



2016 WATER QUALITY REPORT

Rockford Water Division

Annual Drinking Water Quality Report Rockford IL 2010300

Annual Water Quality Report for the period of January 1 to December 31, 2016

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

The source of drinking water used by ROCKFORD is Ground Water

For more information regarding this report contact:

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Phone: 779-348-7371

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

Source of Drinking 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 be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Information About Inorganic Contaminants

Iron: This contaminant is not currently regulated by USEPA. However, the state has set an MCL for this contaminant for supplies serving a population of 1000 or more.

Manganese: This contaminant is not currently regulated by USEPA. However, the state has set an MCL for this contaminant for supplies serving a population of 1000 or more.

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 your physician about this level of sodium in the water.

Arsenic: While your drinking water meets EPA standards for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

- **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 can also come from gas stations, urban storm water runoff, and septic systems.
- **Radioactive contaminants**, which can be naturally-occurring or be the result of oil and gas production and mining activities.

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

In order to ensure that tap water is safe to drink, EPA prescribes regulations which 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.

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. 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).

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. 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>.

Need help?

Water Quality779-348-7151

After Hours Emergencies779-348-7300

Billing Problems779-348-7300

Source Water Assessment

We want our valued customers to be informed about their water quality. If you would like to learn more, please feel welcome to attend any of our regularly scheduled meetings. The source water assessment for our supply has been completed by the Illinois EPA. If you would like a copy of this information, call Water Quality at 779-348-7151. To view a summary version of the completed Source Water Assessments, including: Importance of Source Water; Susceptibility to Contamination Determination; and documentation / recommendation of Source Water Protection Efforts, you may access the Illinois EPA website at <http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl>.

To determine Rockford's susceptibility to groundwater contamination, the Well Site Survey and IRWA's recharge area survey were reviewed. During the surveys of Rockford's source water protection areas, the Rockford Water Department Production Division recorded potential sources, routes, or possible problem sites within the 200 or 400 foot minimum setback zones, 1,000 foot maximum setback zones, and IRWA recorded the sites in the regulated recharge areas. Following are the results of the surveys conducted. Only the wells that have associated sites are listed. The well name is followed by the number of sites within the minimum zone, the maximum zone, and the recharge area, respectively. Group well #1 has 11 sources within 400 feet and 10 within 1,000 feet. Five additional sources are located outside the 1,000 foot zone. Group well #2 has 9 sources within 400 feet and 15 within 1,000 feet. Five additional sources are located outside the 1,000 foot zone. Unit wells #5 and #5A have 2 sources located within 1,000 feet. Unit well #9A has 8 sources within

the recharge area. Six additional sources are located outside the 1,000 foot zone and recharge area. Unit well #10 has 3 sources located within 200 feet and 8 within 1,000 feet. One additional source is located outside the 1,000 foot zone and recharge area. Unit well #13 has 1 source within 200 feet and 1 within 1,000 feet. Unit well #18 has 2 sources within 200 feet and 1 within 1,000 feet. Unit well #21 has 12 sources within 1,000 feet. Unit well #22 has 8 sources within 1,000 feet. Unit well #23 has 1 source within 1,000 feet and 15 within the recharge area. Six additional sources are located outside the 1,000 foot zone and recharge area. Unit well #24 has 2 sources within 1,000 feet and 3 within the recharge area. Seven additional sources are located outside the 1,000 foot zone and recharge area. Unit well #25 has 1 source within 200 feet and 5 within 1,000 feet. Unit well #26 has 9 sources within 1,000 feet. Unit well #30 has 1 source within 200 feet. Unit well #31 has 2 sources located outside the 1,000 foot zone and recharge area. Unit well #35 has 4 sources within 400 feet and 9 within 1,000 feet. One additional source is located outside the 1,000 foot zone and recharge area. Unit well #36 has 3 sources located within 1,000 feet. Unit well #40 has 1 source located outside the 1,000 foot zone and recharge area. The Illinois EPA considers the source water of this facility to be susceptible to contamination. This determination is based on a number of criteria including: monitoring conducted at the wells, monitoring conducted at the entry point to the distribution system, the available hydrogeologic data on the wells, and the land-use activities in the recharge area of the wells. A source water assessment is available upon request.

Lead and Copper

Definitions:

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

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

Lead And Copper	Collection Date	MCLG	Action Level (AL)	90th Percentile	Number of Sites Over AL	Violation	Likely Source of Contamination
Copper	2016	1.3	1.3 ppm	1 ppm	2	No	Erosion of natural deposits; Leaching from wood preservatives Corrosion of household plumbing systems.
Lead	2016	0 ppm	15 ppb	4 ppb	1	No	Corrosion of household plumbing systems; Erosion of natural deposits.

Notes For Charts:

Highest Level Detected indicates the annual running average of the analyte listed.
NOTE: The state requires monitoring of certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of this data may be more than one year old.

The Rockford Water Division is pleased to provide you this Water Quality Report.

If, upon its review, you should have questions or concerns, please contact Kyle Saunders, Water Superintendent (1-779-348-7371).
For other information and updates to activities at the Water Division, please visit our web site at www.rockfordil.gov.



Water Quality Test Results

Definitions: The following tables contain scientific terms and measures, some of which may require explanation.

Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

Maximum Contaminant Level or MCL: 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.

Maximum Contaminant Level Goal or 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 residual disinfectant level or MRDL: 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.

Maximum residual disinfectant level goal or 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.

na: not applicable.

mrem: millirems per year (a measure of radiation absorbed by the body)

ppb: micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

ppm: milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

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

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	12/31/2016	0.8	0 - 1	MRDLG=4	MRDL=4	ppm	No	Water additive used to control microbes
Haloacetic Acids (AA5)	2016	4	0 - 11.2	No goal for the total	60	ppb	No	By-product of drinking water disinfection
Total Trihalomethanes (TTHM)	2016	12	1.68 - 16.8	No goal for the total	80	ppb	No	By-product of drinking water disinfection
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2016	1.1	0 - 1.1	0	10	ppb	No	Erosion of natural deposits; Runoff from orchards Runoff from glass and electronics production wastes.
Barium	2016	0.15	0.15 - 0.15	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride	2016	0.67	0.67 - 0.67	4	4.0	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (Measured as Nitrogen)	2016	4	0 - 4.3	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium	2016	44	5.3 - 44			ppm	No	Erosion from naturally occurring deposits: Used in water softener regeneration.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	2016	4	1.4 - 4.1	0	5	pCi/L	No	Erosion of natural deposits
Gross Alpha Excluding Radon and Uranium	2016	3	0 - 5.1	0	15	pCi/L	No	Erosion of natural deposits
Uranium	07/09/2010	4.321	4.321 - 4.321	0	30	ug/l	No	Erosion of natural deposits
Volatile Organic Contaminates	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
1, 1, 1-Trichloroethane	2016	1.6	0 - 1.6	200	200	ppb	No	Discharge from metal degreasing sites and other factories
Tetrachloroethylene	2016	1.9	0 - 1.9	0	5	ppb	No	Discharge from factories and dry cleaners
Trichloroethylene	2016	1	0 - 1.3	0	5	ppb	No	Discharge from metal degreasing sites and other factories
cis-1,2-Dichloroethylene	2016	12	0 - 13	70	70	ppb	No	Discharge from industrial chemical factories
trans-1,2-Dichloroethylene	2016	1	0 - 1.3	100	100	ppb	No	Discharge from industrial chemical factories
State Regulated Contaminants	Date	Detected	Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Iron	2016	0.9	0 - 0.8		1.0	ppm	No	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Manganese	2016	425	11 - 420	150	150	ppb	No	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.