



City of Mound  
2005 Consumer Confidence Report

The City of Mound is issuing the results of monitoring done on its drinking water for the period from January 1 to December 31, 2005. The purpose of this report is to advance consumer's understanding of drinking water and heighten awareness of the need to protect precious water resources.

The City of Mound provides drinking water from a groundwater source. There are four wells, ranging from 194 to 317 feet deep, which draw water from the Quaternary Buried Artesian aquifer and the Prairie Du Chien-Jordan aquifer. The City of Mound completed Well #8 on Evergreen Road, and this went online in September, 2005. Well #3 on Chateau Lane is being upgraded and a new storage tank on Chateau Lane is scheduled to be completed in 2006.

The water provided to customers may meet drinking water standards but the Minnesota Department of Health has determined that one or more sources of our drinking water are potentially susceptible to contamination. If you wish to obtain the entire source water assessment regarding our drinking water, please call 651-201-4670 or 1-800-818-9318 (and press 5) during normal business hours. You can also view it online at [www.health.state.mn.us/divs/eh/water/swp/swa](http://www.health.state.mn.us/divs/eh/water/swp/swa). Call the Vicki at 952-472-0615 if you have questions about the City of Mound drinking water or would like information about opportunities for public participation in decisions that may affect the quality of the water.

The City of Mound monitors and tests daily for chlorine and fluoride levels, monthly for bacteria, and the Minnesota Department of Health inspects the water system. For the year 2005, no contaminants were detected at levels that exceeded the federal standards for the City of Mound. However, some contaminants were detected in trace amounts that were below the legal limits. The City of Mound has and is still testing for copper and lead in the drinking water as required by the EPA. Infants and children are typically more vulnerable to lead in drinking water than the general population. Lead levels in the City of Mound were found to be in compliance with the drinking standards. It is possible that the lead levels in certain homes may be higher than other homes as a result of the materials used in the home's plumbing. If you are concerned about possible high levels of lead in your drinking water, you can have your water tested. You should also flush your tap for 30 to 90 seconds before using the water. Additional information is available from the Safe Drinking Water Hotline at 800-426-4791.

Attached is the key to abbreviations and the most current test data for the City of Mound's water system. Please keep in mind that contaminants are tested less frequently than once a year.

If you would like a copy of the most current water tests, please call 952-472-0615.

**Key to Abbreviations:**

MCLG – Maximum Contaminant Level Goal: The level of contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

MCL – Maximum Contaminant Level: The highest level of contaminant that is allowed in drinking water. MCL's are set as close to the MCLF's as feasible, using the best 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 requirements which a water system must follow.

90<sup>th</sup> 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 90<sup>th</sup> 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 level is taken to determine the 90<sup>th</sup> percentile level.

pCi/l: PicoCuries per liter (a measure of radioactivity)

ppb: Parts per billion, which can also be expressed as micrograms per liter (ug/l)

ppm: Parts per million, which can also be 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 (2005)	Average Result *	
Alpha Emitters (pCi/l)	0	15.4	nd-5.9	4.57	Erosion of natural deposits
Arsenic (ppb) (10/22/2002)	0	50.0	N/A	11	Erosion of natural deposits; Run-off from orchards; Run-off from glass and electronics production wastes
Combined Radon (pCi/l)	0	5.4	nd-1	1	Erosion of natural deposits
Fluoride (ppm)	4.0	4.0	.8-1.2	1.04	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.
TTHM (Total Trihalomethanes-ppb)	0	80	N/A	1	By-product of drinking water Disinfection
Total Coliform Bacteria	0 present	>1 present	N/A	1 ♥	Naturally present in the environment.

♥Follow-up sampling showed no contamination present.

Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems in their circulatory system, and may have an increased risk of getting cancer. The City of Mound has taken the initiative to limit the amount of water being pumped from the source(s) with elevated arsenic. The Minnesota Department of Health and the City have signed a compliance agreement that ensures drinking water will contain less than 10.4 pCi/L of arsenic measured as an annual average.

Contaminant (units)	Level Found		Typical Source of Contaminant
	Range (2005)	Average Result *	
Radon (pCi/l) (10/21/2003)	N/A	136	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 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	.1-1.2	1.02	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)	N/A	1.3	.74	0 out of 20	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	N/A	15	10	0 out of 20	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 (2005)	Average/Result	
Sodium (ppm) (12/28/2004)	N/A	27	Erosion of natural deposits
Sulfate (ppm) (12-28-2004)	N/A	57	Erosion of natural deposits

**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 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 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 contamination 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.

**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* are available from the Safe Drinking Water Hotline at 1-800-426-4791.**