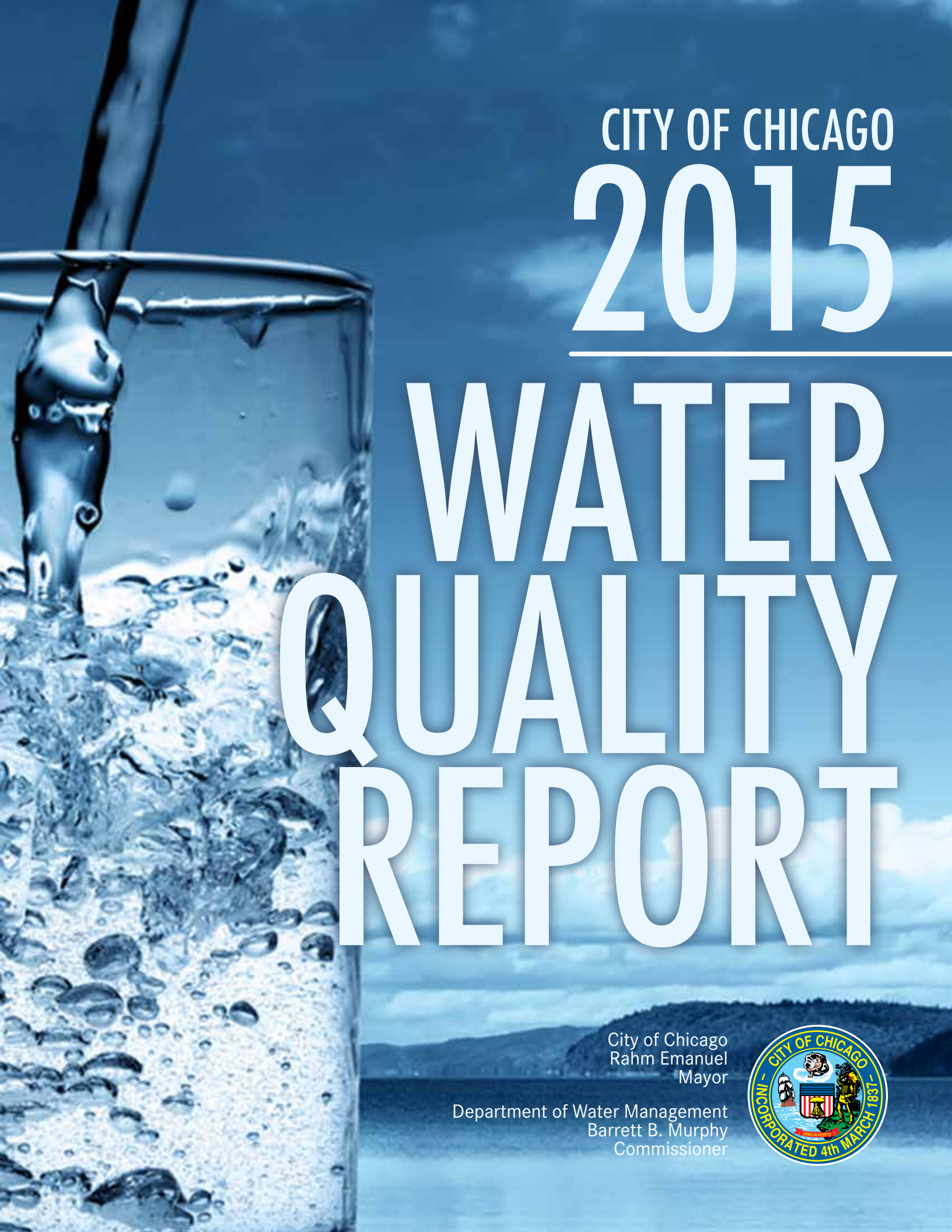

CITY OF CHICAGO
2015
WATER QUALITY REPORT

City of Chicago
Rahm Emanuel
Mayor

Department of Water Management
Barrett B. Murphy
Commissioner

Water in the Street or Basement	Call 311
Water Quality Questions	(312) 744-8190
Department of Finance Water Bill Questions	(312) 744-4H2O TTY (312) 744-2968
E-mail and Internet	E-mail: water@cityofchicago.org www.cityofchicago.org/watermanagement
When e-mailing always include your name, account number & call back number.	
IEPA's Regional Offices (Illinois)	(847) 608-3131
EPA's Safe Drinking Water Hotline	(800) 426-4791
EPA's Water Resource Center	(800) 832-7828
EPA's General Information Line	(312) 353-2000 TTY (312) 886-4658
If you have any questions about this report please contact Alan Stark at:	(312) 742-7499

