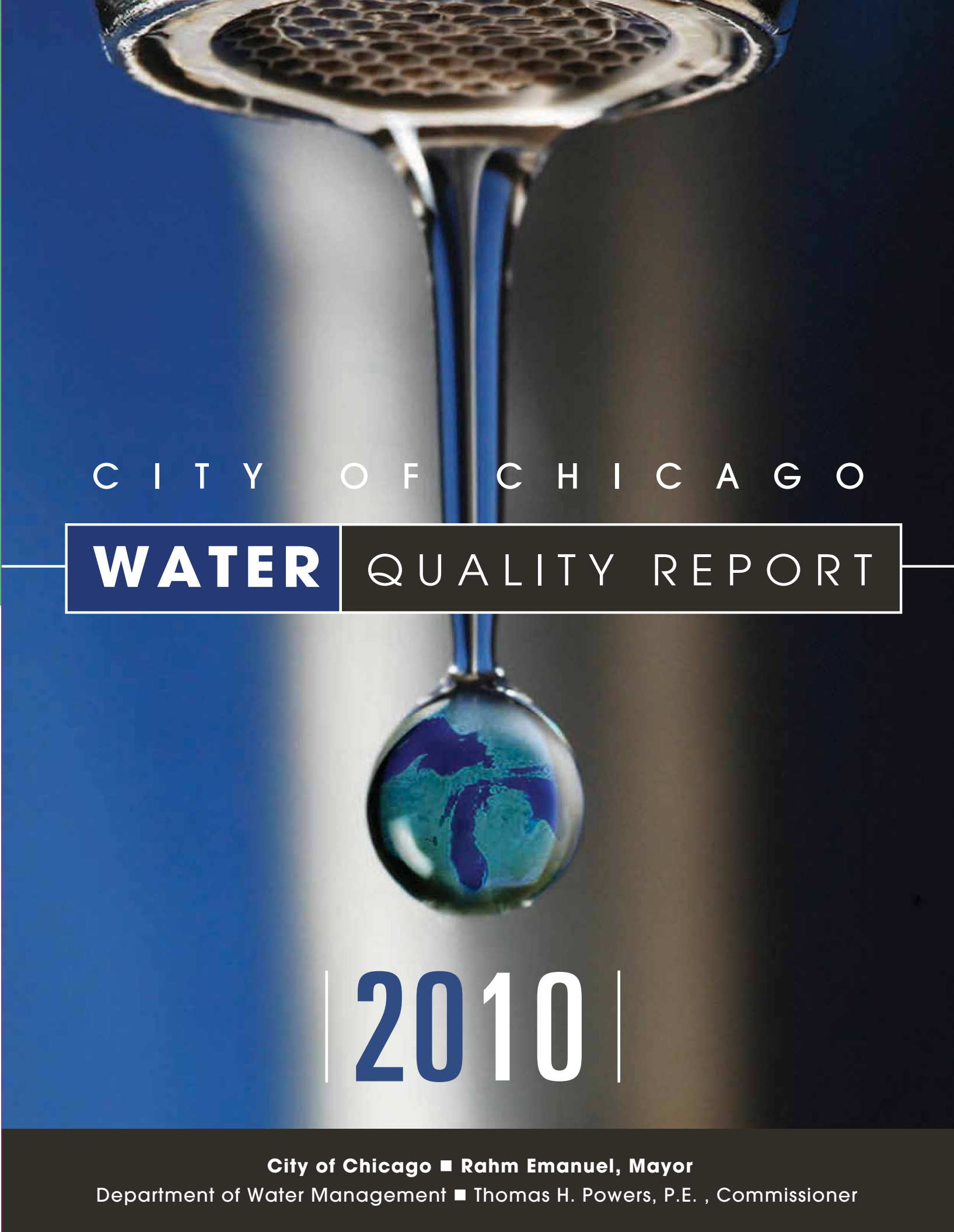

CITY OF CHICAGO

WATER QUALITY REPORT

2010

City of Chicago ■ Rahm Emanuel, Mayor

Department of Water Management ■ Thomas H. Powers, P.E. , Commissioner

Message from

Mayor Rahm Emanuel

Dear Chicago Water Customer,

I am pleased to present you with this full report on the quality of water we purify and deliver from Lake Michigan to Chicago and 125 suburban communities. Making this report is a regulatory requirement, but it is also a source of pride. Chicago is blessed with an incomparable resource—a lake system representing 20 percent of the world's surface fresh water.

