

Water

Confirming the Quality of Drinking Water in the City of Rolling Meadows



Quality

June 2016

Consumer Confidence Report

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.

Report Complies with Safe Drinking Water Act

The Public Works Department publishes this annual *Water Quality* newsletter to meet the requirements of the Federal Safe Drinking Water Act and to provide information about Rolling Meadows' 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.

2015 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.

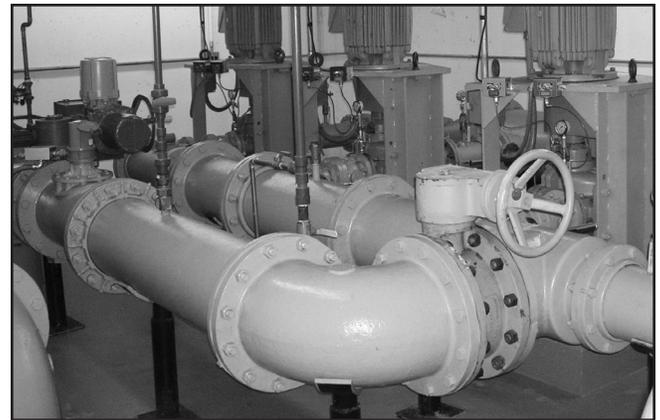
Public Works Ensures City Water Meets EPA Safety Standards

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

The staff members in the Water Operations Division of the Department of Public Works take great pride in delivering water that consistently meets established mandates that ensure the quality of residents' drinking water. 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



Pumping stations ensure that Water Division employees are able to distribute water to meet fluctuating daily consumption requirements.

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 throughout the City that 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 firefighting needs.

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

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. Visit cityrm.org for confirmed dates and times.

Water Quality Data: City of Chicago – ‘Parent Water Supply’ (2015)

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	99.7%	99.7-100%	(%<0.3 NTU)	n/a	TT (Limit 95% < 0.3 NTU)	Soil runoff. NTU/Lowest monthly (% < 0.3NTU).
Turbidity		NONE	0.45	n/a	(NTU)	n/a	TT(Limit 1NTU)	Soil runoff. NTU/Highest single measurement.
Inorganic Contaminants								
Barium		NONE	0.0201	0.0193-0.0201	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Nitrate (as Nitrogen)		NONE	0.3	0.28-0.3	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Total Nitrate & Nitrite (as Nitrogen)		NONE	0.3	0.28-0.3	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	27.2	18.8-27.2	ppm	n/a	n/a	Erosion of naturally occurring deposits.
Sodium		NONE	8.48	8.04-8.48	ppm	n/a	n/a	Erosion of naturally occurring deposits; used as water softener.
State Regulated Contaminants								
Fluoride		NONE	1.01	0.76-1.01	ppm	4	4	Water additive that promotes strong teeth.
Radioactive Contaminants								
Combined Radium (226/228)	2/11/14	NONE	0.84	0.5-0.84	pCi/l	0	5	Decay of natural and man-made deposits.
Gross Alpha excluding Radon and Uranium	2/11/14	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	.03-0.3	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			0.2	0.2-0.2	ppb	n/a	n/a	Naturally-occurring metal; vanadium pentoxide is used as a catalyst and chemical intermediate.
Chromium-6 or Hexavalent Chromium			0.19	0.18-0.19	ppb	n/a	n/a	Naturally-occurring element; used in making steel and other alloys.
Some contaminants are sampled less frequently than once a year. As a result, not all contaminants were sampled during the CCR calendar year. If any of these contaminants were detected the last time they were sampled, they are included in the table, along with the date the detection occurred.								

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.
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.	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.

