Village of Glen Ellyn

July 1, 2009 Edition

2009 Water Quality Report

Inside This Issue:

Water provided by the Village of Glen Ellyn meets or exceeds all established state and federal water quality standards.

INTRODUCTION

The goal of this annual report, which is required by the United States Environmental Protection Agency, is to explain Glen Ellyn's water system and show results of the water quality tests conducted during 2008. This report also includes important information about water and health. We are proud to report that water provided by the Village of Glen Ellyn meets or exceeds all established state and federal water quality standards.

OVERVIEW OF GLEN ELLYN'S WATER SYSTEM

Lake Michigan is a surface water supply. It is the sole source of water, providing drinking water to the City of Chicago and 123 suburban communities. Lake Michigan, by volume, is the second largest Great Lake and the only one located totally within the United States.

Drinking water in the Village of Glen Ellyn is supplied by the DuPage Water Commission (DWC), which purchases Lake Michigan water from the City of Chicago. Before it is purchased by the DWC, lake water is treated at Chicago's Jardine Purification Plant. After leaving the Jardine Purification Plant, the water is transferred to DWC's metering stations and then sold to Glen Ellyn. It then goes into either the water distribution system or into a water storage facility. The Glen Ellyn water distribution system consists of 146 miles of water main, 1,368 water main valves and 1,265 fire hydrants. We also have two standby ground water wells, 2 one-million gallon reservoirs and 2 elevated storage tanks with a combined 1.25 million gallon capacity.

The average pumpage to our customers is 2.75 million gallons per day. This equates to one billion gallons purchased and consumed on an annual basis, or an average of 100 gallons per day per person.

Glen Ellyn delivers high-quality drinking water. Many steps must be taken to attain this goal. Daily monitoring is conducted at all receiving stations. Each week, water samples are collected at representative locations throughout the Village and brought to an independent certified laboratory for microbiological analysis. Sample collection and facility monitoring are performed by Village staff members who are IEPA certified Public Water Supply Operators. Samples are also collected and analyzed to detect specific Volatile Organic Contaminants in the water as prescribed by federal and state regulation.

UNREGULATED CONTAMINANTS

The Chicago Water Department has conducted monthly cryptosporidium analyses since April 1993. Cryptosporidium has not been detected in these samples. Treatment processes have been optimized to ensure that if there were cryptosporidium cysts in the water source they would be removed during the treatment process.

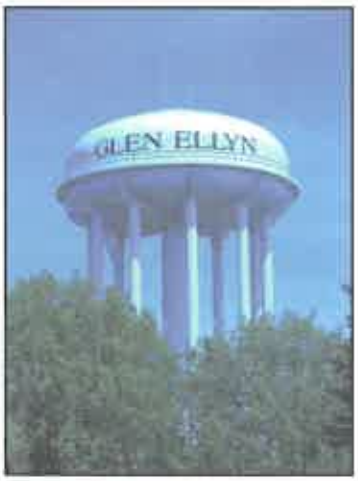
SOURCE WATER INFORMATION

The sources of drinking water (both tap 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 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 may 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 may be naturally occurring or be the result of oil and gas production and mining activities.



2009 Water Quality Table

CONTAMINANT (UNITS)	HIGHEST LEVEL DETECTED	RANGE of DETECTION	COLLECTION DATE	MCLG	MCL	Violation	Likely Source of Contamination
Disinfectants and Disinfection By—Products							
Chloramines (ppm) (1)	0.7	0.1—0.7	2008	MRDLG=4	MRDL=4	No	Water additive used to control microbes.
Haloacetic Acids (HAA5) (ppb) (1)	11	9.6—11.5	2008	No Goal for Total	60	No	By-Product of drinking water chlorination.
Total Trihalomethanes (TThm) (ppb) (1)	30	16.3—41	2008	No Goal for Total	80	No	By-Product of drinking water chlorination.
Not all sample results may have been used for calculating the Highest Level Detected in HAA5s and TThms because some results may be part of an evaluation to determine where compliance sampling should occur in the future.							
Microbial Contaminants							
Total Coliform Bacteria (1)	(1 of 360) 0%	N/A	2008	0	5%	No	Naturally present in the environment.
Radioactive Contaminants							
Combined Radium 226/228 (pCi/l)	1.38	1.30—1.38	2008	0	5	No	Decay of natural and man-made deposits.
Gross Alpha (excluding Radon & Uranium) (pCi/l)	0.88	0.09—0.88	2008	0	15	No	Decay of natural and man-made deposits.
Inorganic Contaminants							
Barium (ppm)	0.01938	0.0191-0.01938	2008	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride (ppm)	1.05	.92—1.05	2008	4	4	No	Water additive that promotes strong teeth; discharge from fertilizer and aluminum; erosion of natural deposits.
Nitrate (as Nitrogen) (ppm)	.321	.304—.321	2008	10	10	No	Runoff from fertilizer use; leaching of septic tanks, sewage; erosion of natural deposits.
Sodium (ppm)	8.85	8.13—8.85	2008	N/A	N/A	No	Erosion of natural deposits; used in softener regeneration.
Unregulated Contaminants							
Sulfate (ppm)	28.9	27.7—28.9	2008	N/A	N/A	No	Erosion of natural deposits.