Chicago has earned a reputation for the best drinking water in the world. We are also renowned in the water industry for our efforts to monitor water quality—in our source and as it moves through our purification system. There is no more important challenge than ensuring safe, pure water and maintaining public confidence in it.

In the interests of full accountability, we post all of our test results at www.cityofchicago.org/watermanagement. You will find a link from the top page.

I also want to direct your attention to sections in this report on MeterSave and on Storm Water Management. Both programs are vital to the quality of life in Chicago. MeterSave offers not only responsible conservation practices, but the likelihood of consumer savings on water bills. Our Storm Water Management program is an effort to adapt to climate change in a way that reduces the risks of basement flooding.

Please read this report, and consider what you and your neighbors can do to help conserve our resources and advance the values we have inherited from the remarkable generations who have given us our water system.

Sincerely,

Rahm Emanuel

Rahm Emanuel
Mayor

Para obtener el informe de la calidad del agua 2010 en español, por favor llame a nuestro centro de información al numero (312) 744-4H2O (744-4426).

OUR WATER AND RESEARCH

The City of Chicago is in the forefront of research on best practices, new technology, and emerging concerns about drinking water safety. We partner with public and private sector scientists to address such matters as trace pharmaceuticals in source water, lead pipes in home plumbing, and even more exotic concerns like Chromium VI and invasive species.

We meet or exceed all standards set by the United States Environmental Protection Agency (USEPA) and the Illinois Environmental Protection Agency (IEPA). But, that is not enough.

Our ability to measure smaller and smaller concentrations of compounds means that we can identify them before they become problems. We can work with the world's top experts to develop new measuring and purification technologies. We can keep our water safe, and make certain your confidence is always justified.

City of Chicago
Rahm Emanuel, Mayor

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

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Please contact our Water Quality Division regarding questions about this Water Quality Report at: 312-742-7499.

Water in the Street or Basement	Call 311
Water Quality Questions	(312) 744-8190
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.

EPA's Water Resource Center	(800) 832-7828
EPA's Safe Drinking Water Hotline	(800) 426-4791
EPA's Regional Offices (Illinois)	(312) 353-4919
EPA's General Information Line	(312) 353-2000 TTY (312) 886-4658

City of Chicago Emerging Contaminant Study Analysis of Endocrine Disrupting Chemicals, Pharmaceuticals, and Personal Care Products

The City of Chicago Department of Water Management (CDWM) is currently performing a water quality study to monitor some compounds that have not historically been considered to be contaminants of concern, but have been recently documented at trace concentrations in our nation's waterbodies. This study includes compounds known as Endocrine Disrupting Chemicals (EDCs) and Pharmaceuticals & Personal Care Products (PPCPs), which are considered to be emerging contaminants. EDCs are compounds with potential to interfere with natural hormone systems. PPCPs are a group of compounds consisting of prescription or over-the-counter therapeutic drugs, veterinary drugs, and consumer products such as sun-screen, lotions, insect repellent, and fragrances. The reader is encouraged to visit the United States Environmental Protection Agency (USEPA) website to learn more about EDCs (http://www.epa.gov/ncer/science/endocrine/) and PPCPs (http://www.epa.gov/ppcp/).

CDWM completed the final sampling and is currently analyzing results for final reporting that will be posted on our web site. Please address any questions or concerns to CDWM's Water Quality Division at 312-742-7499. A list of detected contaminants from the Study and additional information is posted on the City's website which can be accessed at the following address:

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

Violation Description:
There were no violations during 2010.

Department of Water Management Source Water Assessment Summary

Source Water Assesment 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 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.

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 312-744-6635.

