

City of minnetonka Drinking Water Report



The City of Minnetonka is issuing laboratory test results for the drinking water provided to residents during 2004. Each of the past seven years, the Minnetonka Utilities Department has distributed this annual report to summarize drinking water quality for the previous year. This report fulfills an obligation the city's Water Utility has to provide accurate and timely information about your drinking water and the city's water system. This year's report again delivers good news: ***no contaminants have been found that exceed levels set by EPA for safe drinking water.***

If you have questions about your drinking water, please contact Jim Malone at jmalone@eminnetonka.com or (952) 988-8400. If you would like information about opportunities for public participation in decisions that may affect the quality of water, please contact the Public Works Department, (952) 988-8400.

Water Source

The City of Minnetonka operates 18 wells that draw water from the Prairie Du Chien-Jordan aquifer. The wells range in depth from 405 to 575 feet. The Prairie Du Chien-Jordan formation consists of limestone and granular sandstone that was deposited on the shores of an ancient sea millions of years ago. The water resides in cracks and spaces in the rock. This formation covers much of the Upper Midwest.

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 humans. Before a water source is used for a supply, it is tested for contaminants and other water quality parameters. Listed on the back of this page are test results for the City of Minnetonka water supply. The water provided to customers may meet drinking water standards but the Minnesota Department of health has determined that one or more sources of your drinking water is 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 during normal business hours. Also you can view it on line at <http://www.health.state.mn.us/divs/eh/water/swp/swa/>.

Are Contaminants a Concern?

Some people may be more vulnerable to contaminants found 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/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants can be obtained by calling the EPA's Safe Drinking Water Hotline, (800) 426-4791.



Drinking Water Regulations

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. Food and Drug Administration regulations establish limits for contaminants in bottled water that 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 EPA's Safe Drinking Water Hotline, (800) 426-4791.



Lawn Watering Schedule

To effectively conserve the community's water resources, City of Minnetonka ordinances permit watering under the following conditions:

- No watering between 11 a.m. and 5 p.m.
- Even-numbered addresses can water on even-numbered calendar days, and odd-numbered addresses can water on odd-numbered calendar days before 11 a.m. and after 5 p.m.
- Watering by hand-held hose can be done at any time.
- Watering of new sod, seed, shrubbery, or landscaping can take place outside of restricted times if residents have obtained a permit number from the Public Works Department.

Private wells are exempt from these regulations provided the well has been registered and the resident posts a furnished yard sign. If you have questions about these regulations, or need to obtain a permit number, call (952) 988-8400 for details.

Minnetonka Drinking Water Report

Water supplied by the City of Minnetonka is tested throughout the year by the Minnesota Department of Health for nearly 100 contaminants regulated by EPA. Test results for 2004 are listed in the table below. Only those substances that were detected are listed in the table.

No contaminants were found that exceeds limits for safe drinking water.

Monitored substances can be divided into five testing categories:

Microorganisms, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural operations, and wildlife

Inorganic contaminants, such as salts and metals, which can occur naturally or come from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming

Pesticides and herbicides, which may come from agriculture, urban stormwater runoff, and residential uses

Organic chemicals, 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 occur naturally or result from oil and gas production and mining activities

Water Testing Terms and Definitions

The **Amount Found** can be the highest amount found or the average of all samples tested, depending on the regulation. If multiple samples were tested in 2004, the lowest and highest level detected are listed in the **Range of Detections**.

Regulated substances have Maximum Contaminant Levels (**MCLs**) set by EPA. This is the highest level allowed in drinking water. Some contaminants also have MCL goals (**MCLGs**). This is the level of a substance where there is no known or expected health risk. MCLGs allow for a margin of safety. MCLs are set as close to MCLGs as feasible using the best available water treatment processes. Unregulated substances do not have MCLs. They are assessed by state standards known as health risk limits. If an unacceptable amount of any substance is ever found in the water, the City of Minnetonka will notify residents and take action to eliminate the problem.

The MCL for lead and copper is known as the **Action Level**. This is the concentration which, if exceeded, triggers treatment or other requirements a water system must follow. Ninety percent of all samples tested must be below this concentration. Lead and copper get into tap water via corrosion of home plumbing systems. Minnesota Department of Health lab tests show Minnetonka is in compliance for lead and copper. **MRDL**: Maximum Residual Disinfectant Level
MRDLG: Maximum Residual Disinfectant Level Goal

Other Definitions:

ppb: parts per billion or micrograms per liter. **ppm**: parts per million or milligrams per liter
pCi/L: picocuries per liter, a measure of radioactivity **nd**: Not Detected

Radon is a radioactive gas which is naturally occurring in some groundwater, and is caused by the erosion of natural deposits. Testing during 2004 showed average radon levels of 183 pCi/L in Minnetonka water. 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 4000 pCi/L 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 MCL of 300 pCi/L may apply. Minnesota plans to adopt an indoor air program once the radon rule is finalized.

Laboratory Results for Minnetonka Tap Water: 2004

Detected Substance	Units of Measure	MCL	MCLG	Amount Found	Range of Detections	Typical Source in Drinking Water (likely source in italics)
Alpha Emitters	pCi/L	15.4	0	9.65	3.1-10.5	<i>Erosion of natural deposits</i>
Arsenic 6/20/02	ppb	50	0	2.01	—	<i>Erosion of natural deposits; Runoff from orchards, glass and electronics production wastes</i>
Barium 6/20/02	ppm	2.0	2.0	0.16	—	<i>Discharge of drilling wastes, metal refineries; Erosion of natural deposits</i>
Combined Radium	pCi/L	5.4	0	3.1	nd-4.1	<i>Erosion of natural deposits</i>
Fluoride	ppm	4.0	4.0	1.28	1-1.3	<i>Additive for dental health, aluminum and fertilizer factories</i>
Nitrate (as Nitrogen)	ppm	10.0	10.0	0.71	nd-0.71	<i>Erosion of natural deposits, fertilizer runoff, septic tanks, sewage</i>
Total Trihalomethanes	ppb	80	0	16.68	6.0-25.2	<i>By-product of drinking water disinfection</i>
Lead 8/29/03	ppb	90% of samples must be <15 ppb	—	90% of samples <2.0	0 out of 30 homes >15 ppb	<i>Corrosion of home plumbing systems, erosion of natural deposits</i>
Copper 8/29/03	ppm	90% of samples must be <1.3 ppm	—	90% of samples <1.32	3 out of 30 homes >1.3 ppm	<i>Corrosion of home plumbing systems, erosion of natural deposits</i>
Sodium 6/20/02	ppm	No established EPA limits		11	—	<i>Erosion of natural deposits</i>
Sulfate 6/20/02	ppm	No established EPA limits		20	—	<i>Erosion of natural deposits</i>
Mercury	ppb	2	2	0.1	—	<i>Erosion of natural deposits, discharge, runoff</i>
Haloacetic Acid	ppb	60	0	7.3	0.6-10.4	<i>Byproduct of drinking water disinfection</i>
Fecal Coliform and E.Coli		>0 present	0 present	One sample found	Follow-up sample showed none present	<i>Human and animal fecal waste</i>
Chlorine	ppm	MRDL 4.0	MRDLG 4.0	0.39 Quarterly Avg.	0.39-0.9 Monthly Avg.	<i>Water additive used to control microbes</i>