



Water Quality

Consumer Confidence Report

Confirming the Quality of Drinking Water in the City of Rolling Meadows • June 2015



City Water Supply Meets all EPA Standards for Safety & Quality

Once again this year, Rolling Meadows drinking water has met all United States Environmental Protection Agency (USEPA) and state drinking water standards.

That's something the staff members in the Water Operations Division of the Department of Public Works take great pride in: delivering water that consistently meets drinking water quality requirements. Water Division employees:

- Operate four pumping stations that retain or distribute water as consumption fluctuates throughout the day.
- Maintain water storage requirements of 5.5 million gallons.
- Manage redundant operations for use during critical events.

Since 1986, our community has been 100% reliant on Lake Michigan for treated water for daily use. Water pumped from the City

of Chicago's treatment facility is delivered to Rolling Meadows through the Northwest Suburban Municipal Joint Action Water Agency (NSMJAWA), located near O'Hare International Airport, using a network of transmission mains.

Rolling Meadows has three delivery points for Lake Michigan water that serve the City and regulate incoming flow. The daily flow rate is adjusted to meet system demands and maintain a sufficient amount of water for emergency uses, such as fire-fighting needs.

Should a disruption of water flow from JAWA occur, the water system includes four deep wells and emergency generators to ensure an uninterrupted supply of water.



Public Works crews replace a section of underground water main. The City's system contains more than 90 miles of pipes, which deliver nearly 15 million gallons of water to customers each week.

Report Spotlights Water Quality

The Consumer Confidence Report (CCR) provides basic facts regarding the City's water system, so that individuals have the information necessary to make water consumption decisions based on their personal health.

The annual report provides a general overview of water quality and water system operations. It details where the water comes from, what it contains, and how it compares to regulating agency standards. Most of the information and statements contained in this report are required by the Illinois Environmental Protection Agency for public knowledge.

Answers to Questions about Water Quality

If you have any questions about this report or concerns regarding the water system, please contact John Somogyi, Public Works Department Superintendent of Water Operations, at 847-963-0500 (ext. 7012).

City Council meetings sometimes have water systems-related topics on the agenda. Meetings are open to the public and are held the second and fourth Tuesdays of each month, except in November and December. Visit www.cityrm.org for confirmed dates and times.

Report Complies with Safe Drinking Water Act

The Rolling Meadows Department of Public Works publishes this annual Water Quality newsletter to meet the requirements of the Federal Safe Drinking Water Act and to provide information about the City's water system to our customers.

The Water Operations Division is diligent in its efforts to ensure that drinking water delivered to homes and businesses remains safe and of the highest quality.

Water Quality Data: City of Chicago – ‘Parent Water Supply’ (2014)

Contaminants that may be in water include:	Date of Sample	Violation	Level Found	Range of Detection	Unit of Measure	MCLG	MCL	Likely Source of Contamination
Turbidity Data								
Turbidity		None	100%	100-100%	(%≤0.3 NTU)	n/a	TT (Limit 95% ≤0.3 NTU)	Soil runoff. NTU/Lowest monthly (%≤0.3NTU).
Turbidity		None	0.11	n/a	(NTU)	n/a	TT (Limit 1NTU)	Soil runoff. NTU/Highest single measurement.
Inorganic Contaminants								
Barium		None	0.0227	0.0223-0.0227	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Nitrate (as Nitrogen)		None	0.31	0.30-0.31	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits.
Total Nitrate & Nitrite (as Nitrogen)		None	0.31	0.30-0.31	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits.
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 the IEPA.							
Unregulated Contaminants								
Sulfate		None	35.5	20.9-35.5	ppm	n/a	n/a	Erosion of naturally occurring deposits.
Sodium		None	10	9.53-10.0	ppm	n/a	n/a	Erosion of naturally occurring deposits; used as water softener.
State Regulated Contaminants								
Fluoride		None	0.98	0.94-0.98	ppm	4	4	Water additive that promotes strong teeth.
Radioactive Contaminants								
Combined Radium (226/228)		None	0.84	0.50-0.84	pCi/l	0	5	Decay of natural and man-made deposits.
Gross Alpha (excluding Radon and Uranium)		None	6.6	6.1-6.6	pCi/l	0	15	Decay of natural and man-made deposits.
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 have been monitored include 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			0.3	0.2-0.3	ppb	100	100	Naturally-occurring element; used in making steel and other alloys.
Molybdenum			1.1	1.0-1.1	ppb	n/a	n/a	Naturally-occurring element found in ores and present in plants, animals and bacteria; commonly used for molybdenum trioxide.
Strontium			120	110-120	ppb	n/a	n/a	Naturally-occurring element; has been used in cathode-ray tube TVs to block x-ray emissions.
Vanadium			0.3	ND-0.3	ppb	n/a	n/a	Naturally-occurring metal; vanadium pentoxide is used as a catalyst and chemical intermediate.
Chromium-6 or Hexavalent Chromium			0.22	0.18-0.22	ppb	n/a	n/a	Naturally-occurring element; used in making steel and other alloys.
4-Androstene-3, 17-Dione			0.0008	.0006-.0008	ppb	n/a	n/a	Steroidal hormone naturally produced in the human body; used as an anabolic steroid and dietary supplement.
Testosterone			0.0001	.0001-.0001	ppb	n/a	n/a	Androgenic steroid produced in the body; used in pharmaceuticals.

