

2006 Drinking Water Report



The City of Eden Prairie is issuing the results of monitoring done on its drinking water for the period from Jan. 1 to Dec. 31, 2006. The purpose of this report is to advance consumers' understanding of drinking water and heighten awareness of the need to protect precious water resources.

Where Does My Water Come From?

The City of Eden Prairie provides drinking water to its residents from a groundwater source. This includes groundwater wells that range from 379 to 418 feet deep that draw water from the Jordan and Prairie Du Chien-Jo rdan aquifers.

The Minnesota Department of Health (MDH) has determined that one or more of your sources of drinking water is susceptible to contamination. If you wish to obtain the entire source water assessment regarding your drinking water, please call **651-201-4700** or **1-800-818-9318** (press 5) during normal business hours. You can also view the source water assessment report online at health.state.mn.us/divs/eh/water/swp/swa.

Contact Information / Volunteer Opportunities

Call **Rick Wahlen**, manager of utility operations, at **952-294-5908** if you have questions about the City of Eden Prairie's drinking water or would like information about opportunities for volunteers for our household water testing program for lead and copper (see the section on Compliance with National Primary Drinking Water Regulations). If you have questions regarding lawn watering or conservation surcharge policies or would like additional copies of this report, contact **Leslie Stovring**, environmental coordinator, at **952-949-8327** or lstovring@edenprairie.org.

Education Opportunities

Educational opportunities are provided as field trips for local schools. In addition, a program being offered at the Water Treatment Plant is the St. Cloud Technical College's Water Environment Technologies (WETT) program. This program provides adult students with the skills needed to qualify for a job in this rapidly growing industry. Benefits to this program include opportunities for hands-on learning within a 12-month timeframe. If you would like more information on this program, please contact the St. Cloud Technical College at **1-800-222-1009** or contact the instructor, **Bill Spain**, at bspain@sctc.edu.

Radon Monitoring

Radon is a radioactive gas which is naturally occurring in some groundwater that you can't see, taste or smell. It is found throughout the United States. Radon can move up through the ground and into a home through cracks and holes in the foundation. It can also get into indoor air when released from tap water during showering, washing dishes and other household activities. Radon is a known carcinogen and poses a lung cancer risk when gas is released from water into the air and a stomach cancer risk when it is ingested. Compared to radon entering the home through soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air. For information on conducting radon testing in your home, you can contact the Minnesota Department of Health at **651-201-4700** or on their Web site at: health.state.mn.us/divs/eh/indoorair/radon/index.html.

Water Quality Monitoring Results

No contaminants were detected at levels that violated federal drinking water standards. However, some contaminants were detected in trace amounts that were below legal limits. The tables that follow show the contaminants that were detected in trace amounts during the calendar year of this report. Some contaminants are sampled less frequently than once per year because the concentrations of these contaminants do not change frequently. As a result, not all contaminants were sampled for in 2006. 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.

Key to Abbreviations

AL – Action Level: The concentration of a contaminant, which if exceeded, triggers treatment or other requirement 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.

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

MRDL – Maximum Residual Disinfectant Level

MRDLG – Maximum Residual Disinfectant Level Goal

N/A – Not Applicable (does not apply).

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 five 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 (ug/l).

ppm – Parts per million, which can also be expressed as milligrams per liter (mg/l).

Contaminant (units)	MRDLG	MRDL	****	*****	Typical Source of Contaminant
Chlorine (ppm)	4	4	0.6 – 1.0	0.78	Water additive used to control microbes.

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

Contaminant (units)	MCLG	MCL	Level Found Range (2006)	Average / Result*	Typical Source of Contaminant
Radioactive Contaminants					

Alpha Emitters (pCi/l) (10/24/2002)	0	15.4	N/A	1.0	Erosion of natural deposits.
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Inorganic Contaminants					
Barium (ppm) (12/09/2002)	2.0	2.0	N/A	0.03	Discharge of drilling wastes, discharge from metal refineries, erosion of natural deposits.
Fluoride (ppm)	4.0	4.0	0.69 – 1.1	1.01	State of Minnesota requires all municipal water systems to add fluoride to the drinking water to promote strong teeth. Also erosion of natural deposits and discharge from fertilizer and aluminum factories.

Volatile Organic Contaminants					
Haloacetic Acids (HAA5) (ppb)	0	60.0	N/A	5.6	By product of drinking water disinfection
TTHM (Total trihalomethanes) (ppb)	0	80.0	N/A	22	By product of drinking water chlorination.

Microbiological Contaminants					
Total Coliform Bacteria	0 present > 5% present	N/A		3%	Naturally present in the environment.

* Average / Result – This is the value used to determine compliance with federal standards. It is sometimes 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.

Inorganic Contaminants – Source Water (Household Testing)					
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Contaminant (units)	MCLG	AL	90% Level	# sites over AL	Typical Source of Contaminant
Copper (ppm) (07/17/2004)	N/A	1.3	0.02	0 out of 37	Corrosion of household plumbing systems; erosion of natural deposits.

Some contaminants do not have Maximum Contaminant Levels (MCLs) established for them. These "Unregulated Contaminates" 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.

Unregulated Contaminants					
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Contaminant (units)	MCLG	AL	90% Level	Average/Result	Typical Source of Contaminant
Sodium (ppm) (12/09/2002)		N/A		8.7	Erosion of natural deposits.
Sulfate (ppm) (12/09/2002)		N/A		21.9	Erosion of natural deposits.

Interesting Facts About Our Water

Reducing Water Hardness

It's a little known fact that the City's water treatment plant reduces the hardness of our water with pebble lime from about 18 grains of hardness per gallon to 5 to 7 grains, which is considered to be moderately hard. To the average homeowner this means fewer stains or build-up in sinks, tubs and toilet bowls, as well as needing less soap to wash dishes and clothes or to bathe. This happens because lime raises the pH of the water, and the higher the pH the more hardness is removed. Due to reduced hardness, a water softener is not required; however, homeowners may still choose to soften their water more.

Adding Fluoride

Trace amounts of fluoride is added to our water system for the prevention of tooth decay. The State of Minnesota regulates the amount of fluoride in municipal water, which must be in the range of about 0.9–1.4ppm (parts per million). The Eden Prairie treatment plant keeps the dosage around 1ppm. Fluoride is tested at the plant every three to four hours for its concentration, and daily samples are collected by field crew from various points in the distribution system. The treatment plant submits a monthly fluoride report to the Minnesota Department of Health listing daily averages and sample point results.

Sump Pump Update

Last summer, the City began a study to review the issue of where water from resident sump pumps was discharging. This is a challenge because during major storm events, water pumping into sanitary sewer treatment plants can overwhelm the system. Sump pump water should discharge onto lawns or into the storm sewer system – not into the sanitary sewer.

Completion of the study has been delayed due to the lack of significant rain fall last summer. This summer, the City will continue to explore where and how the water flows into sewer systems by installing additional manhole meters and ground water monitoring wells.

A report will follow this year's study and be reviewed by the **Public Works Department** to identify problem areas, which will be prioritized for future corrections.

Why are there Contaminants in My Drinking Water?

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.

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.

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**.

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.



Do I need to take special precautions?

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**.