ANNUAL WATER QUALITY REPORT

Reporting Year 2024



Presented By

City of Rockford Michigan

PWS ID#: 05730

Our Commitment

We are pleased to present to you this year's annual water quality report. This report is a snapshot of last year's water quality covering all testing performed between January 1 and December 31, 2024. Included are details about your source of water, what it contains, and how it compares to standards set by regulatory agencies. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water and providing you with this information because informed customers are our best allies.

Where Does My Water Come From?

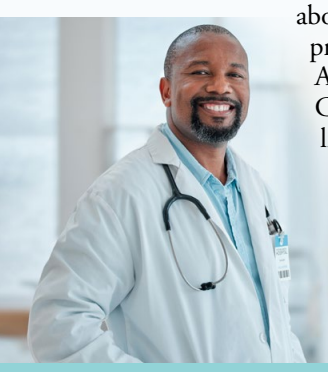
The City of Rockford produces drinking water from three wells located in the southeast corner of the city. The Rockford water treatment plant draws water from an aquifer more than 100 feet below the surface and pumps it directly into the on-site treatment facility. The water travels into the distribution system and your homes, businesses, irrigation systems, and fire protection systems. The distribution system is composed of approximately 40 miles of water main, just over 3,000 water meters, over 427 fire hydrants, a booster pumping station, and four water towers. The city's four water towers range from 200,000 to 500,000 gallons. These elevated tanks provide the city with water pressure and volume for daily use and fire suppression. In addition to providing water to the City of Rockford, we also provide water to parts of Algoma, Cannon, and Courtland Townships.



In 2024 the water treatment plant supplied just over 303 million gallons of water to approximately 7,200 consumers. Our maximum water produced in a single day was 1.96 million gallons, while the minimum amount of water produced in a single day was 327,000 gallons. The average amount of water produced per day was 828,000 gallons.

Important Health Information

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. U.S. Environmental Protection Agency (U.S. EPA)/Centers for Disease Control and Prevention (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) or epa.gov/safewater.



Source Water Assessment

The state performed an assessment of our source water to determine its susceptibility or relative potential for contamination. The susceptibility rating is on a seven-tier scale from very low to very high based on geologic sensitivity, well construction, water chemistry, and contamination sources. The susceptibility of our source water, according to the state, is rated at low.

There are no significant sources of contamination in our water supply. The only listed potential source of contamination within the boundaries of the study was a small creek running through the property. We are making efforts to protect our sources by updating our Source Water Protection Program and implementing its regulations and recommendations. For a copy of Rockford's Source Water Assessment, please call Rockford City Hall at (616) 866-1537. For a copy of Plainfield's Source Water Assessment, please call Plainfield Township Water Department at (616) 363-9660.

Water Treatment Process

The treatment process starts by pumping raw water directly into an aeration unit, where oxygen is introduced. The oxygen oxidizes any dissolved iron in the water as it travels into a detention tank, where the oxidation process is completed. At this point, the iron is ready to be filtered out, and this is done with an anthracite carbon filter bed. Once the water passes through the filter and the iron is removed, the water then enters a clearwell.

Orthopolyphosphate is added to protect against contaminants like lead and copper leaching into the water from household plumbing and fixtures. Finally, chlorine is added as a primary and secondary disinfectant to protect the water from pathogens as it travels to your home or business. We carefully monitor the amount of chlorine applied on a daily basis, making sure we add just enough to protect the safety of your water without compromising taste.

Questions?

For more information about this report, or for any questions relating to your drinking water, please call Kevin Keeney, Water Plant Operator in Charge, at (616) 951-7504.

Substances That Could Be in Water

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 dissolves naturally occurring minerals and, in some cases, radioactive material and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:



Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic Contaminants, such as salts and metals, which can occur naturally in the soil or groundwater or may result from urban stormwater 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 stormwater runoff, and residential uses.

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and can also come from gas stations, urban stormwater runoff, and septic systems.

Radioactive Contaminants, which can occur naturally or be the result of oil and gas production and mining activities.

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

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 mean that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Safe Drinking Water Hotline (800-426-4791) or visiting epa.gov/safewater.

Additional Information



From April 24 to May 14, 2024, our high-pressure district received water supplied by Plainfield Township because our water tower that feeds that area was down for a painting project. This was not the whole town; only a small portion of our system was included in the scope of the project. Around 600 homes in the Heritage Park and Highlander area used this water. Plainfield's contaminant data for 2024 has been added to the data tables. If you have any questions related to the tower project, please call Rockford City Hall at (616) 866-1537.

Lead in Home Plumbing

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. City of Rockford is responsible for providing high-quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter certified by an American National Standards Institute-accredited certifier to reduce lead is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure it is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling does not remove lead from water.

Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, or doing laundry or a load of dishes. If you have a lead or galvanized service line requiring replacement, you may need to flush your pipes for at least five minutes to flush water from both your home plumbing and the service line. If you are concerned about lead and wish to have your water tested, contact the City of Rockford for available resources. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at epa.gov/safewater/lead.

Water service lines in a distribution system can be copper, galvanized steel, lead, or plastic. Contractors used different materials over time; galvanized and lead were commonly used before the 1980s, and copper and plastic were mainly used from the 1980s until the present day. Rockford submitted its full distribution service material inventory before the October 16, 2024, deadline. To access the inventory please contact Rockford City Hall at (616) 866-1537. At the time of this report, Rockford has 2,577 service lines in total:

- 1,623 service lines have been reported as containing neither lead nor galvanized previously connected to lead;
- 633 service lines are considered unknown but likely do not contain lead based on the year the home was built and city building specifications;
- 193 service lines have been documented to contain galvanized previously connected to lead; and
- 128 service lines likely contain lead and will need to be replaced.

