Your 2014 Village of Broadview

Water Quality Report

Este informe contiene información muy importante sobre su agua beber.
Tradúzcalo ó hable con alguien que lo entienda bien.

This annual Water Quality Report for the period of January 1 to December 31, 2014 is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water. This year, as in years past, your tap water met all United States Environmental Protection Agency (USEPA) and state drinking water health standards. The Village of Broadview vigilantly safeguards its water supply. This report summarizes the quality of water that we provided last year, including details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. We are committed to providing you with information because informed customers are our best allies.

If you have any questions about this report or concerning your water system, please contact our Public Works Director Matt Ames at 708-681-3602. 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 Village Board Meetings held on the first and third Monday of every month at 2350 South 25th Avenue at 7:30 PM.

The source of drinking water used by the Village is Purchased Surface Water from Lake Michigan through the City of Chicago. Lake water is supplied to the Village's underground reservoirs. The Village then pumps water into its distribution system. We have included with this report information from the City of Chicago pertaining to Chicago's water monitoring.

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 inventories potential sources of contamination and determined the susceptibility of the source water to contamination.

Source Water Location

The City of Chicago utilizes Lake Michigan as its source water via two water treatment plants. The Jardine Water Purification Plant serves the northern areas of the City of Chicago and suburbs, while the South Water Purification Plant serves the southern portions of the City and suburbs. Lake Michigan is the only Great Lake that is entirely contained within the United States. It borders Illinois, Indiana, Michigan and Wisconsin, and is the second largest Great Lake by volume with 1,180 cubic miles of water and third largest by area.

Susceptibility to Contamination

The Illinois EPA considers all surface water sources of 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 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 tern 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.

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

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.

Your 2014 Village of Broadview
Water Quality Report (cont.)

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

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 EPA's Safe Drinking Water Hotline at (800) 426-4791.

Contaminants that may be present in source water before treatment 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 can be naturally-occurring or 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 byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the United States Environmental Protection Agency (USEPA) prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

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.

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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. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

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2014 Water Quality Data for the City of Chicago
Detected Contaminants

Contaminant (unit of measurement) Typical Source of Contaminant	MCLG	MCL	Highest Level Detected	Range of Detections	Violation	Date of Sample
Microbial Contaminants						
TURBIDITY (%<0.3 NTU) Soil runoff. Lowest monthly percent limit.	n/a	TT=0.3NTU	100%	100% - 100.000%		
TURBIDITY (NTU) Soil runoff. Highest single measurement.	n/a	TT=1NTUmax	0.11	n/a		
Inorganic Contaminants						
BARIUM (pm) Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.	2	2	0.0227	0.0223 – 0.0227		
NITRATE (AS NITROGEN) (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	10	10	0.31	0.30 – 0.31		
TOTAL NITRATE & NITRITE (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	10	10	0.31	0.30 – 0.31		
State Regulated Contaminants						
FLOURIDE (ppm) Water additive which promotes strong teeth	4	4	0.96	0.94 – 0.96		
Radioactive Contaminants						
COMBINED RADIUM (226/228) (pCi/L) Decay of natural and man-made deposits	0	5	0.84	0.500 – 0.840		
GROSS ALPHA excluding radon and uranium (pCi/L) Decay of natural and man-made deposits	0	15	6.6	6.1 – 6.6		
Unregulated Contaminants						
SULFATE (ppm) Erosion of naturally occurring deposits.	n/a	n/a	35.5	20.9 – 35.5		
SODIUM (ppm) Erosion of naturally occurring deposits. Used as water softener.	n/a	n/a	10	9.53 – 10.0		

TOC [TOTAL ORGANIC CARBON]

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

Water Quality Data Table Footnotes:

TURBIDITY

Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

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 not a 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 dietardieysttdietary precautions. If you are on a sodium-restricted diet, you should consult a physician about this level of sodium in the water.

UNREGULATED CONTAMINANT MONITORING RULE II (UCMRII): Our water system was required to monitor for all contaminants required under the Unregulated Contaminant Monitoring Rule II (UCMRII). Started in 2009, monitoring under UCMRII was completed in 2011, with none of the contaminants detected. Inquiries and results may be obtained by calling the Water Quality Division office at (312) 742-7499.

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2014 Water Quality Data for the Village of Broadview

Regulated Contaminants Detected

Definitions:
ALG (Action Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health.
AL (Action Level): The concentration of a contaminant which, if exceeded triggers treatment or other requirements which a water system must follow.

