

City Utilities of Richland Center The Quality of your Drinking Water 2005



We are pleased to present the 8th annual report on the quality of your drinking water. Each year, this report will give you an update on the quality of the water you and other city residents and businesses received during the year.

Water is vital to our community and we are fortunate here in Richland Center to have a relatively pristine water supply. A City Utilities of Richland Center priority is protecting this valuable and essential natural resource.

If you have any questions after you've had a chance to browse through this report, please feel free to give us a call at 647-4226. We're right here in the community and we're happy to help.

Richland Center's Water-Where does it come from?

City Utilities of Richland Center has three wells and all take water from a sandstone aquifer. Well #5 was installed in 1982, is drilled to a depth of 610 feet and has a capacity of 200 gallons per minute. Well #6 is drilled to a depth of 406 feet, was installed in 1992 and has a pumping capacity of 1200 gallons per minute.

Well #7 is drilled to a depth of 510 feet, was installed in 2000 and has a pumping capacity of 1100 gallons per minute. All of the wells are equipped with a generator for use in case of power outages.

Chlorine and fluoride are presently added at all wells. The City takes three bacteria samples and one fluoride sample per month and sends them to be tested at the State Lab of Hygiene.

The distribution system contains approximately 36 miles of watermain ranging in size from 1 1/2" through 14" in diameter. We also have two ground storage tanks; each one has a 500,000 gallon capacity.

City Utilities of Richland Center currently has three full time certified operators employed.

Treating your water

Richland Center residents and businesses use almost 368 million gallons of water each year. For your added protection, the water is treated with a bacterial fighting agent, chlorine, and fluoride. The treatment process is approved by the State of Wisconsin Department of Natural Resources (DNR).

Treatment of the water ensures safe and healthy water for our community. Here's a little more information on the two components City Utilities of Richland Center uses to treat your water.

Chlorine disinfects the water and piping between the well pumps and your faucet.

Fluoride, at an average level of 1.21 parts per million, helps combat childhood tooth decay. Addition of fluoride in public water supplies is a normal practice. It is required by ordinance in Richland Center.

Testing your water

Through regular tests by certified labs, City Utilities of Richland Center routinely monitors for contaminants in your drinking water according to federal and state laws.

The tables on the reverse side show the results of the monitoring done for the period of January 1 to December 31, 2005. You will note that in all areas Richland Center's water is well below the acceptable standards (maximum contaminant level---MCL). That is great news.

And there's more good news...in addition to the results listed, tests were run on 50 other contaminants-all showing no detection in Richland Center's water.

Copies of the complete listing are available on the DNR website-or stop in and pick one up at 450 South Main Street.

It's also important to put the test results into context and understand the possible health effects that can be associated with the many regulated contaminants. As defined by the Federal Environmental Protection Agency (EPA), a person would have to drink 2 liters of water every day for a lifetime at the "MCL" (Maximum Contaminant Level Allowed) to have a one-in-a-million chance of having the described health effect.

Educational Information

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, EPA 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 shall 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 provider. More information about contaminants, potential health effects and means to lessen the risk of microbiological infection may be obtained at the EPA Safe Drinking Water Hotline at 1-800-426-4791.

Term	Definition
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.
MFL	Million fibers per liter/mrem/yearmillirems per year (a measure of radiation absorbed by the body)
NTU	Nephelometric Turbidity Units
pCi/l	Picocuries per liter (a measure of radioactivity)
ppm	Parts per million, or milligrams per liter (mg/l)
ppb	Parts per billion, or micrograms per liter (ug/l)
ppt	Parts per trillion, or nanograms per liter
ppq	Parts per quadrillion, or picograms per liter
TCR	Total Coliform Rule
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.

Inorganic Contaminants

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (prior to 2005)	Violation
BARIUM (ppm)	2	2	.008 (avg.)	.006-.012		NO
Typical Source of Contaminant: Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits						
CHROMIUM (ppm)	100	100	12 (avg.)	10-16		NO
Typical Source of Contaminant: Discharge from steel and pulp mills; erosion of natural deposits						
COPPER (ppm)	AL=1.3	1.3	.14 (avg.)	.0170-.2500		NO
Typical Source of Contaminant: Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives						
FLUORIDE (ppm)	4	4	1.0 (avg.)	nd-1.4		NO
Typical Source of Contaminant: Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories						
LEAD (ppb)	AL=15	0	5 (avg.)	nd-100	*	
Typical Source of Contaminant: Corrosion of household plumbing systems; Erosion of natural deposits						
NICKEL (ppm)	100		8.033 (avg.)	7.20-9.10		NO
Typical Source of Contaminant: Nickel occurs naturally in soils, ground water and surface waters and is often used in electroplating; stainless steel and alloy products						
NITRATE (ppb)	10	10	.11	nd-.22		NO
Typical Source of Contaminant: Erosion of natural deposits; Leaching from septic tanks, sewage, runoff from fertilizer use.						
SODIUM (ppm)	n/a	n/a	1.30 (avg.)	1.10-1.50		NO
Typical Source of Contaminant: n/a						

* Systems exceeding a lead and/or copper action level must take actions to reduce lead and/or copper in the drinking water. The lead and copper values represent the 99th percentile of all compliance samples collected. If you want information on the number of sites or the actions taken to reduce these levels, please contact your water supply operator. Richland Center Utilities is working with residents to insure that the lead and copper levels in their homes, and all homes in the City of Richland Center comply with all Federal and State requirements.

Unregulated Contaminants

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (prior to 2005)	Violation
BROMODICHLOROMETHANE (ppb)	n/a	n/a	.13	.00-.013	7/2/04	NO
Bromoform (ppm)	n/a	n/a	.15	.00-.15	7/2/04	NO
CHLOROFORM (ppb)	n/a	n/a	.44	nd-.44	7/2/04	NO
DIBROMOCHLOROMETHANE (ppb)	n/a	n/a	.14	nd-.14	7/2/04	NO

Number of Contaminants Required to be Tested-This includes all contaminants that were required to be tested in the last 5 years.

Contaminant Groups	# of Contaminants
Inorganic Contaminants	18
Disinfection Byproducts	1
Microbiological Contaminants	1
Radioactive Contaminants	1
Synthetic Organic Contaminants including Pesticides and Herbicides	28
Unregulated Contaminants	4
Volatile Organic Contaminants	21

As the tables also show, some contaminants have been detected, but all contaminant levels are within the allowable Maximum Contaminant Level (MCL) and the Federal EPA has determined that the water provided to you IS SAFE at these levels.

EPA notes, "all 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 the water poses a health risk."

Help keep your drinking water clean

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or are man made. These constituents can be microbes, organic or inorganic chemicals, or radioactive materials. Please do your part to protect our water sources. Dispose of spent fuel, cleaning solutions, motor oil, painting supplies, and other chemicals properly.

We will also do our part to protect the environment and carry on over 100 years of providing clean, safe water to the residents and businesses of Richland Center. If you have any questions about this report or concerning your water utility, please contact Gayle Mathews (Water Department Supervisor) at (608) 647-4226. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the second Monday of each month at 5:00 p.m. in the City Hall, 450 South Main Street, Richland Center, WI 53581.

City Utilities of Richland Center

People you know. Service you trust.