Turbidity					
	Limit (Treatment Technique)	Level Detected	Collection Date	Violation	Likely source of contamination
Lowest monthly % meeting limit	0.3 NTU	100%	2008	No	Soil runoff.
Highest single measurement	1 NTU	0.14 NTU	2008	No	Soil runoff.
Total Organic Carbon (TOC) The percentage of Total Organic Carbon was measured each month and the system met all TOC removal requirements set by the EPA.					

Table Continued on Page 3

CONTAMINANT (UNITS)	MCLG	ACTION LEVEL (AL)	90th PERCENTILE	# of SITES EXCEEDING AL	COLLECTION DATE	VIOL-ATION	LIKELY SOURCE OF CONTAMINATION
Copper (ppm) (1)	1.3	1.3	.124	0	2008	No	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems.
Lead (ppb) (1)	0	15	0	0	2008	No	Corrosion of household plumbing systems; erosion of natural deposits.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in the 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 may minimize the potential for lead exposure by flushing your tap from between 30 seconds and 2 minutes before using the 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 http://www.epa.gov/safewater/lead.

Definitions and Footnotes for the table on this and the previous page:

The table inside this report shows the results of our water-quality analyses based on tests conducted in 2008. Every regulated contaminant that we detected in the water, even in the most minute traces, is listed here. The table contains the name of each substance, the highest level allowed by regulation (MCL), the ideal goals for public health, the amount detected, the usual sources of such contamination, footnotes explaining our findings, and a key to units of measurement. Definitions of MCL and MCLG are important.

Maximum Contaminant Level (MCL): The highest level of contaminant allowed in drinking water. Maximum Contaminant Levels 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. MCLGs allow for a margin of safety.

(1) Results on table based upon samples collected by Village of Glen Ellyn. All other results are based upon tests conducted by the City of Chicago.

(AL) Action Level—The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

(ALG) Action Level Goal -The level of a contaminant in drinking water below which there is no known or expected risk to health. ALG's allow for a margin of safety.

(TT) Treatment Technique - A required process intended to reduce the level of a contaminant in drinking water.

NTU Nephelometric Turbidity Units - Used to measure cloudiness of the water.

%<0.3 NTU – Percent samples less than 0.3 NTU.

#pos/mo - Number of positive samples per month.

N/A - Not applicable.

pCi/l - Picocuries per liter (a measure of radioactivity).

ppm - Parts per million, or milligrams per liter (mgl) or one ounce in 7,350 gallons of water.

ppb - Parts per billion, or micrograms per liter (ug/l) or one ounce in 7,350,000 gallons of water.

NTU Turbidity - Turbidity is a measure 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.

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 recommends an optimal fluoride range of 0.9 mg/l to 1.2 mg/l.

Sodium - There is no state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium restricted diet, you should consult a physician about this level of sodium in water.

AVG - Regulatory compliance with some MCLs are based on running annual average of monthly samples.

MRDL Maximum Residual Disinfectant Level- The highest level of disinfectant allowed in drinking water.

MRLDG Maximum Residual Disinfectant Level Goal - The level of disinfectant in drinking water below which there is no known or expected risk to health. MRDLGs allow for a margin of safety.

NOTE: The state requires monitoring of certain contaminants less than once per year because the concentration of these contaminants do not change frequently. Therefore, some of the results may be more than one year old.

Source Water Assessment Summary

The Illinois EPA considers all surface water sources of a 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 the mandatory treatment of 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. Throughout history there have been extraordinary steps taken to assure a safe source of drinking water in the Chicagoland area—from the building of offshore cribs and 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 the Environment and the Metropolitan Water Reclamation District of Greater Chicago to assure the safety of the city's water supply. Also, 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 association's 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 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 the awareness of the 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.

We want our valued customers to be informed about their water quality. 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 the Public Works Department or call our water operator at (630)469-6756. 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 additional copies of this report, please contact Public Works at (630) 469-6756. Copies are also available on our website.

Additional Health Information

To ensure that tap water is safe to drink, the 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.

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 USEPA's Safe Drinking Water Hotline (1-800-426-4791).

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 microbial contaminants are available from the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

We're on the web:
www.glenellyn.org

National Primary Drinking Water Regulation Compliance

If you are interested in learning more about our drinking water or have questions, please call the Village of Glen Ellyn Public Works Department at 630-469-6756. Water Quality Data for community water systems throughout the United States is available at *www.waterdata.com.*

BACKFLOW & CROSS CONNECTION CONTROL

Public Works is preparing an ordinance designed to protect the public drinking water system from the hazards of Backflow and Cross-Connections, pending Village Board approval.

Our first line of defense against Backflow and Cross-Connections is Public Awareness.

Why should you be concerned?

