VILLAGE OF

a great place to live, work, and play

BARRINGTON

2010 WATER QUALITY REPORT

Barrington Has Safe Drinking Water

The United States Environmental Protection Agency (USEPA) requires all communities to provide to their consumers a Consumer Confidence Report on the quality of their system's drinking water. This report summarizes the quality of water that we provided during the last year. Barrington meets the USEPA standards for water quality and now is only required to analyze lead and copper quanitites once every three years, rather than twice a year.

Included are details about where your water comes from, what it contains and how it compares to standards set by regulatory agencies. Also included in this years report is a Source Water Assessment Summary. Community water supplies are required to report a summary of their source water susceptibility determination, which were compiled by the IEPA.

In order to ensure that tap wter is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systesms. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

The Annual Water Quality Report for the period of January 1 to December 31, 2009 is intended to provide you with important information about your drinking water and the efforts made by the Barrington water system to provide safe drinking water. The source of drinking water used by Barrington is Ground Water.

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

Regulations

In order to ensure that tap water is safe to drink, EPA 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.

In addition to the informational section of the Water Quality Report, we have included for your review several tables. The tables will give you a better picture of the contaminants that were detected in your water and the contaminants that were tested for, but not detected.

Sources of 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 can dissolve naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Possible Contaminants:

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 productions, 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 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;

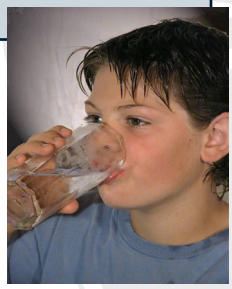
Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

If you have any questions about this report or if you have questions concerning your water system please contact David W. Schmidt, Assistant Director of Public Works at (847) 381-7903. If you would like to learn more, please feel free to attend any of our regularly scheduled Board Meetings, on the 2nd and 4th Mondays of each month at 8:00 p.m. at the Village Hall. Copies of the report are available online at www.barrington-il.gov; or at Village Hall, 200 S. Hough.

Safe Drinking Water Hotline

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 (800) 426-4791.

We are advised by the IEPA that some people may be more vulnerable to contaminates 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 (Center for Disease Control) 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 (800) 426-4791.



2010 Water Facts

More than 6,000 separate tests were performed on water samples from our system.

For the eighteenth (18th) consecutive year, the Village of Barrington has been recognized for achieving the highest standard of compliance for fluoride addition in accordance with the Fluoridation Act.

Population served.....10,300

Metered customers.....4,350

Miles of watermain.....90

# of fire hydrants.....999

Water production.....1.523
(average million gallons/ day)

Regulated Contaminants Detected in 20

CONTAMINANT (units)	Typical Source of Contaminant
LEAD (ppb)	Corrosion of household plumbing systen erosion of natural deposits
COPPER (ppm)	Corrosion of household plumbing systen erosion of natural deposits; leaching fro wood preservatives
INORGANIC REGULATED CONTAMINANTS	
BARIUM (ppm)	Discharge of drilling wastes; discharge f metal refineries; erosion of natural depo
FLUORIDE (ppm)	Erosion of natural deposits; water additi which promotes strong teeth; discharge f fertilizer and aluminum factories
ARSENIC (ppb)	Erosion of natural deposits; runoff from orchards; runoff from glass and electron production wastes
ZINC (ppm)	Naturally occurring; discharge from met factories
DISENFECTANTS & DISINFECTION BY-PRODUCTS	
TThm (ppb)	By-product of drinking water chlorinatio
CHLORINE (ppm)	Water additive used to control microbes
STATE-REGULATED CONTAMINANTS	
IRON (ppm)	Erosion of naturally occurring deposits
SODIUM (ppm)	Erosion of naturally occurring deposits; Used as water softener regeneration
MANGANESE (ppb)	Erosion of naturally occurring deposits
RADIOACTIVE CONTAMINANTS	
COMBINED RADIUM (pCi/L)	Erosion of natural deposits
ALPHA EMITTERS (pCi/L)	Erosion of natural deposits

Note:
The state requires monitoring of certain contaminants less than once pe
frequently. Therefore, some of this data may be more than one year ol

Key:

Definitions of Terms

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.

Maximum Contaminant Level – 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.

n/a:
Not applicable

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

All residents are notified yearly of their water test results and the

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	MCLG	MCL	Highest Level Detected	# Sites Over AL	Violation	Collection Date
ns;	0	AL=15	8.3	1	No	8/3/09
ns; n	1.3	AL=1.3	0.927	1	No	8/3/09

	MCLG	MCL	Highest Level Detected	Range of Levels Detected	Violation	Collection Date
rom sits	2	2	0.081	.053-.081	No	5/21/09
ve rom	4	4	0.81	.58 - .81	No	5/21/09
ics	0	10	1	0 - 1	No	5/21/09
al	5	5	0.022	.01 - .022	No	5/21/09
on	n/a	80	3.5	3.5 - 3.5	No	
	mrdlg=4	mrdl=4	2.1	1.8- 2.32	No	NA
	n/a	1	0.56	.02 - .56	No	5/21/09
	n/a	n/a	25	16 - 25	No	5/21/09
	150	150	13	5.5 - 13	No	5/21/09
	0	5	0.83	0.82 - 0.83	No	4/18/05
	0	15	4.5	1.3 - 4.5	No	4/18/05

er year because the concentrations of these contaminants do not change d.

mrdl:
Maximum residual disinfectant level. The highest level of disinfectant allowed in drinking water.

mrdlg:
Maximum residual disinfectant level goal. The level of disinfectant in drinking water below which there is no known or expected risk to health. Mrdlg's allow for a margin of safety.

ppm:
Parts per million or milligrams per liter

ppb:
Parts per billion or micrograms per liter

pCi/L:
Picocuries per liter, used to measure radioactivity

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

report is available on the village website - www.barrington-il.gov.

