



Introduction

The City of Highland Park is delighted to present its Annual Water Quality Report for the period of January 1 to December 31, 2022. This report, as required by Federal law, is designed to inform all customers about the quality of water and services that are delivered each day. The City of Highland Park is delighted to report that last year, as in years past, your tap water met or exceeded all U.S. Environmental Protection Agency (USEPA) and State drinking water health

standards. There were no water quality violations recorded during 2022, nor were there any samples over the Maximum Contaminant Levels (MCL). The City's continuing goal is to provide all of its customers with a safe and dependable supply of drinking water. As part of this process, the City wants all customers to understand the efforts that are continually being made to improve the water treatment process and to protect water resources. In short, the City of Highland

Park is committed to ensuring the quality of your water.

Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre éste informe en español, contáctenos por correo electrónico a waterplant@cityhpil.com o por teléfono al 847.433.4355.

The Source of Our Drinking Water

The City of Highland Park Water Plant uses surface water drawn from Lake Michigan. The water is drawn into the plant from a 54 inch primary intake located one mile from shore. This primary intake is situated in 30 feet of water, adjacent to two secondary intakes that are 20 and 16 inches in diameter, which also feed water to the filtration plant. The secondary intakes are used infrequently to augment the capacity of the primary intake or during maintenance or inspection of the primary intake.



Contaminants and Protection

✓ EPA Source Water Assessment Completed

In 2002 Illinois EPA (IEPA) conducted a federally mandated Source Water Assessment of Highland Park. To view a summary version of the completed Source Water Assessment, please visit the IEPA website at <https://dataservices.epa.illinois.gov/swap/factsheet.aspx>.

This report states that sources of potential contaminants for Highland Park's intakes include sediment, shoreline erosion, wet weather sewer overflows, wastewater treatment bypasses, stormwater runoff, and air deposition. The IEPA considers all surface water sources of community water supplies 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, hence the reason for mandatory treatment for all surface water supplies in Illinois.

This report also commends Highland Park's active membership to the West Shore Water Producers Association. Lake Michigan has many different organizations and associations that are currently working to either maintain or improve water quality. Protection of Lake Michigan is a priority for Highland Park. For information on source water protection, please visit the City's website at <http://www.cityhpil.com/watertreatment>

⚠ Contaminant Sources

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 can dissolve naturally occurring minerals and 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 stormwater 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 stormwater runoff, and residential uses;
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff, and septic systems;
- **Radioactive contaminants**, which may 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 the water poses a health risk. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in the drinking water. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Removing all contaminants would be extremely expensive and, in most cases, would not provide increased protection of public health. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1.800.426.4791).



Additional Information

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. USEPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the USEPA's Safe Drinking Water Hotline (1.800.426.4791).

About the Data

In order to ensure that tap water is safe to drink, USEPA prescribes regulations that 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. The City of Highland Park Water Plant routinely monitors drinking water for these constituents in accordance with State and Federal laws. Most contaminants are monitored on a monthly, quarterly, or annual basis. Some contaminants are monitored less frequently because the concentrations of these contaminants do not vary significantly from year to year or because Highland Park's water is not considered to be vulnerable to this type of contamination. As such, some of the data below, though representative, may be more than one year old.

The following water quality tables lists all of the drinking water contaminants detected in Highland Park's tap water during the period of January 1 to December 31, 2022, unless the last detection occurred more than one year ago. Many more contaminants were tested for, including organic chemical contaminants and radioactive contaminants, but only those substances listed in the following tables were found in the water. Full comprehensive results may be obtained by calling the contact listed at the end of this report.

Data Analysis

2022 Water Quality Data Table



The “Your Water” column represents the highest sample result collected during the calendar year, unless otherwise noted. The “Range” column represents a range of individual sample results, from lowest to highest, that were collected during the calendar year. The “Sample Date” column shows the year the sample was most recently analyzed. The “Violation” column indicates whether or not a violation occurred with each contaminant that was detected. The “Typical Source” information lists where contaminants may originate.

Disinfectants & Disinfectant By-Products

Contaminants	MCLG or MRDLG	MCL, TT, OR MRDL	Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
TTHMs [Total Trihalomethanes] (ppb)	NA	80	39	16.91	51.8	2022	No	By-product of drinking water disinfection
Haloacetic Acids [HAA5] (ppb)	NA	60	18	7.51	19.8	2022	No	By-product of drinking water disinfection

Note: There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants

Inorganic Contaminants

Contaminants	MCLG	MCL	Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
Barium (ppm)	2	2	0.019	NA	NA	2022	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chloride (ppm)	NA	250	20	NA	NA	2022	No	Naturally occurring; Run-off from road salts.
Fluoride (ppm)	4	4	0.708	NA	NA	2022	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [measured as nitrogen] (ppm)	10	10	0.38	NA	NA	2022	No	Runoff from fertilizer use; Leaching from septic tanks and sewage; Erosion of natural deposits.
Sulfate (ppm)	NA	250	23	NA	NA	2022	No	Naturally occurring; Discharge from metal factories

Note: There is not a federal or state MCL for sodium. Monitoring is required for information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If the level is greater than 20 ppm, and you are on a sodium-restricted diet, you should consult a physician.