Table Definitions

MCLG (maximum contaminant level goal) – The level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MCL (maximum contaminant level) – 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.

***Date of Sample** – If a date appears in this column, the EPA requires monitoring for this contaminant less than once a year, because concentrations do not frequently change. If no date appears in this column, monitoring for this contaminant was conducted during the CCR calendar year.

Level Found – 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 – A range of individual sample results

(lowest to highest) that were collected during the calendar year.

AL (action level) – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Avg. – Regulatory compliance with some MCLs are based on running annual averages of monthly samples.

n/a – Not applicable.

nd – Not detectable at testing limits.

TT (treatment technique) – A process required to reduce the level of a contaminant in the drinking water.

ppm – Parts per million, or milligrams per liter.

ppb – Parts per billion.

ppt – Parts per trillion.

ug/l – Micrograms per liter

pos/mo – Number of positive samples per month.

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

pCi/l – Picocuries per liter, used to measure radioactivity.

%≤0.3 NTU – Percent of samples less than or equal to 0.3 NTU.

% pos/mo – Percent of positive samples per month.

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.

Water Quality Data: City of Rolling Meadows Water Supply (2014)

Contaminants that may be in water include:	Date of Sample	Violation	Level Found	Range of Detection	Unit of Measure	MCLG	MCL	Likely Source of Contamination
Regulated Contaminants Detected								
Total Coliform Bacteria		None	0	n/a	n/a	0	1 Positive monthly sample	Naturally present in the environment.
Fecal Coliform and E. Coli		None	0	n/a	n/a	0	0	Naturally present in the environment.
Disinfectants/Disinfection By-Products								
Chlorine	12/31/14	None	0.9	0.6-1.1	ppm	MRDLG=4	MRDL=4	Water additive to control microbes.
TTHMs (Total Trihalomethanes)	2014	None	34	18.92-53.5	ppb	No Goal	80	By-product of drinking water chlorination.
HAA5 (Haloacetic Acid)	2014	None	15	9.04-16.16	ppb	No Goal	60	By-product of drinking water chlorination.
Inorganic Contaminants								
Arsenic	1/23/13	None	1.01	1.01-1.01	ppb	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronic production waste.
Barium	1/23/13	None	0.0433	0.0433-0.0433	ppm	2	2	Erosion of natural deposits; discharge from drilling wastes and metal refineries.
Fluoride	1/23/13	None	0.984	0.984-0.984	ppm	4	4	Erosion of natural deposits; water additive for strong teeth; discharge from fertilizer and aluminum factories.
Iron	1/23/13	None	2.45	2.45-2.45	ppm	n/a	1.0	Erosion of natural deposits. <i>This contaminant is not currently regulated by the USEPA. However, the state regulates its level.</i>
Manganese	1/23/13	None	18	18-18	ppb	150	150	Erosion of natural deposits. <i>This contaminant is not currently regulated by the USEPA. However, the state regulates its level.</i>
Sodium	1/23/13	None	21.9	21.9-21.9	ppm	n/a	n/a	Erosion of naturally-occurring deposits; used in water softening regeneration.
Zinc	1/23/13	None	0.00721	0.00721-0.00721	ppm	5	5	Naturally-occurring; discharge from metal refineries. <i>This contaminant is not currently regulated by the USEPA. However, the state regulates its level.</i>
Radioactive Contaminants								
Combined Radium (226/228)	7/15/13	None	20	9.7-20	pCi/l	0	5	Erosion of natural deposits.
Gross Alpha (excluding Radon and Uranium)	2013	None	33.8	14.3-33.8	pCi/l	0	15	Erosion of natural deposits.
Synthetic Organic Contaminants including Pesticides and Herbicides								
Benzo (a) pyrene		None	100	0-117	ppt	0	200	Leaching from water storage tanks and distribution lines.
UCMR3 Compliance Reporting								
In compliance with the Unregulated Contaminant Monitoring Rule 3 (UCMR3) as required by the EPA, the City of Rolling Meadows has monitored for 21 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 have been monitored include 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	2014		0.3	0.2-0.3	ppb	n/a	n/a	Naturally-occurring element; used in making steel and other alloys.
Molybdenum	2014		1.3	1.1-1.3	ppb	n/a	n/a	Naturally-occurring element found in ores and present in plants, animals and bacteria; commonly used for molybdenum trioxide.
Strontium	2014		150	120-150	ppb	n/a	n/a	Naturally-occurring element; has been used in cathode-ray tube TVs to block x-ray emissions.
Vanadium	2014		0.4	0.3-0.4	ppb	n/a	n/a	Naturally-occurring metal; vanadium pentoxide is used as a catalyst and chemical intermediate.
Hexavalent Chromium	2014		0.23	0.16-0.23	ppb	n/a	n/a	Naturally-occurring element; used in making steel and other alloys.
Chlorate	2014		32	24-32	ppb	n/a	n/a	By-product of the drinking water disinfection process.

