CONSUMER CONFIDENCE REPORT
Public Water Supply
For the Monitoring Year 2015

Water Supply:

The Village of Brookfield purchased 702,833,000 gallons of water from the Brookfield-North Riverside Water Commission, which they purchase from the City of Chicago. 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 and suburbs, while the South Water Purification Plant serves the southern areas 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.

Water Quality:

The water treatment facilities of the City of Chicago control the water quality supplied to the Water Commission. The Commission provides additional chlorine to the water to maintain the quality as delivered. The reports generated by the City are included in this Customer Confidence Report.

Testing:

The Village of Brookfield tests the water supply for chlorine content on a daily basis. The Village also takes water samples for bacteriological content and lead content. The Village of Brookfield also takes the Trihalomethane [TTHM] Analysis Report. This is per the requirements of the Illinois EPA.

Violations:

The Village of Brookfield water supply received violations in the calendar year of 2015.

Annual Drinking Water Quality Report for Calendar Year 2015
VILLAGE OF BROOKFIELD

BROOKFIELD

IL0310330

Annual Water Quality Report for the period of January 1 to December 31, 2015

The source of drinking water used by BROOKFIELD is Purchased Surface Water.

This report 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.

Contact Name: **Andy Zontos**
Telephone Number: **708-485-2540**
E-mail: **azontos@brookfieldil.gov**

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

Source of Drinking Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and underground 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 pickup 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 may 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.

Other Facts about Drinking Water

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of 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.

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

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

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.

Source Water Information

Source Water Name			Type of Water	Report Status	Location
CC 01-NO TREATMENT	FF IL0315130	TP01: LAKE	SW	OK	4545 Eberly Ave.

Source Water Assessment

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. 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 Village Hall or call our water operator at 708-485-2540. To view a summary version on 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.

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 for 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.

Lead and Copper

Definitions:
Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no know 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
Lead	2014	0	15	9.15	1	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

2015 Regulated Contaminants Detected

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	12/31/2015	0.9	0.7 - 1	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)*	2015	16	9.34 - 21	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)*	2015	35	14.94 - 46.7	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

VIOLATIONS TABLE

Chlorine

Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE (DBP), MAJOR	10/01/2015	12/31/2015	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.

Total Coliform

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING (TCR), ROUTINE MINOR	10/01/2015	10/31/2015	We failed to complete all the required tests of our drinking water for the contaminant and period indicated.

Corrective action on the two violations were resolved on the next collecting period.

Consumer Confidence Rule

The Consumer Confidence Rule requires community water systems to prepare and provide to their customers annual consumer confidence reports on the quality of the water delivered by the systems.

Violation Type	Violation Begin	Violation End	Violation Explanation
CCR ADEQUACY/AVAILABILITY/CONTENT	07/01/2015	2015	We failed to provide to you, our drinking water customers, an annual report that adequately informed you about the quality of our drinking water and the risks from exposure to contaminants detected in our drinking water.

Chicago UCMR3 report is on this years CCR report.

0316000 CHICAGO

DATA TABULATED BY CHICAGO DEPARTMENT OF WATER MANAGEMENT

2015 Water Quality Data

Detected Contaminants

Contaminant (unit of measurement) *Typical Source of Contaminant*	*MCLG*	*MCL*	*Highest Level Detected*	*Range of Detections*	*Violation*	*Date of Sample*
Turbidity Data						
TURBIDITY (NTU/Lowest Monthly %≤0.3 NTU) Soil runoff.	N/A	TT(95%≤0.3NTU)	(Lowest Monthly %) 99.7%	99.7% - 100.0%		
TURBIDITY (NTU/Highest Single Measurement) Soil runoff.	N/A	TT(Limit 1NTU)	0.45	N/A		
Inorganic Contaminants						
BARIUM (ppm) Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.	2	2	0.0201	0.0193 - 0.0201		

