

2010 WATER QUALITY REPORT

Rockford Water Division



"In this country we expect and demand safe drinking water. The City of Rockford takes pride in our achievements in improving water quality and clarity."

*- Larry Morrissey,
Mayor*

Excellence Everywhere

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

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 us (see back page for contacts). For other information and updates on activities at the Water Division, please visit our web site at www.rockfordil.gov.

Why did you receive this report?

The Rockford Water Division is required to provide this report to all of our customers. Illinois and U.S. Environmental Protection Agency (EPA) regulations prescribe much of the information it contains. Thus, the focus of this report is Rockford's compliance with drinking water standards. We also present some other information of general interest including an update of the Water System Improvement Project.



Well 5 - Pelham Road

Water System Improvement Project Update

The City of Rockford entered into an agreement with the Illinois EPA in 2005 to bring the water system in to full compliance with drinking water standards. Approximately 90% of the work identified in the agreement is complete. All of the wells currently being operated by the City are in full compliance with drinking water standards. Eight new water filtration facilities have been constructed and two additional facilities will be completed by early 2012. Highlights of the project in 2010 are summarized below.

Treatment Facilities

Construction was completed at Well 29 (Pepper Drive), Well 30 (Palo Verde Drive) and Well 43 (Publishers Drive) in 2010. These plants filter and remove both iron and radium. They are the first radium removal facilities for the Rockford Water System.



On the cover:

Well 29 at 4750 Pepper Drive is one of the new treatment facilities built to reduce iron and radium levels, and meet IEPA drinking water standards.



Well 13 - Skyline Drive

Well 5 (Pelham Road) and Well 13 (Skyline Drive) are being fully rebuilt and are equipped to remove iron from our drinking water. Radium is not an issue at these two wells. These facilities will be ready in the summer of 2011.

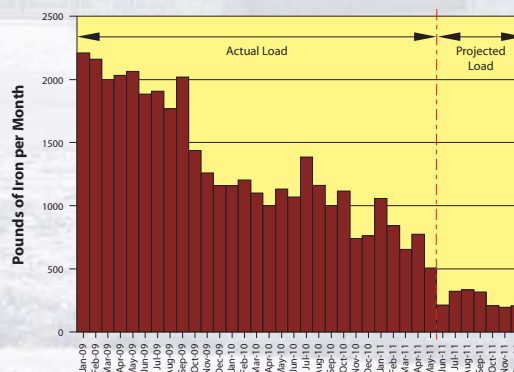
Well 10 (Newburg Road) is being equipped to remove both iron and radium. This facility will be ready in the fall of 2011. Well 36 (Samuelson Road) is under construction and on track for completion in the first quarter of 2012. This facility will remove both radium and iron from our drinking water.

Facility Closures

As part of the Water System Improvement Project, six wells were removed from service in 2010. These sites are Well 4 (Marchesano Drive), Well 11 (7th Avenue), Well 12 (Benton Street), Well 16 (Harrison Avenue), Well 20 (North Central Avenue), and Well 27 (Guilford Road).

Water Quality Improvements

Iron is a mineral present in all groundwater. When iron meets air, it changes (oxidizes). Oxidation is why you sometimes see brownish-red colored water flowing from a tap or hydrant. The Water System Improvement Project fixes this problem by building filtration plants that remove the oxidized iron from the groundwater before pumping it into our water system. This chart shows the amount of iron that is currently removed by filtration. When the improvements are finished, the iron in our drinking water will be 10 times less. This will ensure clear tap water to every customer.



2010 Water Quality Data: Detected Contaminants

Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	5% of monthly samples are positive	.8		0	No	Naturally present in the environment

Lead & Copper

Lead And Copper	Collection Date	MCLG	Action Level (AL)	90th Percentile	Number of Sites Over AL	Violation	Likely Source of Contamination
Lead	8/27/2010	1.3	1.3 ppb	1.1 ppb	1	No	Erosion of natural deposits; Leaching from wood preservatives Corrosion of household plumbing systems.
Copper	8/27/2010	0 ppm	15 ppm	6.7 ppm	1	No	Corrosion of household plumbing systems; Erosion of natural deposits.

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
TTHMs [Total Trihalomethanes]	8/1/2010	22	22 - 22	N/A	80	ppb	No	By-product of drinking water chlorination
Chlorine	12/20/2010	0.5	0.43 - 0.55	MRDLG=4	MRDL=4	ppm	No	Water additive used to control microbes
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	4/21/2010	1.92	0 - 1.92	0	10	ppm	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	4/21/2010	0.207	0.13 - 0.21	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride	12/1/2010	0.86	0 - 0.86	4	4.0	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (As N)	4/21/2010	3	0 - 3.2	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Zinc	4/21/2010	0.012	0 - 0.012	5	5	ppm	No	Naturally occurring; Discharge from metal factories.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/Photon Emitters	01/13/2006	7.8	7.8 - 7.8	0	4	mrem/yr	No	Decay of natural and man-made deposits
Beta/Photon Emitters	01/13/2006	7.8	7.8 - 7.8	0	50	mrem/yr	No	Decay of natural and man-made deposits
Combined Radium 226/228	10/8/2010	9	0.2 - 11.2	0	5	pCi/L	Yes	Erosion of natural deposits
Gross Alpha Excluding Radon and Uranium	10/8/2010	11	0 - 13.9	0	15	pCi/L	No	Erosion of natural deposits
Uranium	10/8/2010	5	2.98 - 4.62	0	30	ug/l	No	Erosion of natural deposits
Synthetic Organic Contaminates Including Pesticides & Herbicides	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Di (2-ethylhexyl) phthalate	4/1/2010	0.78	0.78 - 0.78	0	6	ppb	No	Discharge from rubber and chemical factories
Volatile Organic Contaminates	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Tetrachloroethylene	10/27/2010	2.3	0 - 2.3	0	5	ppb	No	Discharge from factories and dry cleaners
Trichloroethylene	10/27/2010	3	0 - 1.9	0	5	ppb	No	Discharge from metal degreasing sites and other factories
cis-1,2-Dichloroethylene	10/27/2010	3	0 - 3.99	70	70	ppb	No	Discharge from industrial chemical factories
trans 1, 2-Dichloroethylene	10/27/2010	1	0 - 1.22	100	100	ppb	No	Discharge from industrial chemical factories
State Regulated Contaminants	Date	Detected	Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Iron	7/16/2010	1.55	0.02 - 1.55	N/A	1.0	ppm	No	Erosion of naturally occurring deposits
Manganese	7/16/2010	444	0 - 430	150	150	ppb	No	Erosion of naturally occurring deposits