Water Quality Data Table Footnotes

TURBIDITY: Turbidity is a measure of the cloudiness of 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.

2010 Water Quality Data: 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) Human and animal fecal waste.	0	5%	0.2%	n/a	–	–
FECAL COLIFORM AND E. COLI (# pos/mo) Human and animal fecal waste.	0	0	1	n/a	–	–
TURBIDITY (%<0.3 NTU) Soil runoff. Lowest monthly percent meeting limit.	n/a	TT	99.740%	99.740% - 100.00%	–	–
TURBIDITY (NTU) Soil runoff. Highest single measurement.	n/a	TT=1NTUmax	0.38	n/a	–	–
Inorganic Contaminants						
BARIUM (ppm) Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.	2	2	0.0182	0.0175 - 0.0182	–	–
COPPER (ppm) Corrosion of household plumbing systems: Erosion of natural deposits.	1.3	AL=1.3	0.032 (90th percentile)	0 sites exceeding AL	–	6/1/09 to 9/30/09
LEAD (ppb) Corrosion of household plumbing systems; Erosion of natural deposits.	0	AL=15	6.07 (90th percentile)	1 site exceeding AL	–	6/1/09 to 9/30/09
NITRATE (AS NITROGEN) (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	10	10	0.311	0.288 - 0.311	–	–
TOTAL NITRATE & NITRITE (AS NITROGEN) (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	10	10	0.311	0.288 - 0.311	–	–
Synthetic Organic Contaminants						
(Including Pesticides and Herbicides) Di (2-ethylhexyl) phthalate (ppb) Discharge from rubber and chemical factories.	0	6	0.76	0.00 - 0.76	–	–
Disinfectant\Disinfection By-Products						
TTHMs [TOTAL TRIHALOMETHANES] (ppb) By-product of drinking water disinfection.	n/a	80	20.000*	11.700 - 28.600	–	–
HAA5 [HALOACETIC ACIDS] (ppb) By-product of drinking water disinfection.	n/a	60	10.000*	6.000 - 14.200	–	–
CHLORINE (as Cl2) (ppm) Drinking water disinfectant.	4.0	4.0	0.80	0.7063 - 0.8189	–	–
TOC [TOTAL ORGANIC CARBON] The precentage 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	33.600	30.400 - 33.600	–	–
SODIUM (ppm) Erosion of naturally occurring deposits; Used as water softener.	n/a	n/a	8.98	8.26 - 8.98	–	–
State Regulated Contaminants						
FLUORIDE (ppm) Water additive which promotes strong teeth.	4	4	0.817	0.651 - 0.817	–	–
Radioactive Contaminants						
COMBINED RADIUM (226/228) (pCi/L) Decay of natural and man-made deposits.	0	5	1.38	1.300 - 1.380	–	03-17-2008
GROSS ALPHA excluding radon and uranium (pCi/L) Decay of natural and man-made deposits.	0	15	0.88	0.090 - 0.880	–	03-17-2008

*TTHMs, HAA5, and Chlorine are for the Chicago distribution system. * Highest Running Annual Average Computed.*
Compliance monitoring for lead and copper is conducted every 3 years. Radiochemical contaminant monitoring is conducted every 6 years.

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.

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 service lines and home plumbing. The City of Chicago, Department of Water Management is responsible for providing high quality drinking water, but 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.

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 from 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.

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 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 2009.

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 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.
nd: Not detectable at testing limits. **n/a:** Not applicable

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 0.3 NTU

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

Unregulated Contaiminant Monitoring Rule II (UCMRII)

Our water system was required to monitor for all contaminants required under the Unregulated Contaminant Monitoring Rule II (UCMRII). All of the 2009 UCMR II and the February 2010 results were non-detected. A final Round #4 sampling is scheduled for May, 2011. Inquiries and results may be obtained by calling the Water Quality Division office at (312) 742-7499.

2010 VOLUNTARY MONITORING

The City of Chicago has continued monitoring for Cryptosporidium and Giardia 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.

Do you have a Water Meter?