Table Footnotes

TURBIDITY – A measure of the cloudiness of the water. It's monitored because it's a good indicator of water quality and the effectiveness of the filtration system and disinfectants.

UNREGULATED CONTAMINANTS – Neither a maximum contaminant level (MCL) nor mandatory health effects language has been established for this contaminant by either state or federal regulations. 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.

SODIUM – There is not a state or federal MCL for sodium. Monitoring is not required to provide information to consumers and health officials who are concerned about sodium intake due to dietary precautions. Residents on a sodium-restricted diet should consult a physician about this level of sodium in the water.

FLUORIDE – 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.

2014 Violation Summary Table

The Cities of Rolling Meadows and Chicago had no violations to report.

This report follows a format prescribed by the federal government and is published as an annual requirement of the federal and Illinois EPA.

EPA Hotline Offers Water Quality Information

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, potential health effects, and ways to lessen the risk of infection are available from the USEPA's Safe Drinking Water Hotline (800-426-4791).

EPA Limits Contaminant Levels

To ensure that tap water is safe to drink, the USEPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protections for public health.



Water taken directly from Lake Michigan at the Jardine Filtration Plant near Nay Pier (above) is pumped to the Northwest Suburban Municipal Joint Action Water Agency, which supplies water to Rolling Meadows.

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

“To ensure that tap water is safe to drink, the USEPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems.”

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 (800-426-4791).

Minimize Potential Lead Exposure

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 Rolling Meadows is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. To minimize potential exposure to lead, run your tap for 30 seconds to two 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 – including testing methods and steps you can take to minimize exposure – is available from the Safe Drinking Water Hotline (800-426-4791) or at www.epa.gov/safewater/lead/.

Contaminants May Be Natural, Man-made

Sources of tap and bottled drinking water include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over 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 may be:

Inorganic

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, and farming.

Microbial

Viruses and bacteria that may come from

sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Pesticides and Herbicides

These come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

Organic Chemical

Synthetic and volatile organic chemicals, which are by-products of industrial processes, and petroleum production. They may also come from gas stations, urban storm water runoff, and septic systems.

Radioactive

Naturally occurring or the result of oil/gas production and mining.

City Qualifies for Reduced Sampling

Because of satisfactory lead and copper sampling results since August 1992, Rolling Meadows has been placed on the reduced site monitoring program by the Illinois EPA. Samples to test for lead levels are collected every three years.

To become eligible for reduced sampling, the City's 90th percentile sample had to be below the EPA requirements of 15 parts per billion. The results were less than 5 parts per billion.

Prevent Costly Sewage Backups and Overflows: 'Cease the Grease'

DID YOU KNOW?