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.

EPA has reviewed the drinking water standard for arsenic because of special concerns that it may not be stringent enough. Arsenic is a naturally occurring mineral known to cause cancer in humans at high concentrations.

Definitions of Terms & Abbreviations Used in the Table

MCLG: Maximum Contamination Level Goal, or 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.

MCL: Maximum Contamination Level, or 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 technology.

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

n/a: Not applicable.

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

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

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

MRDL: Maximum Residual Disinfectant Level, or the highest level of disinfectant allowed in drinking water.

MRDLG: Maximum Residual Disinfectant Level Goal, or the level of disinfectant in drinking water below which there is no known or expected risk to health. MRDLGs allow for a margin of safety.

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

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.

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.

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.
- **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>.

Water Quality Laboratory

The Illinois EPA and the Department of Public Health require testing of drinking water. In September 2010, the Rockford Water Division Environmental Laboratory, at 1111 Cedar Street, received certification by the Illinois Department of Public Health to perform bacteriological testing on drinking water.

The laboratory accepts water samples Monday through Thursday between the hours of 8:00 am and 2:00 pm. Samples must be submitted in laboratory-approved bottles that are available at the Cedar Street location.

Coliform Analysis Forms and pricing information are available at the City website (www.rockfordil.gov).

Forms are also available at the Cedar Street location.

You may contact Water Quality at 815-987-5713 for additional information.



Source Water

The 2009 Consumer Confidence Report accidentally omitted the following information regarding Rockford's source water. The Illinois EPA considers the source water of Rockford's water supply to be subject to contamination. This determination is based on a number of criteria including:

- Monitoring conducted at wells.
- Monitoring conducted at the entry point to the distribution system.
- Available hydrogeologic data of the wells.
- Land-use activities in the recharge area of the wells.

A Source Water Assessment Summary is available upon request. Be a good steward and help protect our ground water. Refer to our website (<http://rockfordil.gov/public-works/water-division/water-quality.aspx>) for our Groundwater Protection informational bulletins.

2010 Violation Summary Table:

Rule or Contaminant	Violation Type	Violation Duration
RADIUM, COMBINED (226, 228) Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer. Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.	MCL, AVERAGE, WITHOUT NO. EXCEEDANCE	1/1/2010 To 12/31/2010
CONSUMER CONFIDENCE RULE The Consumer Confidence Rule requires community water systems to prepare and provide to their customers annual consumer confidence reports on the quality of drinking water. We failed to provide to you, our drinking water customers, an annual report that adequately informed you about the quality of our drinking water and the risks from exposure to contaminants detected in our drinking water.	CCR ADEQUACY/AVAILABILITY/CONTENT	10/06/2010

Please refer to pages 1 and 4 of this brochure for actions Rockford is taking specific to the violation(s) listed above.

Water Information Sources

City of Rockford
<http://www.rockfordil.gov>

Illinois Environmental Protection Agency
<http://www.epa.state.il.us>

Illinois Department of Public Health
<http://www.idph.state.il.us>

Unidirectional Hydrant Flushing

Spring marks the onset of our annual unidirectional flushing program. This annual maintenance is performed to remove normal mineral build-up from the pipes that deliver water to our customers. Keep in mind that our program runs daily, Monday through Friday, weather permitting, from April through October.

Neighborhoods will be notified when we will be in their area by use of the Non-Emergency Notification System. If you currently have a listed phone number, you will be called. If you have an unlisted number or would rather be notified via email you may register at:

<http://wincoil.us/rockfordwater>.

Notification will also be provided through television, newspaper and the City of Rockford website.

Water is safe during flushing, but customers may notice discoloration or sediment at the water tap. It is best not to use hot water until the water has cleared.



Need help?

Service Problems, Leaks, etc.

Call Customer Service 815-961-3770

Water Quality

Call Water Production 815-987-5736

Billing Problems

Call Rockford Finance Dept. . . 815-987-5700

After Hours Emergencies

Call Public Works 815-987-5712



We invite public comment about water issues. Find out more about the Rockford Water Division on the Internet at www.rockfordil.gov or contact Water Quality at (815)-987-5736 or (815)-987-5701.

El informe contiene información importante sobre la calidad del agua en su comunidad. Tradúzcalo o hable con alguien que lo entienda bien.

