

2024 Annual Drinking Water Quality Report

The City of Highland Park is pleased to present the Annual Water Quality Report, covering January 1 – December 31, 2024. We are proud to report that again for the year 2024, your tap water met or exceeded all federal and state requirements for safety and quality. Please read on to learn more about the source of our drinking water, sampling results, and what we are doing to protect you, your family, and our water resources.

Our goal is to provide a safe and dependable supply of drinking water to our community and our wholesale water customers, and your participation in that process is important. If you have any questions after reading this report, please reach out to Don Jensen, our Water Plant Superintendent, at **847.433.4355** or **waterplant@cityhpil.com**. In addition, decisions that affect your drinking water are made at City Council meetings. Meeting information is available at **cityhpil.com**, and public participation is encouraged.

Este informe incluye información importante sobre el agua potable. Si tiene preguntas sobre este informe o si desea recibir una copia del mismo en español, comuníquese con nosotros por correo electrónico a **waterplant@cityhpil.com** o por teléfono al **847.433.4355**.

About Your Water

THE SOURCE OF OUR DRINKING WATER

The City of Highland Park Water Plant uses surface water from Lake Michigan, drawn 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. These secondary intakes feed water to the treatment plant in times of high demand or during maintenance of the primary intake. The George B Prindle Water Treatment Plant in Highland Park utilizes a state-of-the-art ultrafiltration membrane system to treat up to 30 million gallons of water a day. This water is provided to the 29,000 residents of Highland Park along with another 30,000 residents in Deerfield, Lincolnshire, Bannockburn, and Glenbrook Sanitary District.

WE PROTECT THE SOURCE

The Illinois Environmental Protection Agency (EPA) considers all surface water sources to be susceptible to potential pollution problems and requires mandatory treatment of all surface water supplies in Illinois. Contamination of Highland Park's water supply can come from sediment, shoreline erosion, wet weather sewer overflows, wastewater treatment bypasses, stormwater runoff, and air deposition. Highland Park's primary water intake is located far enough offshore that shoreline impacts are not considered a factor in water quality. However, the secondary intakes are close enough to shore that they may be influenced by potential pollution sources including Central Park. Our Water Plant operators are on duty 24 hours a day year-round to monitor the water system and respond quickly to any changes in our source water that could affect water safety and quality.

Protection of Lake Michigan is a priority for Highland Park. For more information on source water protection, please visit **cityhpil.com/watertreatment**. You may also view a summary of our 2002 Source Water Assessment at **dataservices.epa.illinois.gov/swap/factsheet**.



What Is In Your 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 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 can also come from gas stations, urban stormwater 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 that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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**.

Sampling and Testing

We collect and analyze more than 9,200 samples from across our water system each year. We're looking for bacteria, metals, and chemicals to make sure the water continues to be safe to drink.

Together with a pool of resident volunteers, we also collect water samples from homes in Highland Park with lead service lines and analyze them for lead and copper. This gauges the effectiveness of our corrosion control program in preventing lead and other metals from leaching into the drinking water. More information about lead and copper can be found on the following page.

Your Role in Water Quality

We work hard to provide high quality water but factors on private property, outside of the City's control, can impact water quality, including your plumbing and pipe material, how long you go without running the water, and whether or how you connect other devices to your home's water supply.

From taking a few moments to run the taps after a vacation to properly installing backflow prevention devices, visit the City's website at

cityhpil.com/waterproduction to learn more about other ways you can protect your water quality.

CHECK YOUR HOME OR BUSINESS' PLUMBING FOR LEAD

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. Highland Park is

responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, or doing

Your Water Meets All Standards

In the tables beginning on page 12, you will find all the substances that we detected in your drinking water. Here, we would like to highlight a few substances we watch closely because of their potential effects on public health.

Lead	
Tested throughout the distribution system every year. Most recent tests were done on 30 samples collected between June-September 2024.	
Ideal Goal (MCLG)	0 ppb
90th Percentile	8.2 ppb
Action Level	15 ppb
# of Samples Over Action Level	2
Range of Individual Results	ND – 90 ppb
Violation	No

Total Trihalomethanes ¹	
Tested every 90 days at two locations in the distribution system.	
Ideal Goal (MCLG)	NA
Highest Level Allowed (MCL)	80 ppb
Lowest Amount Detected	21.0 ppb
Highest Amount Detected	51.7 ppb
Highest LRAA	36.2 ppb
Violation	No

Copper	
Tested throughout the distribution system every year. Most recent tests were done on 30 samples collected between June-September 2024.	
Ideal Goal (MCLG)	1.3 ppm
90th Percentile	0.17 ppm
Action Level	1.3 ppm
# of Samples Over Action Level	0
Range of Individual Results	ND – 0.24 ppm
Violation	No