Non-Regulated Inorganic Contaminants

Contaminants	MCLG	MCL	Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
Alkalinity, Total (ppm)	NA	NA	98	NA	NA	2022	No	Erosion of natural deposits
Calcium (ppm)	NA	NA	35	NA	NA	2022	No	Erosion of natural deposits
Chromium, Hexavalent (ppm)	NA	NA	0.00017	NA	NA	2022	No	Naturally occurring; Discharge of dye and paint pigments, wood preservatives, and chrome plating
Copper (ppm)	NA	NA	0.0048	NA	NA	2021	No	Erosion of natural deposits; Leaching from wood preservatives
Hardness, Total (as CaCO3) (ppm)	NA	NA	140	NA	NA	2022	No	Erosion of natural deposits
Magnesium (ppm)	NA	NA	13	NA	NA	2022	No	Erosion of natural deposits
Sodium (ppm)	NA	NA	13	NA	NA	2022	No	Erosion of natural deposits; Used in water softener regeneration
Total Dissolved Solids (ppm)	NA	NA	170	NA	NA	2022	No	Comprised of inorganic salts, dissolved organic matter, chemicals used in the water treatment process, the pipin or hardware used to distribute the water.

Data Analysis (cont.)

2022 Water Quality Data Table (Cont.)

Microbial Control

Contaminant	TT or Min Allowed	MRDLG	MCL/ MRDL	Your Water	Range		Sample Date	Violation	Typical Source
					Low	High			
Chlorine (as Cl ₂) (ppm)	0.50	4	MRDL = 4	1.55	0.50	2.13	2022	No	Water additive used to control microbes
Total Organic Carbon (ppm)	4	NA	NA	1.83	1.6	2	2022	No	Decaying natural organic matter, synthetic sources
Turbidity (NTU)	95% of samples at or below 0.3 NTU	NA	MCL = 1	100% of samples below 0.3 NTU	0.03	0.166	2022	No	Suspended organic and inorganic particles

Note: Some sample results for regulatory compliance are based on a running annual average (RAA) of monthly samples. This is the case for chlorine and TOC. The result for Your Water is the highest RAA for 2022.

Note: The percentage of Total Organic Carbon (TOC) removal was measured each month and the Water Plant met all TOC removal requirements set.

Note: Turbidity is a measure of the cloudiness of the water caused by suspended particulates and is monitored because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

Lead and Copper Contaminants

Contaminants	MCLG	AL	90th Percentile	Sample Date	# of Samples Exceeding AL	Violation	Typical Source
Copper (ppm)	1.3	1.3	0.19	2020	0	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead (ppm)	0	0.015	0.006	2020	1	No	Corrosion of household plumbing systems; Erosion of natural deposits

Note: Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Highland Park is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Note: The USEPA established a lead action level of 0.015 ppm and a copper action level of 1.3 ppm. This means that 90% of samples analyzed for lead and copper in homes with lead service lines in Highland Park must not exceed the lead MCL of 0.015 ppm or the copper MCL of 1.3 ppm.

Drinking Water Definitions

In the water quality data table, you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

- AL** : Action Level or the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- MCLG** : Maximum Contaminant Level Goal or 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.
- MCL** : Maximum Contaminant Level or 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.
- MRDLG** : Maximum Residual Disinfection Level Goal or the level of a drinking water disinfectant below which there is no known or expected risk to health.

- MRDL** : Maximum Residual Disinfectant Level or the highest level of a disinfectant allow in drinking water.

- NA** : Not Applicable

- TT** : Treatment Technique or a required process intended to reduce or control the level of a contaminant in drinking water. For some contaminants, a TT is established rather than a MCL.

UNIT DESCRIPTIONS

- ppm** : Parts per million or Milligrams per liter (mg/L) or one ounce in 7,350 gallons of water.
- ppb** : Parts per billion or or Micrograms per liter (µg/L) or one ounce in 7,350,000 gallons of water.
- NTU** : Nephelometric Turbidity Units, used to measure the cloudiness in drinking water.

Contact Us

For more information about this report or your water utility in general, please contact:



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