

2007 Drinking Water Report

The City of Eden Prairie is issuing the results of monitoring of its drinking water (Public Water Supply ID #1270010) for the period from Jan. 1 to Dec. 31, 2007. The purpose of this consumer confidence report is to advance 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 ranging from 379 to 420 feet deep that draw water from the Jordan and Prairie Du Chien-Jordan aquifers.

The water provided to customers may meet drinking water standards, but the Minnesota Department of Health (MDH) also made a determination as to how vulnerable the source of water may be to future contamination incidents. 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 the 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.

Educational Opportunities

Educational opportunities are provided in the form of field trips to the City's Water Treatment Plant for local schools. An additional opportunity 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 of 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 when performing 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 about conducting radon testing in your home, contact the Minnesota Department of Health at **651-201-4700** or visit 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 often than once per year because the concentrations of these contaminants do not change frequently. As a result, not all contaminants were sampled for in 2007. 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 that a water system must follow.

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.

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 where 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 – 1.3	0.91	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					
Fluoride (ppm)	4.0	4.0	0.46 – 0.96	0.9	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	5.2	Byproduct of drinking water disinfection
TTHM (Total trihalomethanes) (ppb)	0	80.0	N/A	20	Byproduct of drinking water chlorination.

Microbiological Contaminants					
Total Coliform Bacteria	0 present	>5% present	N/A	5%	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)

Contaminant (units)	MCLG	AL	90% Level	# sites over AL	Typical Source of Contaminant
Copper (ppm)	N/A	1.3	0.04	0 out of 30	Corrosion of household plumbing systems; erosion of natural deposits.
Lead	N/A	15	3	0 out of 30	Corrosion of household plumbing systems; erosion of natural deposits.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Eden Prairie is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components.

When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested.

Information on lead in drinking water, testing methods and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline, or at epa.gov/safewater/lead.

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			
Contaminant (units)	Level Found Range (2006)	Average/Result	Typical Source of Contaminant
Sodium (ppm) (10/16/2006)	N/A	8.7	Erosion of natural deposits.
Sulfate (ppm) (10/16/2006)	N/A	21.9	Erosion of natural deposits.

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 storm water 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 storm water runoff and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water 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 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 which must provide the same protection for public health.

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 the reduced hardness, water softeners are not necessary in Eden Prairie; 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 Water 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 crews 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 year the City advised customers that a study was underway to discover the source of storm water entering the sanitary sewer system, which was overwhelming the capacity of our sewers and waste water treatment plant in Prior Lake. As suspected, water from resident sump pumps discharging directly to floor drains, laundry tubs and direct connections to sanitary sewers has been confirmed during the study process.

The City Council will review the study findings later this year and engage in a process to establish methods for the removal of excess water from our system as mandated by the State. One probable outcome will be the creation of a new ordinance mandating the disconnection of sump pumps from the sanitary sewer system.

As part of a metro wide initiative, Eden Prairie and many other communities are subject to fines of more than \$500,000 for failure to resolve the excess water burden, referred to as infiltration and inflow, from the sewer system. There will be a public process to address this important issue in the coming months.

Do I need to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised individuals, 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 at higher risk of infections. These individuals should seek advice about drinking water from their healthcare 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**.