2015 VOLUNTARY MONITORING

The City of Chicago has continued monitoring for Cryptosporidium, Giardia and E. coli in its source water as part of its water quality program. To date, Cryptosporidium has not been detected in these samples, but Giardia was detected in 2010 in one raw lake water sample collected in September 2010. Treatment processes have been optimized to provide effective barriers for removal of Cryptosporidium oocysts and Giardia cysts in the source water, effectively removing these organisms in the treatment process. By maintaining low turbidity through the removal of particles from the water, the possibility of Cryptosporidium and Giardia organisms getting into the drinking water system is greatly reduced. Also, in compliance with Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) Round 2, the City of Chicago has started the 24 months long monitoring program in April 2015, collecting samples from its source water once per month to monitor for Cryptosporidium, Giardia, E. coli and turbidity. Cryptosporidium and Giardia were not detected in these samples.

In 2015, DWM has also continued monitoring for hexavalent chromium, also known as chromium-6. USEPA has not yet established a standard for chromium-6, a contaminant of concern which has both natural and industrial sources. Please address any questions or concerns to DWM's Water Quality Division at 312-742-7499. Data reports on the monitoring program for chromium-6 are posted on the City's website which can be accessed at the following address below:

http://www.cityofchicago.org/city/en/depts/water/supp_info/water_quality_resultsandreports/city_of_chicago_emergincontaminantstudy.html

CITY OF CHICAGO, DEPARTMENT OF WATER MANAGEMENT (DWM) SOURCE WATER ASSESSMENT SUMMARY FOR THE 2015 CONSUMER CONFIDENCE REPORT (CCR)

This year, as in years past, your tap water met all USEPA and state drinking water health standards. Our system vigilantly safeguards its source water supply, and we are able to report that the Department of Water Management, City of Chicago had no violation of a contaminant level or of any other water quality standard in the previous year. 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 this information because informed customers are our best allies.

Source Water Assessment Summary

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. The Illinois EPA has completed the Source Water Assessment Program for our supply.

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 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.

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 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.

Further information on our community water supply's Source Water Assessment Program is available by calling the City of Chicago, Department of Water Management at 312-742-7499 or by going online at http://dataservices.epa.illinois.gov/swap/factsheet.aspx

Detected Contaminants

Contaminant (unit of measure) Typical Source of Contaminant	MCLG	MCL	Highest Level Detected	Range of Detections	Violation	Date of Sample
MICROBIAL CONTAMINANTS						
TOTAL COLIFORM BACTERIA (% pos/mo)Naturally present in the environment	0	5%	0.38%	N/A	-	-
FECAL COLIFORM AND E. COLI (# pos/mo)Human and animal fecal waste.	0	0	0	N/A	-	-
TURBIDITY (NTU/Lowest Monthly %≤0.3 NTU) Soil runoff.	N/A	TT (Limit: 95%≤0.3NTU)	99.7% (Lowest Monthly %)	99.7% – 100%	-	-
TURBIDITY (NTU/Highest Single Measurement) Soil runoff	N/A	TT (Limit: 1 NTU max)	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	-	-
COPPER (ppm) Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.	1.3	AL = 1.3	0.0782 (90^{th} percentile)	0 sites exceeding AL	-	-
LEAD (ppb) Corrosion of household plumbing systems; Erosion of natural deposits.	0	AL = 15	9.1 (90^{th} percentile)	3 site exceeding AL	-	-
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	-	-
DISINFECTANT\DISINFECTION BY-PRODUCTS						
TTHMs [TOTAL TRIHALOMETHANES] (ppb) By-product of drinking water disinfection.	N/A	80	22.3*	11.6 – 29.0	-	-
HAA5 [HALOACETIC ACIDS] (ppb) By-product of drinking water disinfection.	N/A	60	10.1*	3.6-14.3	-	-
CHLORINE (as Cl2) (ppm) Water additive used to control microbes.	4.0	4.0	1	1 - 1	-	-
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.						
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 in water softener regeneration.	N/A	N/A	8.48	8.04 – 8.48	-	-
STATE REGULATED CONTAMINANTS						
FLUORIDE (ppm) Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories	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**	0.5-0.84	-	2/11/2014
GROSS ALPHA excluding radon and uranium (pCi/L) Erosion of natural deposits.	0	15	6.6**	6.1-6.6	-	2/11/2014
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 in 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	-	-

Note: TTHM, HAA5, and Chlorine are for the Chicago Distribution System.
*Data expressed as LRAA – Locational Running Annual Average (See Definition of terms for Details)
**The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, is more than one year old. Some contaminants are sampled less frequently than once a year; as a result, not all contaminants were sampled for during the CCR calendar year. If any of these contaminants were detected the last time they were sampled for, they are included in the table along with the date that the detection occurred. Compliance monitoring for lead and copper is conducted every 3 years. Radiochemical contaminant monitoring is conducted every 6 years.