Total Haloacetic Acids ¹	
Tested every 90 days at two locations in the distribution system.	
Ideal Goal (MCLG)	NA
Highest Level Allowed (MCL)	60 ppb
Lowest Amount Detected	11.6 ppb
Highest Amount Detected	24.4 ppb
Highest LRAA	17.4 ppb
Violation	No

¹Compliance is based on the running annual average at each location (LRAA). The Highest LRAA reflects the highest average at any location and the Lowest and Highest Amounts Detected reflects all samples collected in 2024 from both locations.

laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact the Water Plant at **847.433.4355**. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at [epa.gov/safewater/lead](https://www.epa.gov/safewater/lead). In 2024, the City of Highland Park completed a material inventory of all

water service lines. Out of 10,449 water services, we identified 1,805 residences with a lead or galvanized service line. Please visit cityhpil.com/leadinformation to view our water service line inventory and to learn more about our City’s lead service line replacement plan.

LOOK OUT FOR SPECIAL POPULATIONS

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 at **800.426.4791**.

2024 Water Quality Data Tables for IL0970500

The following water quality tables list all of the drinking water contaminants detected in Highland Park's tap water from January 1 through December 31, 2024 unless the last detection occurred more than one year ago. Many more contaminants were tested for, including organic chemical contaminants, but only those substances listed in the following tables were found in the water. Full comprehensive results may be obtained by calling the Water Plant at **847.433.4355**.

A list of acronyms and their definitions is provided on the last page of this report.

Microbiological Contaminants - We test for coliform bacteria at the entry point to the distribution system each day, and at over 30 locations throughout the distribution system each month.

Analyte	Highest Number of Positive Samples in a Calendar Month	Monthly MCLG	Monthly MCL	Violation	Date Sampled	Source
Total Coliform Bacteria	2	0	1	No	2024	Naturally occurring
E. Coli Bacteria	0	0	0	No	2024	Naturally occurring

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water system. On 12/09/24, we found total coliform bacteria at one of four locations in the distribution system tested that day. This positive sample indicated the need for us to look for potential problems in water treatment or distribution. We collected follow-up samples at the positive location, at other nearby locations, and at multiple locations throughout the distribution system. A positive coliform sample was found again at the same location but all other locations tested satisfactory. Additional follow-up samples were collected and all samples tested satisfactory.

In response to the two positive coliform samples at this specific location in December 2024, our water system was required to conduct an assessment to identify problems and to correct any problems found during the assessment. Our Level 1 assessment was completed with one problem being identified and one corrective action being taken.

Disinfectants - We regularly monitor residual disinfectant levels at multiple locations throughout the distribution system.

Analyte	Minimum Allowed	Maximum Allowed (MDRL)	Maximum Residual Disinfectant Level Goal (MRDLG)	Maximum Running Annual Average (RAA) ²	Range of Test Results for the Year ²	Violation	Date Sampled	Source
Chlorine (as Cl₂)	0.50 ppm	4 ppm	4 ppm	1.6 ppm	1.3 – 1.7 ppm	No	2024	Water additive used to control microbes

²Compliance is based on the running annual average (RAA). The Maximum RAA reflects the highest RAA that occurred during the previous 12 months and the Range of Test Results reflects the range of monthly RAAs in 2024. Residual chlorine levels in individual samples collected in 2024 ranged from 0.52 – 2.04 ppm.

Disinfection By-products - We collect samples every 90 days from two locations in the distribution system.

Analyte	Highest Level Allowed (MCL) One Year Average	Maximum Locational Running Annual Average (LRAA) ³	System Wide Range of Test Results for the Year ³	Violation	Date Sampled	Source
Total Trihalomethanes (TTHMs)	80 ppb	36.2 ppb	21.0 – 51.7 ppb	No	2024	By-product of drinking water disinfection
Total Haloacetic Acids (THAAs)	60 ppb	17.4 ppb	11.6 – 24.4 ppb	No	2024	By-product of drinking water disinfection

³Compliance is based on the running annual average at each location (LRAA). The Maximum LRAA reflects the highest average at any location and the Range of Test Results reflects all samples collected in 2024 from both locations.

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

Total Organic Carbon - We collect samples each month at the Water Treatment Plant.

Total Organic Carbon (TOC) is a measurement of the amount of organic carbon in the water. Organic carbon comes from decaying natural organic matter as well as synthetic sources. TOC removal during the water treatment process was measured each month and the City of Highland Park met all TOC removal requirements set.

Turbidity - We test turbidity at regular intervals at least six times each day at the entry point to the distribution system.

