

Lake Barrington Industrial Park Annual Water Quality Report, 2010



This is an annual report on the quality of water delivered by Village of Lake Barrington. It meets the federal Safe Drinking Water Act (SDWA) requirement for “Consumer Confidence Reports” and contains information on the source of our water, its constituents, and the health risks associated with any contaminants. Safe water is vital to our community. Please read this report carefully.

Village of Lake Barrington’s drinking water meets or surpasses all federal and state drinking-water standards.

If you have any questions about this annual report or concerns about our water system, please contact Tim Zintl, Asst. Public Works Supt. Water and Sewer, at (847) 639-8360.

We want our valued customers to be informed about their water quality. If you would like to learn more, please feel welcome to attend any of our regularly scheduled meetings held on 1st Thursday of the month, 7:00 p.m. at the Village hall 305 Illinois Street, Fox River Grove IL. Or contact Chris Martin, Lake Barrington Village Administrator at (847) 381-6010.

What is a water quality report?

Illinois EPA requires all communities to provide drinking water quality reports to their customers on an annual basis, consisting of information on the water system and tables that summarize monitoring data. Consumers’ awareness right-to-know was a major theme of the 1996 Safe Drinking Water Act Amendments. These amendments confirm the importance of educating the consumer and added new responsibility for community water systems.

Drinking Water Source.

The Village of Lake Barrington uses groundwater provided by two shallow sand and gravel wells constructed at a depth of approx. 106 ft. Each well can produce 500 gallons per minute.

How is the drinking water treated?

Groundwater is pumped from the wells to the iron removal treatment facility where dissolved iron and manganese are removed by filtration. Next aeration is provided to oxidize the iron, strip any volatile organic compounds out and to improve taste and odor. Fluoride is added to prevent cavities (A concentration of 1 part per million of fluoride which has shown to reduce cavities by 60%). Chlorine is added for disinfection. Treated water is pumped to the 500,000-gallon capacity elevated tank and then out to the distribution system. An emergency water main inter-connection with Fox River Grove provides improved fire protection.

Required EPA Educational Information:

Drinking water, including bottled water, may reasonably be expected to contain 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 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 contaminate are available from the USEPA’s Safe Drinking Water Hotline (1-800-426-4791).

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. Possible contaminants consist of:

- 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, can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharge, oil and gas production, mining or farming.
- Pesticide 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 may be naturally occurring or the result of oil and gas production and mining activities.

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 system.

Water quality testing is performed on a daily basis, with monthly bacteriological samples collected and submitted to the Illinois Environmental Protection Agency. The Village’s water supply is in compliance with all EPA water quality standards and regulations.

The Village currently maintains over 4 miles of water distribution pipe, in sizes of 6”, 8”, 10” and 12” diameter. There are 57 Fire Hydrants and 81 service lines to the business and industrial park. Fire hydrants are inspected and flushed in the spring and fall to ensure fire hydrants are in good working order and available for fire protection needs. The Village maintains water service lines from the b-box to the main, including the b-box. The business is responsible for the service to the business including the shutoff valve before the water meter. Water meters are read and billed bi-monthly.

A cross connection program has been implemented to protect the public water supply from back flow and back siphoning. A drop in water pressure could result in a reverse flow into the service lines causing contaminants to be drawn into the system from cross-connections. IEPA regulations require back-flow prevention devices tested annually. A licensed plumber that is contracted through the Village provides this service.

SOURCE WATER ASSESSMENT

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 City Hall or call our water operator at (847) 639-8360. 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>

Based on information obtained in a Well Site Survey published in 2002 by the Illinois EPA, four potential sources or possible problem sites were identified within the survey area of Lake Barrington's wells. The Illinois EPA has determined that Lake Barrington Community Water Supply's source water is not susceptible to contamination. This determination is based on a number of criteria including: monitoring conducted at the wells; monitoring conducted at the entry point to the distribution system; and the available

Hydrogeologic data on the wells.

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 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>.

In addition to the informational section of this Water Quality Report, the Illinois Environmental Protection Agency website (www.epa.state.il.us) contains more information regarding the elements that were monitored and tested in your drinking water.

The Village of Lake Barrington had no water quality violations during 2010.

The Village of Lake Barrington Special Service Area is proud to deliver good quality water to its citizens and businesses.

For additional information please look us up at the Village of Lake Barrington website at www.lakebarrington.org or stop by the Village Hall.

2010 Regulated Contaminants Detected

Lead and Copper

Definitions:

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.

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

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper		1.3	1.3	0.159	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

Water Quality Test Results

Maximum Contaminant Level Goal or 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.

Maximum Contaminant Level or MCL: 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.

Maximum residual disinfectant level goal or MRDLG: 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.

Maximum residual disinfectant level or MRDL: 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.

Definitions: The following tables contain scientific terms and measures, some of which may require explanation.

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 are based on running annual average of monthly samples.

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

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine		0.4	0.15 - 0.67	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)*		5	5 - 5	No goal for the total	60	ppb	N	By-product of drinking water chlorination.

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

Total Trihalomethanes (THM)*		22.27	22.27 - 22.27	No goal for the total	80	ppb	N	By-product of drinking water chlorination.
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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

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	01/22/2008	0.51	0.51 - 0.51	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	01/22/2008	0.1318	0.1318 - 0.1318	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	01/22/2008	0.844	0.844 - 0.844	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]		0.000161	0.000161 - 0.000161	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium	01/22/2008	26.98	26.98 - 26.98			ppm	N	Erosion from naturally occurring deposits: Used in water softener regeneration.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	09/26/2007	0.75	0.75 - 0.75	0	5	pCi/L	N	Erosion of natural deposits.
Gross alpha excluding radon and uranium	09/26/2007	3.5	3.5 - 3.5	0	15	pCi/L	N	Erosion of natural deposits.
Uranium	10/12/2005	0.298	0.298 - 0.298	0	30	ug/l	N	Erosion of natural deposits.