Community Participation

The public is invited to attend city council meetings and voice your concerns about your drinking water. City council meetings are on the second Monday of each month at 7:00 p.m. at Rockford City Hall, Seven South Monroe Street.

Test Results

The following tables list all the drinking water contaminants that we detected in 2024. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done from January 1 through December 31, 2024. Plainfield's contaminant data has been added.

The state allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. All the data is representative of the water quality, but some is more than a year old.

We participated in the fifth stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR5) program by performing additional tests on our drinking water. UCMR5 sampling benefits the environment and public health by providing the U.S. EPA with data on the occurrence of contaminants suspected to be in drinking water to determine if it needs to introduce new regulatory standards to improve drinking water quality. Unregulated contaminant monitoring data is available to the public, so please feel free to contact us if you are interested in obtaining that information. If you would like more information on the U.S. EPA's Unregulated Contaminant Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

REGULATED SUBSTANCES

				City of Rockford		Plainfield			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Barium (ppm)	2021	2	2	0.0846	NA	0.0177	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chlorine (ppm)	2024	[4]	[4]	0.49[1]	0.30–0.78	0.77[2]	0.16–1.15	No	Water additive used to control microbes
Chromium (ppb)	2021	100	100	1.59	NA	1.51[3]	NA	No	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride (ppm)	2024	4	4	0.63[2]	0.48–0.80	0.8	0.34–0.8	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs] (ppb)	2024	60	NA	3.02	NA	14.6	8.5–16.7	No	By-product of drinking water disinfection
Nitrate (ppm)	2024	10	10	0.295	NA	1.21	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Perfluorobutanesulfonic Acid [PFBS] (ppt)	2024	420	NA	NA	NA	4.7	ND–4.7	No	Discharge and waste from industrial facilities; Stain-resistant treatments
Perfluorohexanoic Acid [PFHxA] (ppt)	2024	400,000	NA	NA	NA	2.7	ND–2.7	No	Firefighting foam; Discharge and waste from industrial facilities
Perfluorooctanesulfonic Acid [PFOS] (ppt)	2024	16	NA	NA	NA	3.1	ND–3.1	No	Firefighting foam; Discharge from electroplating facilities; Discharge and waste from industrial facilities
Total Organic Carbon [TOC] (percent removal)	2024	TT[4]	NA	NA	NA	34.95	34.95–37.54	No	Naturally present in the environment
TTHMs [total trihalomethanes] (ppb)	2024	80	NA	6.07	NA	73	34.95–80.77	No	By-product of drinking water disinfection
Turbidity[4] (NTU)	2024	TT	NA	NA	NA	0.08	NA	No	Soil runoff
Turbidity (lowest monthly percent of samples meeting limit)	2024	TT = 95% of samples meet the limit	NA	NA	NA	100	NA	No	Soil runoff

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

				City of Rockford			Plainfield				
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	RANGE LOW-HIGH	SITES ABOVE AL/ TOTAL SITES	AMOUNT DETECTED (90TH %ILE)	RANGE LOW-HIGH	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2024	1.3	1.3	0.4	ND–0.7	0/20	ND[3]	ND–0.1[3]	0/31[3]	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2024	15	0	ND	ND–3	0/20	3[3]	ND–45[3]	1/31[3]	No	Lead service lines; Corrosion of household plumbing, including fittings and fixtures; Erosion of natural deposits

SECONDARY SUBSTANCES

				City of Rockford		Plainfield			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	2024	250	NA	27.0	NA	96	68–96	No	Runoff/leaching from natural deposits
Copper (ppm)	2021	1.0	NA	0.0266	NA	NA	NA	No	Corrosion of household plumbing systems; Erosion of natural deposits
Iron (ppb)	2024	300	NA	25[5]	ND–60	NA	NA	No	Leaching from natural deposits; Industrial wastes
Manganese (ppb)	2021	50	NA	1.27	NA	NA	NA	No	Leaching from natural deposits
pH (units)	2024	6.5-8.5	NA	7.8[5]	7.5–7.9	NA	NA	No	Naturally occurring
Sulfate (ppm)	2024	250	NA	133	NA	44.2	NA	No	Runoff/leaching from natural deposits; Industrial wastes

UNREGULATED SUBSTANCES

		City of Rockford		Plainfield		
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
1,4-Dioxane (ppb)	2024	NA	NA	0.40	NA	Industrial chemical
Calcium (ppm)	2024	NA	NA	42	19–42	Naturally present in groundwater
Hardness [CaCO3] (ppm)	2024	373[6]	330–412	190	128–190	Naturally occurring in groundwater
Lithium[7] (ppb)	2023	12	11–12	NA	NA	Erosion of natural deposits; Industrial wastes
Magnesium (ppm)	2024	NA	NA	28	17–28	Naturally present in groundwater
Sodium (ppm)	2024	17.0	NA	37.1	NA	NA

[1] Disinfectant residual running annual average of the bacteriological sample sites.
[2] Running annual average.
[3] Sampled in 2022.
[4] Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.
[5] Monthly average.
[6] Monthly average, equivalent to 22 grains per gallon.
[7] UCMR5 sampling.



Definitions

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

AL (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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.

MCLG (Maximum Contaminant Level Goal): 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.

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

MRDLG (Maximum Residual Disinfectant Level Goal): 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.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

ppt (parts per trillion): One part substance per trillion parts water (or nanograms per liter).

SMCL (Secondary Maximum Contaminant Level): These standards are developed to protect aesthetic qualities of drinking water and are not health based.

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