- ALL cross-connections pose a potential health risk. Chemical burns, fires, explosions, poisonings, illness and death have all been caused by backflow through cross-connections.
- Backflow can be a health hazard for your family or other consumers if contaminated water enters your water supply plumbing system and is used for drinking, cooking or bathing.
- Backflow occurs more often than you think.
- Cross-connections between the customers plumbing and the public drinking water supply are strictly prohibited by law.
- Protecting the public water system from backflow contamination is the law.
- You are responsible for protecting your water supply plumbing from backflow that may contaminate your drinking water and the drinking water of others. This includes complying with the plumbing code and not creating cross-connections.

What is a cross-connection?

Any physical connection between a possible source of contamination and any drinking water system piping.

What is backflow?

The flow through a cross-connection from a possible source of contamination back into the drinking water system.

Why does backflow occur?

Backflow occurs when a cross-connection is created and a pressure reversal, either as backsiphonage or backpressure, occurs in the water supply piping.

What causes backsiphonage?

Backsiphonage occurs when there is a loss of pressure in a piping system. This can occur if the water supply pressure is lost or falls to below the source of contamination. This condition allows liquids to be siphoned back into the distribution system, just like drinking from a glass with a drinking straw.

What causes backpressure?

Backpressure occurs when an opposing pressure is applied against the public water system's supply pressure and the higher pressure overcomes the public water system's pressure. This condition allows undesirable gases or liquids from another system to enter into the drinking water supply. Any pumping system (well pump) or pressurized system (steam or hot water boilers) can exert backpressure when cross-connected with the public water system.

What are some common backflow hazards that threaten the homeowner and other consumers?

- Hose connections to chemical solution aspirators to feed lawn and shrub herbicides, pesticides or fertilizers.
- Lawn irrigation systems.
- Chemically treated heating systems.
- Hose connections to a water outlet or laundry tub.
- Private and/or non-potable water supplies located on the property.
- Water-operated sump drain devices.
- Fire suppression systems.

What can you do to prevent backflow situations in your home or business?

- Be aware of and eliminate cross-connections.
- Maintain air gaps. Do not submerge hoses or place them where they could become submerged.
- Use hose bib vacuum breakers on fixtures (hose connections in the basement, laundry room and outside).
- Install approved, testable backflow prevention devices on lawn irrigation systems.
- Do not create a connection between an auxiliary water system (well,cistern, body of water) and the public water supply plumbing.

What are examples of cross-connection and backflow scenarios?

- Soapy water or other cleaning compounds backsiphoned into your water supply plumbing through a faucet or hose submerged in a bucket or laundry basin.
- A hose submerged in a swimming pool, hot tub, or spa creates a pathway for non-potable water to enter your drinking water plumbing.
- Fertilizers/pesticides backsiphoned into your water supply plumbing a garden hose attached to a fertilizer/ pesticide sprayer.
- Bacteria/chemicals/additives present in a boiler system backsiphoned into the water supply plumbing.
- A connection made between a private well supply and the water being supplied by a public water system through the water supply plumbing.
- Chemicals, pesticides, and animal waste drawn into your water supply plumbing from a lawn irrigation system with submerged

What is the law?

As listed in the Illinois Environmental Protection Agency Technical Policy Statement , Title 35, Subtitle F, Chapter II, Subpart H, Sec 653.801, the Village of Glen Ellyn is required to have an active Cross-Connection Control Program.

What must be done to protect the public water system?

The water supplier is required to determine potential and actual hazards. If a hazard exists at a customer's service connection to the public water system, the customer will be required to install and maintain an appropriate backflow prevention device* at the meter and/or at the source of the hazard.

**State and Local codes determine where and what type of backflow*

Hose submerged in a barrel of water is a cross-connection hazard.

Who is responsible?

Both the Village and the Customers share responsibilities when it comes to preserving the integrity of the water distribution system.

The Village's Responsibility

The Village of Glen Ellyn Public Works Department has the responsibility of protecting the public water supply from contamination through cross-connections.

This objective is best obtained through public awareness, an effective tracking system, and enforcement through a Cross-Connection Control Ordinance.

Following passage of the Ordinance by the Village Board, the Public Works Department will conduct a biennial survey of each customer to identify those premises that would require backflow prevention and to ensure that such devices are properly maintained. This survey will be in the form of a questionnaire.

Typical Backflow Prevention Device

The Customer's Responsibility

It is the responsibility of the customer to ensure the following:

- Any backflow devices within the home or business are in good working order.
- The device(s) are tested annually by a licensed plumber ***WITH*** a CCCDI endorsement. (Check the Yellow pages for local listings)
- A tag on the device listing;
  1) date of last test report,
  2) name of the CCCDI inspector,
  3) type and date of any repairs.
- Ensure access to the premises by a delegate of the Director of Public Works during reasonable working hours for verification purposes.
- Ensure that a copy of the latest test report is forwarded to the Public Works Department.

Contact Information

Any questions concerning the Cross-Connection Control Program should be directed to Gary Bach at (630) 547-5503, Fax (630) 469-3128, or e-mail (garyb@glenellyn.org.)

Please direct any Backflow Test Results to :

Village of Glen Ellyn Public Works
Backflow Test Results
30 S. Lambert Road
Glen Ellyn, Illinois 60137

VILLAGE OF GLEN ELLYN
535 DUANE STREET
GLEN ELLYN, IL 60137

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IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

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