Water Quality Data: City of Rolling Meadows Water Supply (2015)

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	12/31/15	NONE	0.9	.71-1	ppm	MRDLG=4	MRDL=4	Water additive to control microbes.
TTHMs (Total Trihalomethanes)	2015	NONE	37	21.55-49.4	ppb	No Goal	80	By-product of drinking water disinfection.
HAA5 (Haloacetic Acid)	2015	NONE	17	12.76-19	ppb	No Goal	60	By-product of drinking water disinfection.
Inorganic Contaminants								
Barium	2015	NONE	0.0436	0.0261-0.0436	ppm	2	2	Erosion of natural deposits; discharge from drilling wastes & metal refineries.
Fluoride	2015	NONE	1.32	0.99-1.32	ppm	4	4	Erosion of natural deposits; water additive for strong teeth; discharge from fertilizer and aluminum factories.
Iron	2015	NONE	1.8	.277-1.8	ppm	n/a	1	Erosion of natural deposits. <i>This contaminant is not currently regulated by USEPA. However, the state regulates.</i>
Manganese	2015	NONE	49.6	0-49.6	ppb	150	150	Erosion of natural deposits. <i>This contaminant is not currently regulated by USEPA. However, the state regulates.</i>
Sodium	2015	NONE	34.7	34.7-34.7	ppm	n/a	n/a	Erosion of naturally-occurring deposits; used in water softening regeneration.
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	7/15/13	NONE	33.8	14.3-33.8	pCi/l	0	15	Erosion of natural deposits.
Some contaminants are sampled less frequently than once a year. As a result, not all contaminants were sampled during the CCR calendar year. If any of these contaminants were detected the last time they were sampled, they are included in the table, along with the date the detection occurred.								

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.	n/a – Not applicable	# pos/mo – Number of positive samples per month
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.	nd – Not detectable at testing limits	NTU – Nephelometric Turbidity Unit, used to measure cloudiness in drinking water
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.	TT (treatment technique) – A process required to reduce the level of a contaminant in the drinking water.	pCi/l – Picocuries per liter, used to measure radioactivity
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.	ppm – Parts per million, or milligrams per liter	%<0.3 NTU – Percent of samples less than 0.3 NTU
Range of Detection – A range of individual sample results (lowest to highest) that were collected during the calendar year.	ppb – Parts per billion	% pos/mo – Percent of positive samples per month
AL (action level) – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.	ppt – Parts per trillion	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.
Avg. – Regulatory compliance with some MCLs are based on running annual averages of monthly samples.	ug/l – Micrograms per liter	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.

Environmental Protection Agency (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.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).



The Illinois EPA considers all surface water to be susceptible to potential pollution problems. This is the reason for mandatory treatment of all public water supplies across the state.

Flush Home Taps Before Use to Minimize Potential for 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

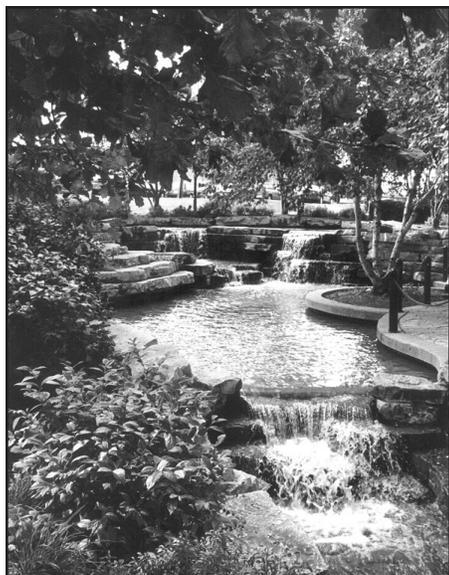
drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes, before using water for drinking or cooking.

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/.

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



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.

Fats, Oils & Grease Cause Sewage Backups, Overflows

What remains in your cooking pans and pots after you fry bacon, broil hamburgers or bake meat? Fats, oils, and grease (FOG) – and it's 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.