EDUCATIONAL STATEMENTS REGARDING COMMONLY FOUND DRINKING WATER CONTAMINANTS

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 (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 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 for their health care providers. USEPA/CDC 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 (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 materials, and pick up substances resulting from the presence of animals or 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, 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; and
- Radioactive contaminants, which may 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, USEPA 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.

Water Quality Data Table Footnotes

TURBIDITY: Turbidity is a measure of the cloudiness of the water caused by suspended particles. 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 been set. The purpose of unregulated contaminant monitoring 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 had recommended an optimal fluoride range of 0.9 mg/L to 1.2 mg/L until November 2015. As of November 2015, the new recommendation is an optimal fluoride level of 0.7 mg/L.

SODIUM: There is not a state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials who are concerned about sodium 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.

LEAD: 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 lead service lines and home plumbing. The Department of Water Management, City of Chicago, is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for over six hours, you can minimize the potential for lead exposure by flushing your tap for a minimum of 5 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 by calling 311 or going to www.chicagowaterquality.org. 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.

Definition 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 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 (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 (MRDL): The highest level of a drinking water disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Highest Level Detected: This column represents the highest single sample reading of a contaminant of all the samples collected in this calendar year.

Range of Detections: This column represents a range of individual sample results, from lowest to highest that were collected during the 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 Consumer Confidence Report calendar year.

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

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

ND: Not detectable at testing limits. **N/A:** Not applicable.

Locational Running Annual Average (LRAA): The average of 4 consecutive quarterly results at each monitored sample location. The LRAA should not exceed 80µg/L for TTHM and 60 µg/L for HAA5.

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.

Unit of Measurement

ppm: Parts per million, or milligrams per liter (mg/L)

ppb: Parts per billion, or micrograms per liter(µg/L)

NTU: Nephelometric Turbidity Unit, used to measure cloudiness in drinking water

%<0.3 NTU: Percent samples less than 0.3 NTU

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

Do you have a WATER METER?

MeterSave is available to all eligible single family or two-flat non-metered homeowners in Chicago that volunteer to have a FREE water meter installed. With your FREE installation you will receive our 7-year guarantee that your water and sewer bill will not exceed what you would have paid as a non-metered customer, so long as you stay current on your bill. If you move, the guarantee does not transfer to the new owner.

By installing a water meter, you become more aware of your water usage. By making small changes in your everyday water habits, you can easily save water and money. In addition to the installation of a FREE water meter and the 7-year guarantee, MeterSave participants may choose a FREE outdoor water conservation kit or indoor water conservation kit, while supplies last.

The water meter and installation are FREE!

Please Note: some meter installations may require more than one visit for completion.

EXAMPLE OF A SINGLE FAMILY WATER BILL

BEFORE METERSAVE

AVG. 2015 MONTHLY BILL: $85.50
(Based on Bi-Annual Assessment)

BASED ON:
23' wide building with 2 floors:
$181.08 / 6 months
50' hose frontage:$75.40 / 6 months
Sewer: is equal to 100% of Water.
Senior Sewer Exemption would reduce bill by 50%

AFTER METERSAVE

AVG. 2015 MONTHLY BILL: $59.78
(Based on Billing Every 2 Months)

Savings of 30% on bill by installing meter

BASED ON:
Water: $3.81 per 1,000 gallons
Sewer: is equal to 100% of water
Senior Sewer Exemption would reduce bill by 50%

WHAT ARE THE SOURCES OF LEAD?

The primary sources of lead exposure for most children are deteriorating lead-based paint, lead-contaminated dust, and lead-contaminated residential soil. We work hard to minimize potential lead exposure from drinking water by utilizing corrosion inhibitors in our drinking water. Lead is not found in the water leaving Chicago's treatment plants and water mains, but enters tap water through corrosion of homeowner's individual water service lines or interior plumbing fixtures and materials. Homes built before 1986 are more likely to have lead service lines, fixtures and solder.

