

City of Oakbrook Terrace Annual Water Quality Report IL 0430750

For the period of January 1, 2022 to December 31, 2022

This report is intended to provide you with important information about your drinking water and the efforts made by the City of Oakbrook Terrace water system to provide safe drinking water. The source of drinking water used by the City of Oakbrook Terrace is Purchase Water from the DuPage Water Commission which purchases their water from the City of Chicago.

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IS MY WATER SAFE?

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. We are committed to providing you with information because our customers are our best allies. The Oakbrook Terrace City Council meets routinely on the 2nd and 4th Tuesday of every month at 7:00pm.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of Infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

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 or 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 can be naturally-occurring or be the result of oil and gas production and mining activities.

Drinking water including bottled water may be 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 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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of Infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

DESCRIPTION OF THE WATER TREATMENT PROCESS

Your water is treated in a "treatment train" (a series of processes applied in a sequence) that includes coagulation, flocculation, sedimentation, filtration and disinfection. Coagulation removes dirt and other particles suspended in the source water by adding chemicals (coagulants) to form tiny sticky particles called "floc", which attract the dirt particles. Flocculation (the formation of larger flocs from smaller flocs) is achieved using gentle, constant mixing. The heavy particles settle naturally out of the water in a sedimentation basin. The clear water then moves to the filtrations process where the water passes through sand and gravel filters that remove even smaller particles. A small amount of chlorine is used to kill bacteria and other microorganisms (viruses, cysts, etc.) that may be in the water before the water is stored and distributed to homes and businesses in the community.

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 to all surface water

supplies in Illinois. Chicago's offshore intakes are located at a distance that shoreline impacts are not considered a factor on water quality. At certain times of the year, 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. Throughout history there have been extraordinary steps taken to assure a safe source of drinking water in the Chicago land area. From the building of the offshore cribs and the introduction of interceptor sewers to the lock and dam system of Chicago's waterways and the city's Lakefront Zoning ordinance.

The city now looks to the recently created Department of Water Management, Department of Environment and the MWRDGC to assure the safety of the city's water supply. Water Supply officials from Chicago are active members of the West Shore Water Producers Association. Coordination of water quality situations (i.e., spills, tanker leaks, exotic species, etc) and general lake conditions are frequently discussed during the associations quarterly meetings. Also, Lake Michigan has a variety of organizations and associations that are currently working to either maintain or improve water quality. Finally, one of the best ways to ensure a safe source of drinking water is to develop a program designed to protect the source water against potential contamination on the local level. Since the predominant land use within Illinois boundary of Lake Michigan watershed is urban, a majority of the watershed protection activities in this document are aimed at this purpose. Citizens should be aware that everyday activities in an urban setting might have a negative impact on their source water. Efforts should be made to improve awareness of storm water drains and their direct link to the lake within the identified local source water area. A proven best management practice (BMP) for this purpose has been the identification and stenciling of storm water drains within a watershed. Stenciling along with an educational component is necessary to keep the lake a safe and reliable source of drinking water.

ADDITIONAL INFORMATION ON 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 City of Oakbrook Terrace 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 (800-426-4791) or at: www.epa.gov/safewater/lead.

WATER CONSERVATION TIPS

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily there are many low cost and no cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature.

- Take short showers – a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving to save up to 500 gallons a month.
- Use a water efficient showerhead. They're inexpensive, easy to install and can save you up to 750 gallons per month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons per month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the bowl without flushing, you have a leak.
- Fixing it or replacing a leaking toilet with a new more efficient model can save up to 1,000 gallons per month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit www.preservingeverydrop.org/ for more information.

SOURCE WATER PROTECTION

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you own a septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one.
- Use EPA's Adopt Your Watershed to locate groups in your community, or visit the Watershed Information Network's How to Start a Watershed Team.
- Organize a storm drain stenciling project with your local government or water supplier.
- Stencil a message next to the street drain reminding people "Dump No Waste – Drains to River" or "Protect Your Water".

- Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

2022 REGULATED CONTAMINANTS DETECTED

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. MCL's 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. MCLG's allow for a margin of safety.

Mg/l: milligrams per litre or parts per million – or one ounce in 7,350 gallons of water.

Ug/l: micrograms per litre or parts per billion – or one ounce in 7,350,000 gallons of water.

Na: not applicable. **Avg:** Regulatory compliance with some MCL's are based on running annual average of monthly samples.

Maximum Residual Disinfectant Level (MRDL): The highest level of disinfectant in drinking water below which there is no known or expected risk to health. MRDLG's allow for a margin of safety.

NOTE: The State requires monitoring of certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of this data may be more than a year old. **MCL (Maximum Contaminant Level):** 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, **MCLG (Maximum Contaminant Level Goal):** 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. **AL (Action Level):** The concentration of a contaminant which, if exceeded triggers treatment or other requirements which a water system must follow. **PPM:** parts per million. **PPB:** parts per billion. **PPT:** parts per trillion. **pCi/l:** picocuries per liter (measurement of radioactivity).

2022 Regulated Contaminants Detected - City of Oakbrook Terrace

Regulated Contaminants

Disinfectants and Disinfection By Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely source of contamination.
Chlorine	2022	1.3	0.9-1.3	MRDLG=4	MRDL=4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAAS)	7/20/2022	18.9	18.9-18.9	No goal for total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	7/20/2022	46.7	46-7-46.7	No goal for total	80	ppb	N	By-product of drinking water disinfection.

Coliform Bacteria

Maximum Contaminant Level Goal	Total Colifom Maximum Contaminant Level	Highest Number of Positive	Fecal Colifom of E. Coli Maximum Contaminant Level	Total Number of Positive E. Coli of Fecal Coliform Samples	Violation	Likely Source of Contamination
0	0 positive monthly sample	0	Fecal Coliform or E. Coli MCL: A routine sample and a repeat sample are total coliform positive and one is also fecal coliform or E. coli positive.	0	No	Naturally present in the environment

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% (Lowest Monthly %)	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	
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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 0.6 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.

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

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 - Picocuries per liter, used to measure radioactivity.