



2009 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 improvements in water quality and clarity."

*- Larry Morrissey,
Mayor*

Excellence Everywhere

Water System Improvement Project Update

Is Our Water Safe To Drink?

YES, Rockford's water is safe to drink.

This past year, Rockford received a notice of non-compliance from the Illinois EPA for exceeding the drinking water standard for radium (a naturally occurring element that is present in rocks and soil within the earth's crust). In response, we notified you, our customers, of the violation as required, identifying the wells that exceeded this standard.

It is the belief of the EPA and other health experts that the levels found in our wells pose no immediate threat. In May of 2005, The City of Rockford entered into an agreement with the Illinois EPA to make improvements that will reduce these levels in the drinking water.

The following outlines water system improvements and project updates that will ensure the quality and clarity of our water supply now and for generations to come.

Non-Treatment Facilities

The work that began in July of 2008 is complete as of June 2010. Significant upgrades made at all facilities included new control equipment, efficient heating systems, and new chemical feed equipment. These improvements will help to control costs while improving quality and clarity.



Well 3
1404 Riverbluff



Well 37 - 2100 Huffman Blvd.



Well 6 - 2604 19th Ave.



Well 21 - 703 Daiseyfield Ave.



Treatment Facilities

Well 31, the third of ten of planned filtration facilities scheduled to be constructed as part of the Water System Improvement Project became operational in December 2009. Construction at this site (Located on the corners of Bell School and Rote Roads) included the installation of a new iron removal filter, pumping equipment, and an emergency generator. This site



Well & Filtration Plant 31 - Bell School & Rote Roads

will greatly improve the quality and clarity of the water. It will also boost water pressure for customers located in the Northeast portion of Rockford.

Wells 29 located on Pepper Drive, 30 located on Palo Verde Drive, and 43 located on Publishers Drive are new water treatment facilities that are equipped to filter and remove both iron and radium. The sites represent the first radium removal facilities for the Rockford Water System. They will be operational and online by summer's end 2010.



Well 29 - Pepper Drive



Well 30 - Palo Verde Drive

A new treatment facility (5, and 5A) located on Pelham Road will include both iron and manganese removal. Well 13 on Skyline Drive is undergoing a full rebuild. When completed by spring 2011 it will contain iron filtration capabilities.

The improved treatment capabilities will result in higher water quality and greater clarity for our customers.

2009 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	Fecal Coliform or E. Coli MCL: A routine sample and a repeat sample are total coliform positive, and one is also fecal coliform or E. coli positive		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	07/24/2007	1.3	1.3 ppb	.939 ppb	1	No	Erosion of natural deposits; Leaching from wood preservatives Corrosion of household plumbing systems.
Copper	07/24/2007	0 ppm	15 ppm	4 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]		15	15 - 15	N/A	80	ppb	No	By-product of drinking water chlorination
Chlorine		1.1	.07 - 1.1	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
Barium		0.2	0.1 - 0.2	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride		1.2	1 - 1.2	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	0 - 3.8	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
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	50	mrem/yr	No	Decay of natural and man-made deposits
Combined Radium 226/228		9	1.1 - 9.5	0	5	pCi/L	Yes	Erosion of natural deposits
Gross Alpha Excluding Radon and Uranium		12	0 - 13.1	0	15	pCi/L	No	Erosion of natural deposits
Uranium		4	2.533 - 2.831	0	30	ug/l	No	Erosion of natural deposits
Volatile Organic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
cis-1,2-Dichloroethylene	10/22/2009	12	0 - 12	70	70	ppb	No	Discharge from industrial chemical factories
1,1,1-Trichloroethane	10/23/2009	7.8	0 - 7.8	200	200	ppb	No	Discharge from metal degreasing sites and other factories
Trichloroethylene	1/30/2009	4.7	0 - 4.7	0	5	ppb	No	Discharge from metal degreasing sites and other factories
Tetrachloroethylene	1/30/2009	2.3	0 - 2.3	0	5	ppb	No	Discharge from factories and dry cleaners
trans 1, 2-Dichloroethylene	8/25/2009	.069	0 - 0.69	100	100	ppb	No	Discharge from industrial chemical factories
State Regulated Contaminants	Date	Detected	Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Sodium		4	4 - 4	N/A	N/A	ppm	No	Erosion of naturally occurring deposits; used in water softener regeneration
Iron		0.8	0 - 1	N/A	1.0	ppm	No	Erosion of naturally occurring deposits
Manganese		398	0 - 570	150	150	ppb	No	Erosion of naturally occurring deposits

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.

2009 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.	MCL, AVERAGE, WITHOUT NO. EXCEEDANCE	1/1/2009 To 12/31/2009

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

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.

Additional Health 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 and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

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. USEPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

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 can dissolve naturally occurring minerals and radioactive materials, and pick up substances resulting from the presence of animals or human activity. Possible contaminants consist of:

- **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 may be naturally occurring or 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 may also come from gas stations, urban stormwater runoff and septic systems; and
- **Radioactive contaminants**, which may be naturally occurring or be the result of oil and gas production and mining activities

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

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 list of contacts). For other information and updates to activities at the Water Division, please visit our web site at www.rockfordil.gov.

Water Main Construction

The Dawson Avenue water main project broke ground on November 2, 2009. The project included installing approximately 8,500 feet of new water main, 115 service connections, and 900



feet of storm sewer replacement.

This was necessary due to the need for additional water mains to transport filtered water throughout the city and the upgrading of aging water mains.

Reservoir Demolition

Three large reservoirs were deemed no longer suitable for potable water storage due to deteriorating conditions caused by age and were demolished. These reservoirs were located on East Newburg (Alpine Park), South Johnston (Levings Lake), and Chestnut St (near Springfield Ave.)



Water Quality Improvements

Iron is a naturally occurring mineral that is present in groundwater. It exists in two forms, natural and oxidized. Iron in its natural state (un-oxidized) is not visible to the eye. Before pumping from the ground, the iron exists in this state in the water. Once the pumped water comes out of the ground and exposed to air and light it begins to oxidize. The reason you see brownish

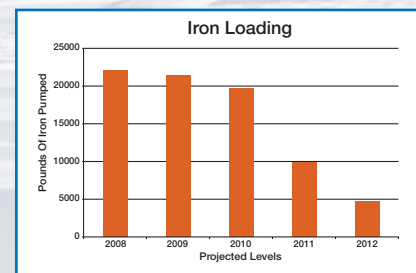


red water flowing from your tap or a hydrant is due to the oxidation process.

The Water System Improvement Project addresses this issue with the construction of additional filtration plants. Removal of oxidized iron from the water before pumping into the system and into your homes results in better clarity and improved quality of your water.

Current projections (see chart) show that 80% plus of all oxidized iron in our drinking water will be removed when the project is complete.

This coupled with the radium removal will vastly improve the clarity and quality of the water for our customers now and in the future.



Water Information Sources

City of Rockford

<http://www.ci.rockford.il.us>

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.

