

*Annual*  
**WATER  
QUALITY  
REPORT**  
*Reporting Year 2012*



*Presented By* \_\_\_\_\_



PWS ID#: 1970700

## There When You Need Us

We are once again proud to present our annual water quality report covering all testing performed between January 1 and December 31, 2012. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Please remember that we are always available to assist you should you ever have any questions or concerns about your water.

## Community Participation

You are invited to participate in our public forum and voice your concerns about your drinking water. The Village Board of New Lenox meets the second and fourth Mondays of each month at 7:00 p.m. Meetings are held at the Village Hall located at 1 Veterans Parkway, New Lenox, Illinois 60451.



## Information on the Internet

The U.S. EPA Office of Water ([www.epa.gov/watrhme](http://www.epa.gov/watrhme)) and the Centers for Disease Control and Prevention ([www.cdc.gov](http://www.cdc.gov)) Web sites provide a substantial amount of information on many issues relating to water resources, water conservation, and public health. Also, the Illinois Environmental Protection Agency has a Web site ([www.epa.state.il.us](http://www.epa.state.il.us)) that provides complete and current information on water issues in Illinois, including valuable information about our watershed. The City of Chicago website ([www.cityofchicago.org](http://www.cityofchicago.org)) has valuable information concerning our source water and the water treatment process.

## Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration 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 these contaminants does not necessarily indicate that the water poses a health risk.

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, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife;

**Inorganic Contaminants**, such as salts and metals, which can be naturally occurring or may 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 can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

## Where Does My Water Come From?

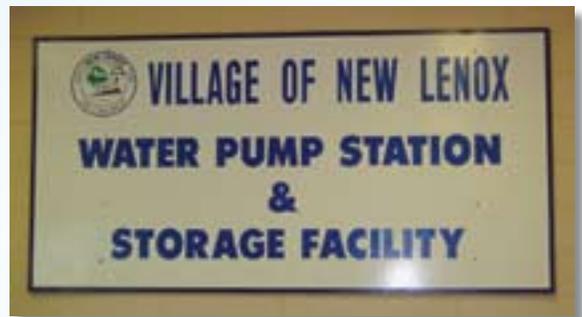
The Village of New Lenox water customers' primary source of water is Lake Michigan, which is a surface water supply. The City of Chicago utilizes Lake Michigan as its source water via two treatment plants. The Jardine Water Purification Plant serves the northern areas of the city and suburbs, while the South Water Purification Plant serves the southern areas of the city and suburbs, including New Lenox. Lake Michigan, by volume, is the second largest Great Lake and the only one located entirely within the United States. It borders Illinois, Indiana, Michigan, and Wisconsin.

## Water Conservation

You can play a role in conserving water and save yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water-using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

Conserving outdoor water suggestions and information can be found at these Web sites: [www.epa.gov/safewater/publicoutreach](http://www.epa.gov/safewater/publicoutreach) and the University of Illinois Web site [www.urbanext.uiuc.edu/lawntalk](http://www.urbanext.uiuc.edu/lawntalk).



## Important Health Information

While your drinking water meets U.S. EPA's standard for arsenic, it does contain low levels of arsenic. U.S. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. U.S. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) 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 or <http://water.epa.gov/drink/hotline>.

## QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Wayne Rassman, Water Department Supervisor, at (815) 462 6400.

## Source Water Assessment Program

The Illinois EPA completed the Source Water Assessment Program for the City of Chicago. The Illinois EPA implemented a Source Water Assessment Program (SWAP) to assist with watershed protection of public drinking water supplies. The SWAP inventoried potential sources of contamination and determined the susceptibility of the source water to contamination.

The Illinois EPA considers all surface water sources of community water supplies to be susceptible to pollution problems. The very nature of surface water allows contaminants to migrate unimpeded into the intake. This is the reason for mandatory treatment of all surface water supplies in Illinois. Chicago offshore intakes are located at a distance such that shoreline contaminants are not usually considered factors of water quality. At certain times of the year, however, the potential for contamination exists due to wet weather water flows and river reversals. In addition, the placement of crib structures may 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 stormwater runoff, marinas, and shoreline point sources due to the influx of groundwater to the lake.