Treatment Technique (TT) Requirement	Result	Violation	Date Sampled	Source
95% of samples must be at or below 0.3 NTU	100% below 0.3 NTU	No	2024	Suspended organic and inorganic particles
No sample greater than 1 NTU	0.070 NTU	No	2024	Suspended organic and inorganic particles

Turbidity is a measurement of the cloudiness of the water and has no health effects. We monitor turbidity because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

Lead and Copper - We collect multiple samples throughout the distribution system. The most recent tests were done on samples collected from 30 homes with lead service lines between June and September 2024.

Analyte	EPA's AL for a representative sampling of customer homes	Ideal Goal (MCLG)	90% of customers' homes were less than	Violation	Date Sampled	Source
Lead	15 ppb	0 ppb	8.2 ppb	No	2024	Corrosion of household plumbing; Erosion of natural deposits
Copper	1.3 ppm	1.3 ppm	0.17 ppm	No	2024	Corrosion of household plumbing; Erosion of natural deposits

To obtain a copy of our 2024 lead tap sampling data in full, please visit cityhpil.com/leadinformation.

Regulated Inorganic Contaminants (IOC) - A single sample is tested annually at the entry point to the distribution system.

Analyte	Highest Level Allowed (MCL)	Ideal Goal (MCLG)	Highest Result	Violation	Date Sampled	Source
Barium	2 ppm	2 ppm	0.020 ppm	No	2024	Discharge of drilling wastes; Discharge from metal refiners; Erosion of natural deposits
Chloride	250 ppm	NA	25 ppm	No	2024	Naturally occurring; Runoff from road salts
Fluoride	4 ppm	4 ppm	0.64 ppm	No	2024	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Sulfate	250 ppm	NA	24 ppm	No	2024	Naturally occurring; Discharge from metal factories

NOT ALL SUBSTANCES IN THE WATER HAVE OFFICIAL HEALTH LIMITS

In this report, we share the data for all the substances we monitor as required by the Safe Drinking Water Act (SDWA). The law doesn't specify a limit for every potential substance that could be found in the water, so the EPA is constantly studying new potential pollutants (they call them unregulated contaminants) to determine what their effects are on our health, and at what levels, to determine where to set limits for them.

Non-Regulated Inorganic Contaminants – These contaminants are not currently regulated in drinking water by the Federal or State EPA but we choose to monitor them to ensure water quality.

Analyte	Your Water	Range of Test Results for the Year	Date Sampled	Source
Alkalinity, Total	100 ppm	Single sample	2024	Erosion of natural deposits
Calcium	35 ppm	Single sample	2024	Erosion of natural deposits
Chromium, Hexavalent	0.18 ppb	Single sample	2024	Naturally occurring; Discharge of dye and paint pigments, wood preservatives, and chrome plating
Copper	0.0048 ppm	Single sample	2021	Erosion of natural deposits
Hardness, Total (as CaCO ₃)	140 ppm	Single sample	2024	Erosion of natural deposits
Magnesium	12 ppm	Single sample	2024	Erosion of natural deposits
Ortho-phosphate	0.58 ppm (average)	0.42 – 0.91 ppm	2024	Erosion of natural deposits; Water additive used to inhibit corrosion of plumbing materials
Perchlorate	0.14 ppb	Single sample	2024	Naturally occurring; Discharge from fertilizer and munitions factories; Degradation of hypochlorite used in disinfection
Sodium ²	14 ppm	Single sample	2024	Erosion of natural deposits
Total Dissolved Solids	180 ppm	Single sample	2024	Comprised of inorganic salts, dissolved organic matter, chemicals used in the water treatment process, and the piping or hardware used to distribute the water

²There is no State or Federal 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.

Acronym Definition

AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
LRAA	Locational Running Annual Average: The average of results for samples taken at specific monitoring locations during the previous four calendar quarters.
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.
MRDL	Maximum Residual Disinfectant Level: 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.
MRDLG	Maximum Residual Disinfectant Level Goal: The level of a drinking water disinfectant below which there is no known or expected risk to health.
NA	Not applicable
ND	Not detected
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
NTU	Nephelometric Turbidity Units: Turbidity is measured with an instrument called a nephelometer. Measurements are given in nephelometric turbidity units.
PPM	Part Per Million (mg/L) = 1 drop of water in a hot tub
PPB	Part Per Billion (µg/L) = 1 drop of water in an Olympic size swimming pool
PPT	Part Per Trillion (ng/L) = 1 drop of water in 20 Olympic-sized swimming pools
RAA	Running Annual Average: The average of results for samples taken during the previous four calendar quarters.