By now you have probably heard the good news–from a neighbor, family member, or a friend-who has had a **FREE** water meter installed in their home through the MeterSave Program. The current average water and sewer bill savings for MeterSave customers is over 50%!

MeterSave is available to all single family or two-flat homeowners in Chicago that volunteer to have a **FREE** water meter installed. With your **FREE** installation you receive our 7-year guarantee that your water and sewer bill will not exceed what you would have paid as a non-metered customer. By installing a water meter you become more aware of your water use. By making small changes in your everyday water habits you can easily save water and money.

MeterSave participants can choose from one of the following **FREE** water conservation tools (and two if a whole block volunteers!): rain barrel, outdoor water conservation kit, or indoor water conservation kit.

The water meter and installation are FREE!

Signing up is easy

You can visit our web site at www.metersave.org and complete the online registration or simply call 3-1-1 or 312-744-4H20 at any time. Visit our on-line calendar to reserve your timeslot at www.metersave.org.

To volunteer for a FREE water meter

1) Be the owner or have approval from the owner of
- *Single family residence*
- *Two-flat residence*

2) Be current on water bill
- *Active payment plan is current*
- *Current water bill is not delinquent*

To maintain your 7-year guarantee

1) The owner must retain ownership of the home
- *Guarantee does not transfer to future owners*

2) Be current on water bill
- *Active payment plan is current*
- *Current water bill is not delinquent*

Some meter installations may require more than one visit for completion.

What to expect

The water shut-off valve must be accessible and clear of clutter. Be prepared to answer the following questions:
- *Do you have a basement? If you don't have a basement, installation may require additional labor but you should still volunteer.*
- *If you have a basement, is the area around the water shut-off valve or water pipe un-finished or is the shut-off valve in a mechanical room? If the answer is yes, this is the optimal scenario to install a meter. Unfortunately, some fully-finished or remodeled basements have hidden the water shut-off valve. With a minimal amount of work our crew can create an access door.*

Meter or Non-Metered

Non-Metered water bills are billed every 6 months and are based on a flat rate assessment of such things as your lot size and the number of water fixtures installed. Typically, a detail of the assessment is provided on the front of the bill.

Metered water bills are billed every 1-2 months and are based on the actual water usage. The number of gallons or cubic feet consumed is multiplied by the water rate. The 2011 water rate is $2.01 per 1,000 gallons (or $15.00 per 1,000 cubic feet) and is one of the lowest in the nation. The water rate charged is the same for all metered accounts, both for Chicago residents and the 48 direct suburban connections.

The sewer charge is 86% of the water charge (metered or non-metered) and is also listed on the water bills.

Visit **www.metersave.org** to sign-up today for your **FREE** water meter and **FREE** installation!

Downspout Disconnects

Downspout Disconnects represents a new approach to reducing the risk of basement flooding during rain storms. We are partnering with your neighbors and your Alderman to get as many people involved as possible. Simply put the more rain water that we can keep on the street in a rain storm the fewer flooded basements we will have.

The program starts with you, your block club or community organization. When you can provide an area that has 70% participation then we bring together all of the appropriate City of Chicago department experts, programs and resources to take a comprehensive approach to your whole neighborhood.

They will offer specific suggestions on what property owners can do to overcome conditions that could promote flooding (e.g. elevation differences with the neighbor; connection gutter downspouts, etc.).

All departments with a role in storm water management will take a close look at the neighborhood and prepare advice. The will also identify programs from which you could benefit.

Sewers will be checked for working Rain Blockers.

Our goal is to keep the sewers from backing up into your basement by keeping the rain water on the streets until the sewer mains can handle the flow.

Chicago Sustainable Backyard Program

The Chicago Department of Environment in an effort to promote more environmentally-friendly landscaping has announced the 2011 Chicago Sustainable Backyard Program and, will host a series of Sustainable Backyard Workshops throughout the city. Rebates for Chicago residents for up to 50% off their next local purchase of trees (up to $100 back), native plants (up to $60 back), compost bins (up to $50 back), and rain barrels (up to $40 back). More information can be found at: www.cityofchicago.org/rainbarrel.