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Level Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	12/31/2014	1	0.67 – 1.46	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetric Acids HAA5	2014	20	9.3 – 22.18	No goal for the total	60	ppb	N	By-product of drinking water disinfection
Total Trihalomethanes (TTHM)	2014	31	29.3 – 33.3	No goal for the total	80	ppb	N	By-product of drinking water disinfection

Lead and Copper

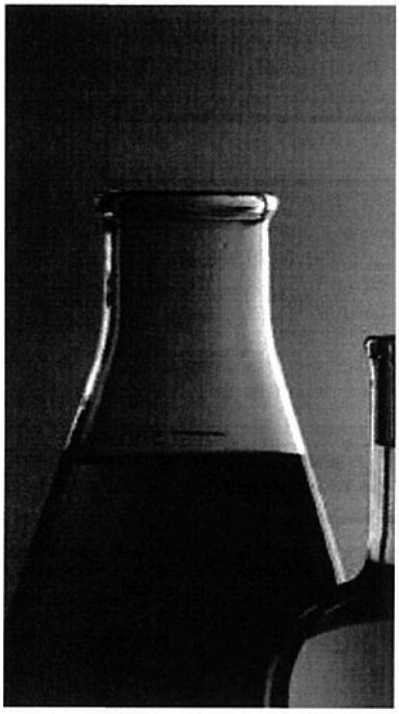
Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	#Sites over AL	Units	Violation	Likely Source of Contamination
Copper	2014	1.3	1.3	0.109	0	Ppb	Y	Erosion of natural deposits; Leaching from wood preservatives, Corrosion of household plumbing systems
Lead	2014	0	15	24.6	4	ppb	Y	Corrosion of household plumbing systems; Erosion of natural deposits

Not all samples 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 be done in the future.

Water Quality Test Results

Maximum Contaminant Level (MCL: The highest level of a contaminant that is allowed in drinking water. MCLs 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.
Maximum Residual Disinfectant Level (MRDL): The highest level of disinfectant allowed in drinking water. There is convicting 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. MRDLG's do not reflect the health benefits of the use of disinfectants to control microbial contaminants.
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.

Definitions: The preceding tables contain scientific terms and measures, some of which may require explanation.
ppm: milligrams per liter or parts per million—or one ounce in 7350 gallons of water.
ppb: micrograms per liter or parts per billion—or one ounce in 7,350,000 gallons of water.
n/a: not applicable.
Avg. Regulatory compliance with some MCLs are based on running annual average of monthly samples.



Water Quality Data

Definition of Terms Used

- ***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.
- ***nd:*** Not detectable at testing limits.
- ***n/a:*** Not applicable
- ***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.
- ***Level Found:*** This column represents an average of sample result data collected during the CCR calendar year. In some cases, it may represent a single sample if only one sample was collected.
- ***Range of Detection:*** This column represents a range of individual sample results; from lowest to highest that were collected during eh CCR calendar year.
- ***Date of Sample:*** If a date appears in this column, the Illinois EPA requires monitoring for this contaminant less than once per year because the concentrations do not frequently change. If no date appears in the column, monitoring for this contaminant was conducted during the CCR calendar year.
- ***Action Level (AL):*** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- ***Treatment Technique (TT):*** A required process intended to reduce the level of a contaminant in drinking water.

Unit of Measurement;

ppm - Parts per million, or milligrams per liter
ppb - Parts per billion, or micrograms per liter
NTU - Nephelometric Turbidity Unit, used to measure cloudiness in drinking water
%<0.5 NTU - Percent samples less than 0.5 NTU
pCi/l – picoCuries per liter (measurement of radioactivity)
ppt - Parts per trillion

CITY OF CHICAGO 2014 VIOLATION SUMMARY

We are pleased to announce that no monitoring, reporting, treatment technique, maximum residual disinfectant level, or maximum contaminant level violations were recorded during 2014.

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VILLAGE OF BROADVIEW 2014 VIOLATION SUMMARY

The following table(s) list all violations that occurred during 2014. We included a brief summary of the actions we took following notification of the violation.

Contaminant or Program	Violation Type	Violation Begin	Violation End	Violation Explanation
Haloacetic Acids (HAA5)				We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
Health Effects (if applicable)	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.			
Actions we took:	We have made procedural changes to ensure the proper number and timing of the testing in the future is in accordance with regulations.			
Lead and Copper Rule	Public Education (LCR)	01/01/2012	01/30/2015	We failed to adequately educate you regarding health problems associated with and sources of elevated lead levels in our water system.
Health Effects (if applicable)	The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.			
Actions we took:	We have since sent out the required notice to our customers. We have made procedural changes to ensure that if future notification is required, that it is completed on time.			
Total Trihalomethanes (TTHM)				We failed to test our drinking water for the contaminant for the period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
Health Effects (if applicable)	Some people who drink water containing trihalomenthanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.			
Actions we took:	We have made procedural changes to ensure the proper number and timing of the testing in the future is pin accordance with regulations.			