

City of Coon Rapids 2004 Drinking Water Report

The City of Coon Rapids is issuing the results of monitoring done on its drinking water for the period from January 1 to December 31, 2004. The purpose of this report is to advance consumers understanding of drinking water and heighten awareness of the need to protect precious water resources.

Source of Water

The City of Coon Rapids provides drinking water to its residents from a groundwater source: 24 wells ranging from 105 to 702 feet deep, that draw water from the Multiple, Franconia-Mt. Simon, Iron-ton-Mt. Simon, Quaternary Buried Artesian, Indeterminate, Jordan, and Franconia-Eau Claire aquifers.

The water provided to customers may meet drinking

water standards but the Minnesota Department of Health has determined that one or more of the sources of water is potentially susceptible to contamination. If you wish to obtain the entire source water assessment regarding your drinking water, please call 651-215-0800 or 1-800-818-9318 (press 5) during normal business hours. Also, you can view it online at www.health.state.mn.us/divs/eh/water/swp/swa.

Call 763-767-6576 if you have questions about the City of Coon Rapids' drinking water or would like information about opportunities for public participation in decisions that may affect the quality of the water.

Results of Monitoring

The results contained in the following table indicate an

exceedance of a federal standard. Some other contaminants were detected in trace amounts that were below legal limits. The table that follows shows the contaminants that were detected in trace amounts last year. (Some contaminants are sampled less frequently than once a year; as a result, not all contaminants were sampled for in 2004. If any of these contaminants were detected the last time they were sampled for, they are included in the table along with the date that the detection occurred.)

A system distribution map and the gallons pumped from all entry points in 2004 were provided to the Minnesota Department of Health. Based on a 2004 annual production of 983 million gallons (MG) from Well 1, Well 2 and East TP, and a ten percent factor of safety, the system plans to limit the total use of Wells 16 and 18 to 260 MG in 2005 to meet a running annual average that is less than the radionuclides Maximum Contaminant Level (MCL).

The system will limit the amount of water pumped from Wells 16 and 18, and provide the daily number of gallons pumped from all entry points on a monthly basis on the MDH monthly fluoride report. In addition, the meters at the East TP, Wells 1, 2, 16 and 18 will be calibrated annually, with a calibration report provided to MDH. The system will also collect quarterly samples from Wells 16 and 18 for at least one year, and annually thereafter, to assure consistent arsenic results.

Consumers will be notified of the annual Consumer Confidence Report. The bilateral compliance agreement will be updated annually to reflect any changes to the system and the most recent gallons of production from East TP, Wells 1, 2, 16, and 18.

Key to abbreviations:

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.
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.
MRDL: Maximum Residual Disinfectant Level.
MRDLG: Maximum Residual Disinfectant Level Goal.
AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirement which a water system must follow.
90th Percentile Level:
 This is the value obtained after disregarding

10 percent of the samples taken that had the highest levels. (For example, in a situation in which 10 samples were taken, the 90th percentile level is determined by disregarding the highest result, which represents 10 percent of the samples.) Note: In situations in which only 5 samples are taken, the average of the two with the highest levels is taken to determine the 90th percentile level.
pCi/l: PicoCuries per liter (a measure of radioactivity).
ppb: Parts per billion, which can also be expressed as micrograms per liter (µg/l).
ppm: Parts per million, which is expressed as milligrams per liter (mg/l).
nd: No Detection.
N/A: Not Applicable (does not apply).

Contaminant (units)	MCLG	MCL	Level Found		Typical Source of Contaminant
			Range 2004	Average/Result*	
Alpha Emitters (pCi/l)	0	15.4	nd-21	15.5*	Erosion of natural deposits.
Arsenic (ppb) (10/16/2003)	0	50	n/a	2.6	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium (ppm) (08/01/2003)	2	2	n/a	.4	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Combined Radium (pCi/l)	0	5.4	nd-8.7	8.2**	Erosion of natural deposits.
Fluoride (ppm)	4	4	1.1-1.2	1.15	State of Minnesota requires all municipal water systems to add fluoride to the drinking water to promote strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories.
Haloacetic Acids (HAAs) (ppb) (11/25/2003)	0	60	n/a	3.5	By-product of drinking water disinfection.
Nitrate (as Nitrogen) (ppm)	10	10	nd-.18	.18	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
THM (Total trihalomethanes) (ppb) (11/25/2003)	0	80	n/a	12.3	By-product of drinking water disinfection.

