1/22-9/30/22 |

Detected Contaminants Continued

| <i>Contaminant (unit of measurement) Typical Source of Contaminant</i> | <i>MCLG</i> | <i>MCL</i> | <i>Highest Level Detected</i> | <i>Range of Detections</i> | <i>Violation</i> | <i>Date of Sample</i> |
|---|-------------|------------|-----------------------------------|--------------------------------|------------------|---------------------------|
| NITRATE (AS NITROGEN) (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits | 10 | 10 | 0.30 | 0.30 - 0.30 | N | |
| TOTAL NITRATE & NITRITE (AS NITROGEN) (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits | 10 | 10 | 0.30 | 0.30 - 0.30 | N | |

Disinfectants\Disinfection By-Products

| | | | | | | |
|--|-----|-----|------|-------------|---|--|
| TTHM [TOTAL TRIHALOMETHANES] (ppb) * By-product of drinking water disinfection | N/A | 80 | 25.1 | 12.8 – 37.6 | N | |
| HAA5 [HALOACETIC ACIDS] (ppb) * By-product of drinking water disinfection | N/A | 60 | 11.9 | 5.8 – 15.2 | N | |
| CHLORINE (as Cl ₂) (ppm) Drinking water disinfectant | 4.0 | 4.0 | 1 | 1 – 1 | N | |
| 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 IEPA | | | | | | |

Unregulated Contaminants

| | | | | | | |
|--|-----|-----|------|-------------|--|--|
| SULFATE (ppm) Erosion of naturally occurring deposits | N/A | N/A | 27.1 | 25.8 – 27.1 | | |
| SODIUM (ppm) Erosion of naturally occurring deposits; Used as water softener. | N/A | N/A | 9.08 | 8.56 – 9.08 | | |

State Regulated Contaminants

| | | | | | | |
|--|---|---|------|-------------|---|--|
| FLUORIDE (ppm) Water additive which promotes strong teeth | 4 | 4 | 0.76 | 0.63 – 0.76 | N | |
|--|---|---|------|-------------|---|--|

Radioactive Contaminants

| | | | | | | |
|---|---|----|------|-------------|---|-----------|
| COMBINED RADIUM 226/228 (pCi/L) ** Decay of natural and man-made deposits. | 0 | 5 | 0.95 | 0.83 – 0.95 | N | 2/04/2020 |
| GROSS ALPHA excluding radon and uranium (pCi/L) ** Decay of natural and man-made deposits. | 0 | 15 | 3.1 | 2.8 – 3.1 | N | 2/04/2020 |

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 has recommended an optimal fluoride

level of 0.7 mg/L, with a range of 0.8 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.

Note: TTHM, HAA5, and Chlorine are for the Chicago Distribution System.

*Data expressed as LRAA – Locational Running Annual Average (See Definition of Terms for Details)

**The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, is more than one year old. 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. Compliance monitoring for lead and copper is conducted every 3 years. Radiochemical contaminant monitoring is conducted every 6 years.

Unit of Measurement

ppm - Parts per million, or milligrams per liter

opb - 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 - PicoCuries per liter, used to measure radioactivity.

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

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!

| | |
|-------------------------|-----------------------------|
| <u>Toilet Flush:</u> | 2 to 6 gallons per flush |
| <u>Shower:</u> | 30 to 50 gallons per shower |
| <u>Dishwasher:</u> | 20 gallons per run |
| <u>Washing Machine:</u> | 40 gallons per load |
| <u>Sink Faucet:</u> | 3 gallons per minute |
| <u>Lawn Sprinkling:</u> | 600 gallons per hour |
| <u>Small Leak:</u> | 170 gallons per day |
| <u>Large Leak:</u> | 1,000 gallons per day |

District Bulletin Board

Do you Have a Pool, In-House or In-Ground Sprinkler System?

Backflow Preventor Inspections Are Due!

Subject: Ordinance O-01-11 Required Back-Flow Prevention

The South Palos Township Sanitary District is responding to the standards set by the Illinois Pollution Control Board (IPCB) and the Illinois Environmental Protection Agency (IEPA) concerning back flow preventers. The regulations prevent the contamination of all public water supply systems due to back-flow of contaminants or pollutants through the potable water service connection. The IEPA requires all residences with in-ground sprinkler systems, fire suppression systems or swimming pools connected to District's water supply (Lake Michigan Water) to have RPZ (reduced pressure zone) back flow preventers. The IEPA also requires that RPZ back flow preventers undergo a yearly inspection and certification by a plumber licensed by the State of Illinois and certified in back-flow inspection, testing, and repair. A list of certified Cross-Connection Control Inspectors is available at the District Office.

Be advised, these yearly inspections are **mandatory**, and are the responsibility of the home owner. Please have your tester send the inspection report to District Office, 8102 W 119th Street- Unit 1130, Palos Park, Illinois 60464. Please submit inspection results no later than October 31, 2022

If you have questions about the devices mentioned above contact Harold (Bud) Cowger , The District's Water Operator in Charge at 708-821-7894.

RPZ VALVE