Nearly 50% of all sewage overflows and backups nationwide are caused by Fats, Oils and Grease (FOG) that have been poured down the drain. These overflows are more than a public nuisance:

they can cause serious damage to our environment by polluting our streams, rivers and lakes.

As the agency that responds to sewage overflows, the City of Rolling Meadows' Underground Utilities Division wants to

educate businesses and residents on ways to properly dispose of the fats, oils and grease that are found in the foods we use every day.

Avoid These 'FOGGY' Foods:
Meat
Cooking oil
Butter
Shortening
Margarine
Baked goods
Dairy products



When poured down the drain, bacon grease – and other fats and oils – can create sewer backups and cause serious damage to the environment.

What happens when you fry bacon, broil hamburgers or bake meat? When you're finished, what remains in your cooking pans and pots? The answer is FOG – a real enemy of our sewer system. These substances build-up over time when rinsed or poured down your drain/garbage disposal. Eventually, they will cause sewers to back up into homes and businesses, and overflow into local streams, rivers and lakes.

Underground Utilities Division employees are trained to respond to, and resolve, backups and overflows caused by FOG. However, preventing them from occurring in the first place is the ideal solution to this growing problem.

Frequently Asked Questions



FOG buildup will eventually cause sewer backups and overflows.

What is FOG?

Fats, Oils and Grease (FOG) are byproducts of cooking and meat-cutting. FOG is found in meat fats, oils, shortening, butter, margarine, sauces and dairy products.

Why is FOG an issue for me?

When FOG is poured down drains or garbage disposals, it builds up in your sewer lateral and in the City's sewer system, and can cause backups into our homes or businesses. Backups can pose serious public health and environmental problems – and be very costly to cleanup.

Sewer overflows affect the health of our waterways. By

safely disposing of FOG (see below), we are all taking steps to protect the environment and the quality of life we enjoy in the City of Rolling Meadows.

What about the pipes in my home or business?

Your pipes will most likely be the first to become blocked by FOG, which could result in expensive plumbing bills. Keeping FOG out of your drains, disposals, and the sewer system benefits your home's or business' plumbing system.

Residents with questions or concerns should contact the Public Works Department at 847-963-0500.

Tips for Preventing FOG Buildup

First and foremost, we must work to reduce the amount of FOG that enters the City's sanitary sewage system. Homeowners and businesses should follow these simple steps when disposing of fats, oils and grease:

1. Minimize use of excess cooking oils and grease when cooking, baking or frying.
2. Pour lukewarm cooking grease from pans into a durable, disposable container (such as a frozen juice carton).
3. Use a spatula to scrape as much remaining grease as possible out of the pan, then use a paper towel to wipe the pan clean before washing.
4. Store the grease container in the freezer and reuse, when necessary, until it is filled, then throw it away.



Illinois EPA's Source Water Assessment Available for Review

We want our customers to be informed about their water quality. The Source Water Assessment for our water supply (Lake Michigan) has been completed by the Illinois EPA. If you would like a copy of this information, please stop by the Public Works Department or call 847-963-0500. To view a summary version of the completed Source Water Assessment, including Importance of Source Water; Susceptibility to Contamination Determination; and documentation/recommendation of Source Water Protection Efforts, visit the Illinois EPA Website at

www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl/

The IEPA considers all surface water sources of community water supply to be susceptible to potential water 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 where shoreline impacts are not usually considered a factor on water qual-

ity. 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 water fowl, gulls and terns that frequent the Great Lakes area. This may concentrate fecal deposits at the intake and compromise 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.



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'WaterSense' Program Promotes Conservation, Saves Residents Money

The Environmental Protection Agency's WaterSense partnership program is designed to protect the future of our nation's water supply by helping consumers make smart water choices that **save money** and **conserve limited natural resources**.

According to EPA data, Americans could save more than \$50 million in energy costs and conserve 6 billion gallons of water per year if just 10% of homes in the United States installed bathroom faucets or faucet accessories featuring the WaterSense label.

Products and services carrying the WaterSense label are certified to be at least 20% more efficient – without sacrificing performance. The program brings together a variety of stakeholders to:

-  Provide consumers with easy ways to save water, as both a label for products and an information resource.
-  Encourage innovation in manufacturing.
-  Promote the value of water efficiency and decrease water use.

Visit www.epa.gov/watersense to learn more.

Sprinkling Ban: May 15 – September 15, Noon to 6 p.m. DAILY