Further information on the City of Chicago Source Water Assessment Program is available by calling the City of Chicago's Department of Water Management at (312) 744-6635.



## Lead in Home Plumbing

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).



## Sampling Results

During the past year, we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The tables below show only those contaminants that were detected in the water. The state requires us to monitor for certain substances less often than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

### REGULATED SUBSTANCES

				Village of New Lenox Lake Water		City of Chicago		New Lenox Groundwater Emergency Back up			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Alpha Emitters (pCi/L)	2008	15	0	NA	NA	0.88	0.09–0.88	NA	NA	No	Erosion of natural deposits
Arsenic (ppb)	2012	10	0	NA	NA	0.67	0.52–0.67	10	2.73–10	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2012	2	2	NA	NA	0.02	0.019–0.02	0.029	0.011–0.029	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chlorine (ppm)	2012	[4]	[4]	0.7	0.43–0.80	NA	NA	NA	NA	No	Water additive used to control microbes
Combined Radium (pCi/L)	2008	5	0	NA	NA	1.38	1.30–1.38	1.81 <sup>1</sup>	1.28–1.81 <sup>1</sup>	No	Erosion of natural deposits
Fluoride (ppm)	2012	4	4	NA	NA	0.85	0.84–0.85	NA	NA	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs]–Stage 2 (ppb)	2012	60	NA	14	8.8–17.62	NA	NA	NA	NA	No	By-product of drinking water disinfection
Nitrate (ppm)	2012	10	10	NA	NA	0.34	0.34–0.34	NA	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total Trihalomethanes]–Stage 2 (ppb)	2012	80	NA	34	15.9–59.6	NA	NA	NA	NA	No	By-product of drinking water disinfection
Total Coliform Bacteria (# positive samples)	2012	1 positive monthly sample	0	1	NA	NA	NA	NA	NA	No	Naturally present in the environment
Total Nitrate + Nitrite (ppm)	2012	10	10	NA	NA	0.34	0.34–0.34	NA	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Turbidity <sup>2</sup> (NTU)	2012	TT	NA	NA	NA	0.69	NA	NA	NA	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2012	TT	NA	NA	NA	99.7	NA	NA	NA	No	Soil runoff

### STATE REGULATED SUBSTANCES<sup>3</sup>

				City of Chicago		New Lenox Groundwater Emergency Back up			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	EXCEEDANCE	TYPICAL SOURCE
Iron (ppb)	2012	1,000	NA	NA	NA	7,300	1,340–7,300	No	Erosion from naturally occurring deposits
Manganese (ppb)	2012	150	NA	NA	NA	112	18.3–112	No	Erosion of naturally occurring deposits
Sodium (ppm)	2012	NA	NA	7.07	6.88–7.07	42	25–42	No	Erosion of naturally occurring deposits; Used in water softener regeneration

## UNREGULATED SUBSTANCES<sup>4</sup>

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	Village of New Lenox Lake Water		City of Chicago		New Lenox Groundwater Emergency Back up		TYPICAL SOURCE
		AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	
Sulfate (ppm)	2012	NA	NA	17.8	13.4–17.8	NA	NA	Erosion of naturally occurring deposits

<sup>1</sup> Sampled in 2012.

<sup>2</sup> Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

<sup>3</sup> Iron, manganese and sodium are not currently regulated by the U.S. EPA. However, the state has set MCLs for these contaminants for supplies serving a population of 1,000 or more.

<sup>4</sup> 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 of monitoring unregulated contaminants is to assist the U.S. EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

## Definitions

**AL (Action Level):** The concentration of a contaminant that triggers treatment or other required actions by the water supply.

**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. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**NA:** Not applicable

**NTU (Nephelometric Turbidity Units):** Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**pCi/L (picocuries per liter):** A measure of radioactivity.

**ppb (parts per billion):** One part substance per billion parts water (or micrograms per liter).

**ppm (parts per million):** One part substance per million parts water (or milligrams per liter).

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