About the Data

The Maximum Contaminant Level (MCL) for lead is 15 parts per billions (ppb) and 1.3 parts per million (ppm) for copper. When lead or copper exceeds their Action Levels (AL), some form of treatment is required, which the water system must follow. The Village of Barrington adds polyphosphates to the potable water system. This is to help prevent lead in your home's plumbing from leaching into the water. In the Regulated Contaminants Detected chart, the number 8.78 represents the 90th% level found in (ppb) for lead. The number of homes the IEPA required the Village to test is 60. Of the 60 homes tested, 3were found to exceed the AL for lead while 2 were found to exceed the AL for copper.

Lead: Infants and young children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure. It is possible that lead levels at your home may be higher than at other homes in your community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your homes water, have your water tested. Also, flush your tap for 30 seconds to two minutes before using tap water. Additional information is available from the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Copper: Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their personal doctor.

Iron: The contaminant is not currently regulated by the USEPA. However, the state has set an MCL for this contaminant for supplies serving a population of 1,000 or more. Iron is not a health risk, but it does create aesthetic problems, such as giving water a metallic taste and causing stains on fixtures and clothing.

Sodium: There is not a state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials that are concerned about intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult a physician about the level of sodium in the water.

Manganese: This contaminant is not currently regulated by USEPA. However, the state has set an MCL for manganese for supplies serving a population of 1,000 or more.

2010 Water Report

Village of Barrington
200 S. Hough Street
Barrington, IL 60010
(847) 304-3400
http://www.barrington-il.gov

Karen Darch, Village President
Adam Frazier, Village Clerk
Trustees
Elizabeth Jones Raseman
Paul Hunt
Jim Daluga
Steve Miller
Tim Roberts
Robert Windon

Board Meetings Held 2nd & 4th Monday of each month at 8:00 p.m.

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Permit 40

2010 Source Water Assessment

Importance of Source Water

The Village of Barrington utilizes groundwater from four wells, separated into two sets of two wells each. The first set of wells is drilled in a sand and gravel aquifer and the second set are drilled in a limestone aquifer. An aquifer is a geological formation that contains water. All of the wells are located within the Village limits. Water is pumped from all four wells and treated. Your home, normally receives a mixture of water from both sets of wells. Due to favorable history, aquifer characteristics and inventory of potential sources of contamination, our water supply was issued a vulnerability waiver renewal. No monitoring for Volatile Organic Chemicals (VOC's) or Synthetic Organic Chemicals (SOC's) is required between January 1, 2011 and December 31, 2013. The source water assessment for our supply was completed in 1992 by the Illinois EPA. If you would like a copy of this information, please stop by the Public Works facility or contact the Water Division by calling (847) 381-7903.

Susceptibility to Contamination

Based on information obtained in a well Site Survey, published in 1992 by the Illinois EPA, fourteen potential sources or possible problem sites were located within the survey area of Barrington's wells. Furthermore, information provided by the Leaking Underground Storage Tank and Remedial Project Management Sections of the Illinois EPA indicated several sites with ongoing remediation, which may be of concern.

The Illinois EPA has determined that the 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.

Furthermore, in anticipation of the U.S. EPA's proposed Ground Water Rule, the Illinois EPA has determined that the Barrington Community Water Supply is not vulnerable to viral contamination. This determination is based upon the completed evaluation of the following criteria during the Vulnerability Waiver Process: the community's wells are properly constructed with sound integrity and proper site conditions; a hyrdro geologic barrier exists which should prevent pathogen movement; all potential routes and sanitary defects have been mitigated such that the source water is adequately protected; monitoring data did not indicate a history of disease outbreak; and the sanitary survey of the water supply did not indicate a viral contamination threat. Because the community's wells are constructed in a confined aquifer, which should prevent the movement of pathogens into the wells, well hydraulics were not considered to be a significant factor in the susceptibility determination. Hence, well hydraulics were not evaluated for this groundwater supply.

Source Water Protection Efforts

The Illinois Environmental Protection Act provides minimum protection zones of 200 feet for Barrington's wells. Minimum protection zones are regulated by the Illinois EPA. To further reduce the risk to source water, the facility has implemented a wellhead protection program, which includes the proper abandonment of potential routes of groundwater contamination and correction of sanitary defects at the water treatment facility. This effort resulted in the community water supply receiving a special exception permit from the Illinois EPA, which allows a reduction in monitoring. The outcome of this monitoring reduction has saved the facility considerable laboratory analysis costs. To further minimize the risk to Barrington's groundwater supply, the Illinois EPA recommends that three additional activities be assessed. First, the community may wish to enact a "maximum setback zone" ordinance to further protect their water supply. These ordinances are authorized by the Illinois Environmental Protection Act and allow county and municipal officials the opportunity to provide additional protection up to a fixed distance, normally 1,000 feet from their wells. Second, the water supply staff may wish to revisit their contingency planning documents, if available. Contingency planning documents are a primary means to ensure that, through emergency preparedness, a community will minimize their risk of being without safe and adequate water. Finally, the water supply staff is encouraged to review their cross connection control program to ensure that it remains current and viable. Cross connections to either the water treatment plant (for example, at bulk water loading stations) or in the distribution system may negate all source water protection initiatives provided by the community.