The Department follows the requirements of the US Environmental Protection Agency (USEPA) Lead and Copper Rules as administered by the State of Illinois Environmental Protection Agency (IEPA). DWM has been placed on a reduced monitoring status by IEPA due to DWM's record of compliance with the 90th percentile rule which allows DWM to operate under the Lead and Copper Rule at a lower sampling level. Our most recent round of lead and copper sampling, completed in the summer of 2015, showed our results were in compliance for the action level for lead below 15 micrograms per liter (µg/L).

What Are The Health Effects of Lead? Lead can cause serious health problems if too much enters your body from drinking water or other sources such as lead paint. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants (particularly if they drink formula prepared with water containing elevated levels of lead whose growing bodies tend to absorb more lead than the average adult), young children, and pregnant women. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones, and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development.

What Can I Do to Reduce Exposure to Lead in Drinking Water? If you are concerned about your lead exposure risks from lead service lines, fixtures and solder, there are several things you can do:

- Run your water to flush out lead. If water hasn't been used for over six hours, run water from your kitchen tap or whatever tap you use for drinking and cooking at a moderate rate for a minimum of 5 minutes and it becomes cold or reaches a steady temperature before using it for drinking or cooking. This will help flush lead-containing water from the pipes. In order to conserve water, you can fill multiple containers after flushing for drinking, cooking and preparing baby formula.
- Use cold water for drinking, cooking and preparing baby formula. Do not cook with or drink water from the hot water tap; lead dissolves more easily into hot water. Do not use water from the hot water tap to make baby formula.
- Do not boil water to remove lead. Boiling water will not reduce lead.
- Clean your faucet aerators. Sediment, rust and metals, including any lead may collect in the aerator screen located at the tip of your faucets. These screens should be removed and cleaned regularly.
- Test your water for lead and identify if your plumbing fixtures contain lead. Call us at 311 or go online to www.chicagowaterquality.org to get your water test kit for lead. If any issues are found, we'll provide an inspection to help determine the type of plumbing and if there are any corrosivity issues within the plumbing system that need to be addressed to help reduce the lead concentration in the water.

If you have any questions or concerns about your water quality, or if you would like your water tested, please call us at 311. For additional advice and information visit http://www.epa.gov/il/advice-chicago-residents-about-lead-drinking-water .

For more information on reducing lead exposure around your home and the health effects of lead, visit USEPA's Web site at www.epa.gov/lead, the CDC website at www.cdc.gov/nceh/lead, call the National Lead Information Center at 800-424-LEAD, or contact your health care provider or the Chicago Department of Public Health.

CROSS-CONNECTION CONTROL SURVEY

The City of Chicago Department of Water Management is required by the Illinois Environmental Protection Agency (IEPA) to survey all water services connected to our public drinking water supply. This survey will help us prevent accidental contamination of our drinking water system by determing whether a cross-connection may exist at your home or business. A cross-connection is an unprotected or improper connection to the public drinking water system that may cause contamination or pollution to enter the system.

Please fill out the survey online at www.chicagoccr.org. Your answers are for the Department of Water Management's use only! Please be assured this survey is not an indication of any problems, but is required by the IEPA. Thank you for your cooperation.

Message from

Mayor Rahm Emanuel

Dear Chicago Water Customer,

I am pleased to provide you with the City of Chicago's annual Water Quality Report. This report meets an obligation to relay information about our drinking water, and also gives us an opportunity to explain what it takes to get that water to you.

To continue our city's reputation for high quality, good tasting water it is imperative that we continue to pursue significant renewal of infrastructure. Chicago water has exceeded all standards set by the USEPA, the Illinois EPA and the drinking water industry. The quality of Chicago tap water is monitored at every step of the process 24-hours a day.

We are further pleased to inform you that the safety and reliability of the Chicago water distribution system has been improved under the Building a New Chicago Program. The city of Chicago replaced more than 320 miles of aging water mains, converted the first of 3 pumping stations from steam to electric power and installed more than 80,000 water meters.

This report is full of useful information that will help you manage your water consumption, improve your efficiency, and protect your family and your neighbors from flooding and other risks. I hope that you look it over carefully and find value from it. If you are concerned about the quality of your water please don't hesitate to make a request online at www.chicagowaterquality.org or call 311 to have your water quality checked.

On behalf of all Chicagoans, I will continue my commitment to revitalizing the city's infrastructure and ensuring that Chicago is a world-class city built on a world-class foundation.

Sincerely,

Rahm Emanuel

Rahm Emanuel
Mayor

Este informe contiene información muy importante. Tradúscalo ó hable con alguien que lo entienda bien.

The Department of Water Management
Jardine Water Purification Plant
1000 East Ohio Street
Chicago, Illinois 60611

City of Chicago
Rahm Emanuel, Mayor