Leyden Township

RE: IL0315880 Consumer Confidence Annual Water

Report January 1, 2022 to December 31, 2022

This publication conforms to the new federal regulation under the S.D. W.A. that requires water utilities to provide detailed water quality to each of their customers annually. Leyden Township must provide you with this information.

This report is intended to provide you with important information about your drinking water and efforts made by Leyden Township Water Department top provide safe drinking water to all residents.

If you have any questions relating to your water supply, and this report, please contact Mr. Marcin Mitek, Certified Water Operator for Leyden Township at 847-455-8616.

Have a friend or relative translate this report to non-speaking/reading resident.

This Report will try to answer most common questions about your drinking water. Leyden Township receives its water originally from the City of Chicago via Lake Michigan. The water is then purchased through the Village of Melrose Park water supply system and the Franklin Park water system.

Lake Michigan is the surface water supply used to provide drinking water for Chicago and 123 suburban communities. The Environmental Protection Agency (EPA) has found that the quality of Lake Michigan has improved dramatically over the past 22 years. Lake Michigan, by volume, is the second largest Great Lake and the only one located totally within the United States. It serves as a source of drinking water, as a place for swimming and fishing, and as a scenic wonderland. Sources of drinking water used for both tap water and bottled water can pick up contaminants as water travels over the surface of the land or through the ground. The drinking water source is vulnerable to industrial waste and runoff from surrounding lands. Potential sources of pollution such as pesticides, herbicides, radioactive materials, and organic and inorganic petroleum and gas production by-products can impact the source water. We do not have indications of the presence of these contaminants at this time, mainly because of restrictions, which prohibit industrial effluents from entering Lake Michigan; Sewage treatment plant effluents are not discharged into the lake, thereby reducing the threat of microbial contamination n. All 63 miles of shoreline within Illinois are now considered to be in good condition. The Illinois EPA Office of Groundwater will be doing a source water assessment within the next three years. When completed, all sources of Pollutants into Lake Michigan will be identified and there will be information regarding the source water's susceptibility to contaminants based on the findings of the assessment. Since the quality of the raw water source is good, conventional treatment methods of disinfection, coagulation and sedimentation, and sand filtration are adequate for producing water that is free of harmful contaminants.

The City of Chicago Water Department provides the water treatment necessary to safeguard the water delivered through Melrose Park and then on to Leyden Township. Water is taken from Lake Michigan at several water inlets located just off shore. Chlorine is then injected into the water for disinfection. The water is processed through settling and filtration where the water is filtered to remove any sedimentation that exists in the water. After any remaining particles are removed the water is then re-chlorinated as a precaution to eliminate any microorganisms still remaining. The City of Chicago Water Department monitors and proceeds with voluntary testing for many contaminants which are regulated but no current standards currently exist.

Cryptosporidium: a microscopic organism that can cause illness similar to that of gastrointestinal symptoms. Analyses have been conducted monthly. Cryptosporidium has not been detected in any sample testing. Treatment processes have been optimized to ensure that if there are cryptosporidium cysts in the source water they will be removed during the treatment process. By maintaining a low Turbidity (cloudiness from soil runoff), through proper filtration and disinfectants, the threat of cryptosporidium organisms in the drinking water system is dramatically reduced.

Asbestos: samples are examined for asbestos fibers in the source water and finished water on a routine basis. The EPA has determined that asbestos fibers in high levels for long periods of time may cause lung cancer. Fibers in high levels have not been found.

Sodium: there is not a state or federal acceptable level for sodium amounts in water. The City of Chicago is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions.

The water is now ready to be distributed to adjoining towns. The city of Chicago carefully monitors the chlorine amounts so as not to compromise taste and odor. Fluoride is also added to fight the battle of tooth decay.

Leyden Township Water Department also monitors the levels of contaminants exiting in the water as it enters our distribution system, adding chlorine when tests results show abnormal levels of contaminants. The Township works adamantly to ensure the delivery of safe and tasteful drinking water to all its residents.

SPECIAL HEALTH INFORMATION

FROM THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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 might be present in source water include:

Microbial Contaminants: such as viruses and bacteria, this may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

Inorganic Contaminants: such as slats and metals, which can be naturally occurring or result from urban storm water runoff, domestic wastewater discharges, oil and gas production, mining or farming.

Pesticides and Herbicides: This 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 byproducts 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 the tap water is safe to drink, EPA prescribes regulations which limit the number 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.

The water, originating from the City of Chicago, is purchased through the Village of Melrose Park's water system and stored the Township's I-million-gallon water tank, located on 25th Ave. It is then pumped throughout the Township's pumping station, located adjacent from the water tank, throughout the township on demand.

The attached tables show the Water Quality Data for the sources of water from which Leyden Township receives its water for distribution, via City of Chicago and Village of Melrose Park. These reports showing any and all detected contaminants results monitored for the 2022 calendar year can be found on the **IEPA** website.

Water Conservation Tips

Water conservation measures are an important first step in protecting our water supply. Such measures not only save the supply of our source water, but can also save you money by reducing your water and sewer bills. Here are a few suggestions.

Fix leaking faucets, pipes, toilets, etc.
Replace old fixtures; install water-saving devices in faucets, toilets and appliances.
Wash only full loads of laundry.
Do not use the toilet for trash disposal.
Take shorter showers.
Do not let water run while shaving or brushing teeth.
Soak dishes before washing.
Run the dishwasher only when full. You can conserve outdoors as well:
Water the lawn and garden in the early morning or evening.
Use mulch around plants and shrubs.
Repair leaks in faucets and hoses.
Use water-saving nozzles.
Use water from a bucket to wash your car, and save the hose for rinsing.

Unit of Measurement - Definition

Ppt. Parts per trillion, or nanograms per liter
ppm _ Parts per million, or milligrams per liter
ppb_Parts per billion, or micrograms per liter
Pei/I.Pico curies per liter, used to measure radioactivity

Consumer Confidence Report

Annual Drinking Water Quality Report

LEYDEN TWSP WATER DISTRICT

IL0315880

Annual Water Quality Report for the period of January 1 to December 31, 2022

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

The source of drinking water used by LEYDEN TWSP WATER DISTRICT is Purchased Surface Water

For more information regarding this report contact:

Name MARCIN MITEK

Phone 847 455-8616

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

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 EPAs 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 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.

Source Water Information

Source Water Name		Type of Water	Report Status	Location
CC 01-HSP DISCHARGE LINE	FF IL0311860 TP02: LAKE	SW		

Source Water Assessment

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. 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 City Hall or call our water operator at 847 455 - 8616 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 http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl.

Source of Water: CHICAGOThe 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.

Water Quality Test Results

Definitions:	The following tables contain scientific terms and measures, some of which may require explanation.
Avg:	Regulatory compliance with some MCLs are based on running annual average of monthly samples.
Level 1 Assessment:	A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
Level 2 Assessment:	A 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 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 Contaminant Level Goal or 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 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.
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.
na:	not applicable.
mrem:	millirems per year (a measure of radiation absorbed by the body)
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.
Treatment Technique or TT:	A required process intended to reduce the level of a contaminant in drinking water.

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	12/31/2022	1	0.6 - 1.13	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2022	13	9.8 - 18.7	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2022	30	20.1 - 37.5	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

0316000 CHICAGO **DATA TABULATED BY CHICAGO DEPARTMENT OF WATER MANAGEMENT**

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)	(Lowest Monthly %) 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 (90th 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 (90th percentile)	1 site exceeding AL	N	6/1/22-9/30/22

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.