Nearly 50% of all sewage overflows and backups nationwide are caused by FOG being poured down the drain. As the agency that responds to sewage overflows, the City of Rolling Meadows'

Underground Utilities Division is uniquely positioned 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 Rinsing these "FOGGY" foods down your drain:

- Meat drippings
- Cooking oil
- Butter
- Shortening
- Margarine
- Baked goods
- Sauces
- Dairy products

Ignoring 'Silent Leaks' is Like Flushing Money Down the Toilet

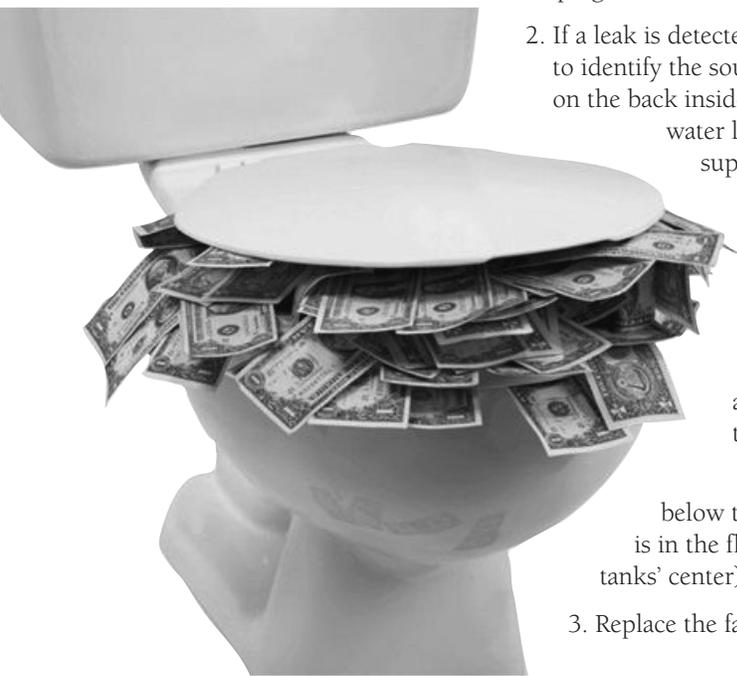
A leaking toilet can add significant expense to a homeowner's water bill. Even when there are no visible signs of water leakage, small "silent leaks" may be expanding water flow through the toilet and adding to a home's consumption. A 1/4-inch leak will waste more than 300,000 gallons of water in one month's time – adding more than \$3,000 to the water bill.

Homeowners can save significant amounts of money each month by conducting a few simple diagnostic tests:

1. Remove the toilet tank cover and add dye capsules, food coloring or powdered drink mix into the tank water until it turns a deep hue. Wait 30 minutes. The water in the toilet bowl should remain clear. If the dye is seen seeping into the bowl, there is a leak.
2. If a leak is detected, conduct a second test to identify the source: Draw a pencil line on the back inside wall of the tank at the water level, then turn off the water supply to the tank (either under the tank or at the main water shutoff). Wait 20-30 minutes.

If the water level remains at the pencil mark, the leak is occurring at the refill valve (located at the left side of the tank).

If the water level falls below the pencil mark, the leak is in the flush valve (located in the tanks' center).
3. Replace the faulty valve.



Tips for Preventing FOG Buildup

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.

First and foremost, it is important 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 grease containers in the freezer and reuse, when necessary, until they are filled, then throw them away.

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

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 of all public water

supplies in Illinois. Mandatory treatment includes coagulation, sedimentation, filtration, and disinfection. Primary sources of pollution in Illinois lakes can include agricultural runoff, land disposal (septic systems), and shoreline erosion.

Chicago's offshore intakes are located at a distance where 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 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.



Department of Public Works
3900 Berdnick Street
Rolling Meadows, IL 60008
(847) 963-0500

PRSR STD
US POSTAGE
PAID
PALATINE P&DC
IL 60095
PERMIT NO. 2448

ECRWSS
POSTAL PATRON

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.

Sprinkling Ban

City Ordinance Updated To Meet New State Standards

An amended ordinance approved by City Council to meet revised standards established by the Illinois Department of Natural Resources restricts lawn sprinkling from May 15th to September 15th between the hours of 12 – 6 p.m. daily. **The updated ordinance also prohibits lawn watering on any two consecutive days during this time period.**

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