The east system serves one pressure zone with radium 226/228 leaving the East Treatment Plant (TP) at 0.2 pCi/L (picoCuries per liter), seasonal Well 1 at 0.9 pCi/L, seasonal Well 2 at 0.9 pCi/L, seasonal Well 16 at 4.6 pCi/L, and seasonal Well 18 at 8.2 pCi/L. Since Well 16 also has a significant concentration of radionuclides

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* During the year, the City of Coon Rapids had a violation for Alpha Emitters. Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer. The City of Coon Rapids will limit the use of Wells 16 and 18 to meet the weighted averaging requirements for Alpha Emitters. The weighted averaging plan also deals with Combined Radium which is outlined in the next section.

** During the year, Coon Rapids had a violation for Combined Radium. 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. In response to discussions with the Minnesota Department of Health (MDH), the City of Coon Rapids is interested in limiting the use of Wells 16 and 18 to meet the weighted averaging requirements for radionuclides set forth by the U.S. Environmental Protection Agency.

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and is in a somewhat isolated location near Well 18, it is a conservative estimate to limit use of Wells 16 and 18. Based on current distribution system design, service connections near Wells 16 and 18 receive water from the East TP, Well 1, and Well 2 when Wells 16 and 18 are not being used.

The system understands that if the allowed number of gallons pumped from Wells 16 and 18 is exceeded, if required information is not reported on the Consumer Confidence Report, or if the bilateral compliance agreement is not updated annually, a Notice of Violation shall be sent.

Contaminant (units)	Level Found		Typical Source of Contaminant
	Range 2004	Average/Result*	
Radon (pCi/l) (12/03/2001)	N/A	457	Erosion of natural deposits.

* This is the value used to determine compliance with federal standards. It sometimes is the highest value detected and sometimes is an average of all the detected values. If it is an average, it may contain sampling results from the previous year.

Radon is a radioactive gas which is naturally occurring in some groundwater. It poses a lung cancer risk when gas is released from water into air (as occurs during showering, bathing, or washing dishes or clothes) and a stomach cancer risk when it is ingested. Because radon in indoor air poses a much greater health risk than radon in drinking water, an Alternative Maximum Contaminant Level (AMCL) of 4,000 picoCuries per liter may apply in states that have adopted an Indoor Air Program, which compels citizens, homeowners, schools, and communities to reduce the radon threat from indoor air. For states without such a program, the Maximum Contaminant Level (MCL) of 300 pCi/l may apply. Minnesota plans to adopt an Indoor Air Program once the Radon Rule is finalized.

Contaminant (units)	MRDLG	MRDL	****	*****	Typical Source of Contaminant
Chlorine (ppm)	4	4	.2-.5	.32	Water additive used to control microbes.

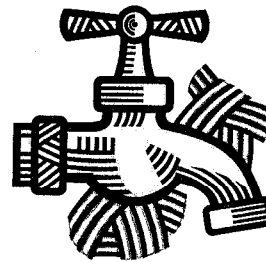
**** Highest and Lowest Monthly Average.
***** Highest Quarterly Average.

Contaminant (units)	MCLG	AL	90% LEVEL	# sites over AL	Typical Source of Contaminant
Copper (ppm) (07/23/2002)	N/A	1.3	.71	0 out of 30	Corrosion of household plumbing systems; Erosion of natural deposits.
Lead (ppb) (07/23/2002)	N/A	15	3	0 out of 30	Corrosion of household plumbing systems; Erosion of natural deposits.

Some contaminants do not have Maximum Contaminant Levels established for them. These unregulated contaminants are assessed using state standards known as health risk limits to determine if they pose a threat to human health. If unacceptable levels of an unregulated contaminant are found, the response is the same as if an MCL has been exceeded; the water system must inform its customers and take other corrective actions. In the table that follows are the unregulated contaminants that were detected:

Contaminant (units)	Level Found		Typical Source of Contaminant
	Range 2004	Average/Result	
Sodium (ppm) (08/01/2003)	N/A	12	Erosion of natural deposits.
Sulfate (ppm) (08/01/2003)	N/A	14	Erosion of natural deposits.

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 from their healthcare provider about drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline at 1-800-426-4791.



Compliance with National Primary Drinking Water Regulations

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 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 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, the U.S. Environmental Protection Agency (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 indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.