



# **GLENBROOK SANITARY DISTRICT**

## **CONSUMER CONFIDENCE REPORT**

**ANNUAL DRINKING WATER QUALITY REPORT FOR JAN-DEC 2017**

## **Glenbrook Countryside Residents:**

This past year, we have been active with updating our meter reading system and replacing 100% of our water meters. The District is excited to have converted to an Automated Meter Reading (AMR) system. This new system allows the District to record everyone's water usage within an hour versus several days. AMR transmits meter readings and event data via radio frequency to a mobile receiver when the device is within range of the water meter. The AMR has many features which will be beneficial to the District as well as to our water customers. In addition to acquiring the AMR system, the District replaced all of its water meters. It has been over 30 years since the District has replaced its water meters, resulting in increased inaccuracy. The new water meters are more accurate when recording water usage. If you have any questions about the ARM and the new water meters, please give us a call.

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The District is in need of an individual to assist us with documenting and recording water samples for chlorine levels on a daily basis. The Illinois Environmental Protection Agency requires the District to conduct daily water samples. The water sampling process is fairly easy, and only takes a few minutes a day to complete. If you are interested in taking water samples on behalf of the District, please contact Cheryl Thompson at (847) 295-3322.

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Little leaks add up in a hurry. A faucet drip or invisible toilet leak that totals only **two tablespoons a minute** comes to 15 gallons a day (2 cubic feet). That's 105 gallons (14 cubic feet) a week, and so on...

Is it possible your toilet has a secret leak? You can test it by putting 10 drops of food coloring in the tank. Don't flush for 15 minutes. If the colored water shows up in the bowl, the tank is leaking.

If you have an automatic sprinkler system, check the heads periodically for leaks.

To check for leaks, read your water meter and record the number. **Without** using any water, check your meter again some time later (at **least** 20-30 minutes). If the number has changed, you have a leak.

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Water/sewer bills are sent out quarterly, at the end of January, April, July, and October. If you do not receive your bill by the end of the first week of the following month, please phone the District at 847-604-8280 for a duplicate copy.

If you suspect there is a leak in your home, please phone your plumber. Glenbrook Sanitary District is **not** responsible for leaks inside your property lines.

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**Sprinkler systems at your residence or place of business are to be INSPECTED ANNUALLY per Ordinance no. 85, dated February 2, 1995, by an authorized plumber for proper cross connection control. Copies of the inspection report are to be sent to the District to keep on file. Non-compliance of this ordinance could cause your water to be disconnected from the water system.**

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### Violation Summary Table

We are happy to announce that no monitoring, reporting, treatment technique, maximum residual disinfectant level, or maximum contaminant level violations were recorded during 2017.

### HIGHLAND PARK, IL0970500

The source water assessment for Highland Park's supply has been completed by the Illinois EPA. If you would like a copy of this information, please stop by Highland Park City Hall or call our water operator at (847) 433-4355. 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>. **For more information regarding this portion of this report contact the Superintendent for Highland Park Water Treatment Facility, Mr. Donald Jensen, Phone: 847-433-4355**

### Source Water Information

<u>Source Water Name</u>	<u>Type of Water</u>	<u>Report Status</u>	<u>Location</u>
INTAKE 1 (01481) LAKE MICHIGAN WATER	SW (source water)	active	250 ft east of plant
INTAKE 2 (01482) LAKE MICHIGAN WATER	SW (source water)	active	230 ft east of plant
INTAKE 5 (00110) LAKE MICHIGAN WATER	SW (source water)	active	

### Lead and Copper

<u>Lead and Copper</u>	<u>Date Sampled</u>	<u>MCLG</u>	<u>Action Level (AL)</u>	<u>90<sup>th</sup> Percentile</u>	<u># of sites over AL</u>	<u>Units</u>	<u>Violation</u>	<u>Likely Source of Contamination</u>
Copper	2017	1.3	1.3	0.18	0	ppm	N	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems
Lead	2017	0	15	4	0	ppb	N	Corrosion of household plumbing systems; erosion of natural deposits

### Regulated Contaminants

<u>Disinfectants and Disinfection By-Products</u>	<u>Collection Date</u>	<u>Running Annual Average</u>	<u>Range of Levels Detected</u>	<u>MCLG</u>	<u>MCL</u>	<u>Units</u>	<u>Violation</u>	<u>Likely Source of Contamination</u>
Chlorine	2017	1.4	1.2 -1.6	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2017	20	12.2 – 26.9	No goal for the total	60	ppb	N	By-product of drinking water disinfection
Total Trihalomethanes (TTHM)	2017	40	21.07-54.9	No goal for the total	80	ppb	N	By-product of drinking water disinfection

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 in the future.

**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 MCLG's 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.

**ppm:** milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

**ppb:** micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

**na:** not applicable.

**Avg:** Regulatory compliance with some MCLs is based on running annual average of monthly samples.

**Maximum Residual Disinfectant Level (MRDL):** The highest level of 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 (MRDLG):** The level of disinfectant in drinking water 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.

**Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. 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 are responsible for providing high quality drinking water, but 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 [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead)

**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.

***Glenbrook Sanitary District, IL0315310***

**Lead and Copper**

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90 <sup>th</sup> Percentile	# of sites over AL	Units	Violation	Likely Source of Contamination
Copper	2015	1.3	1.3	0.0	0	ppm	N	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems
Lead	2015	0	15	9.8	0	ppb	N	Corrosion of household plumbing systems; erosion of natural deposits

**Regulated Contaminants**

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chloramines	12/31/17	1.4	1.12-1.736	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2017	4	4 - 4	No goal for the total	60	ppb	N	By-product of drinking water disinfection
Total Trihalomethanes (TTHM)	2017	40	40.4-40.4	No goal for the total	80	ppb	N	By-product of drinking water disinfection

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2017	0.021	0.021-0.021	2.0	2.0	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2017	0.8	0.826-0.826	4	4	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (measured as nitrogen)	2017	0.45	0.45-0.46	10	10	ppm	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium	2017	13.0	13.0-13.0	NA	NA	ppm	N	Erosion from naturally occurring deposits: Used in water softener regeneration.

### Turbidity

	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	1 NTU	0.985 NTU	N	Soil runoff.
Lowest monthly % meeting limit	0.3 NTU	99%	N	Soil runoff.

**Nephelometric Turbidity Units (NTU)** A unit measuring the lack of clarity of water, used by water and sewage treatment plants, in marine studies, etc.

Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

### Total Organic Carbon

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