Contaminant (unit of measurement) *Typical Source of Contaminant*	*MCLG*	*MCL*	*Highest Level Detected*	*Range of Detections*	*Violation*	*Date of Sample*
NITRATE (AS NITROGEN) (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	10	10	0.30	0.28 - 0.30		
TOTAL NITRATE & NITRITE (AS NITROGEN) (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	10	10	0.30	0.28 - 0.30		
Total Organic Carbon						
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 IEPA.						
Unregulated Contaminants						
SULFATE (ppm) Erosion of naturally occurring deposits.	N/A	N/A	27.2	18.8 - 27.2		
SODIUM (ppm) Erosion of naturally occurring deposits; Used as water softener.	N/A	N/A	8.48	8.04 - 8.48		
State Regulated Contaminants						
FLUORIDE (ppm) Water additive which promotes strong teeth.	4	4	1.01	0.76 - 1.01		
Radioactive Contaminants						
COMBINED RADIUM 226/228 (pCi/L) Decay of natural and man-made deposits	0	5	0.84	0.50 - 0.84		2/11/2014
GROSS ALPHA excluding radon and uranium (pCi/L) Decay of natural and man-made deposits	0	15	6.6	6.1 - 6.6		2/11/2014

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
%<0.3 NTU: Percent samples less than 0.5 NTU
pCi/L: Picocuries per liter, used to measure radioactivity

UCMR3 Compliance Reporting

In compliance with the Unregulated Contaminant Monitoring Rule 3 (UCMR3) as required by the EPA, the City of Chicago has monitored for 28 contaminants suspected to be present in drinking water, but that do not have health-based standards set under the Safe drinking Water Act. The monitoring results were reported to the EPA. The list of UCMR3 contaminants that we have monitored included volatile organic chemicals, metals, perfluorinated compounds, hormones, 1,4-dioxane and chlorate. The contaminants that were detected in this monitoring program are listed below.

CHROMIUM (ppb) Naturally-occurring element; used in making steel and other alloys	100	100	0.3	0.3 - 0.3		
MOLYBDENUM (ppb) Naturally-occurring element found in ores and present plants, animals and bacteria; commonly used form molybdenum trioxide	NA	NA	1.1	1.0 - 1.1		
STRONTIUM (ppb) Naturally-occurring element has been used in cathode-ray tube TVs to block x-ray emissions	NA	NA	120	110 - 120		
VANADIUM (ppb) Naturally-occurring metal; vanadium pentoxide is used as a catalyst and a chemical intermediate	NA	NA	0.2	0.2 - 0.2		
CHROMIUM-6 or HEXAVALENT CHROMIUM (ppb) Naturally-occurring element; used in making steel and alloys	NA	NA	0.19	0.18 - 0.19		

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 dietary precautions. If you are on a sodium-restricted diet, you should consult a physician about this level of sodium in the water.

2015 Violation Summary Table

We are pleased to announce that no monitoring, reporting, treatment technique, maximum residual disinfectant level, or maximum contaminant level violations were recorded during 2015.

UCMR3 Compliance Reporting 2014 Chicago

In compliance with the Unregulated Contaminant Monitoring Rule 3 (UCMR3) as required by the EPA, the City of Chicago has monitored for 28 contaminants suspected to be present in drinking water, but that do not have health-based standards set under the Safe drinking Water Act. The monitoring results were reported to the EPA. The list of UCMR3 contaminants that we have monitored included volatile organic chemicals, metals, perfluorinated compounds, hormones, 1,4-dioxane and chlorate. The contaminants that were detected in this monitoring program are listed below.

CHROMIUM (ppb) Naturally-occurring element; used in making steel and other alloys	100	100	0.3	0.2 - 0.3		
MOLYBDENUM (ppb) Naturally-occurring element found in ores and present plants, animals and bacteria; commonly used form molybdenum trioxide	NA	NA	1.1	1.0 - 1.1		
STRONTIUM (ppb) Naturally-occurring element has been used in cathode-ray tube TVs to block x-ray emissions	NA	NA	120	110 - 120		
VANADIUM (ppb) Naturally-occurring metal; vanadium pentoxide is used as a catalyst and a chemical intermediate	NA	NA	0.3	ND - 0.3		
CHROMIUM-6 or HEXAVALENT CHROMIUM (ppb) Naturally-occurring element; used in making steel and alloys	NA	NA	0.22	0.18 - 0.22		
4-ANDROSTENE-3, 17-DIONE (ppb) Steroidal hormone naturally produced in the human body; and used as an anabolic steroid and a dietary supplement	NA	NA	0.0008	0.0006 -0.0008		
TESTOSTERONE (ppb) Androgenic steroid naturally produced in the human body; and used in pharmaceuticals	NA	NA	0.0001	0.0001 - 0.0001		

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
%<0.3 NTU: Percent samples less than 0.5 NTU
pCi/L: Picocuries per liter, used to measure radioactivity