



ANNUAL
**WATER
QUALITY
REPORT**

Water testing performed in 2009

Presented By:



PWS ID#: 1270006

Maintaining High Standards

Once again we are proud to present our annual water quality report. This report covers all testing performed between January 1, 2009, and December 31, 2009. The events of the past few years have presented many of us with challenges we could not have imagined. Yet in spite of this, we have maintained our high standards in an effort to continue delivering the best quality drinking water possible. There may be other hurdles in the future, but know that we will always stand behind you and the drinking water we work diligently to provide.

We encourage you to share your thoughts with us on the information contained in this report. Should you ever have any questions, we are always available to assist you.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or www.epa.gov/safewater/hotline/.

Source Water Assessment

The water provided to customers may meet drinking water standards, but the Minnesota Department of Health has determined how vulnerable the source 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 (800) 818-9318 (and press 5) during normal business hours. Also, you can view it online at www.health.state.mn.us/divs/eh/water/swp/swa.

Where Does My Water Come From?

The City of Champlin's water is supplied from six ground water wells, ranging from 291 feet to 620 feet deep. These wells draw from the Franconia, Ironton/Galesville, and Mt. Simon aquifers. The water distribution system consists of approximately 100 miles of water main and 7,000 water service connections. The City of Champlin removes iron and manganese, and adds chlorine to disinfect the water supply of viruses and bacteria. Fluoride is also added to enhance dental protection. To ensure proper dosages of these additives, the City of Champlin utility staff monitors the levels daily.

Questions?

For more information about this report, or if you have any questions about your drinking water, please call Mike Bramwell, Utilities Superintendent, at (763) 923-7190.



2010 Summer Lawn Sprinkling

All residents are asked to take an active role in conserving our water resources. High-demand periods are hard on our production equipment and our water resources. If Champlin's residents do their part and follow the odd/even sprinkling ban, the City's water production facilities will be better able to provide water without further watering restrictions.

The mandatory odd/even sprinkling ban began on May 1 and continues through Labor Day. First violation of the ordinance will result in a written warning. The second and each subsequent violation of the ordinance will result in an excess usage fee of \$75 per day. You will be notified in person (if present) and by mail if observed watering outside of these restrictions.

Odd-even Calendar Sprinkling

- Odd numbered addresses may water on odd numbered calendar days only.
- Even numbered addresses may water on even numbered calendar days only.
- The day begins at midnight and ends at midnight.

- You cannot sprinkle between 10 a.m. and 7 p.m.

For example:

You live at 123 Champlin Lane: You may sprinkle on May 17, beginning at midnight and up until 10 a.m. If you prefer to water in the evening, you may also sprinkle on May 17, beginning at 7 p.m. and up until midnight.

Exemptions

- You may hand-water anytime.
- New sod and seed is exempt for four weeks only.
- Children can run in the sprinkler anytime, but please do not leave the sprinkler running. Abuse of this privilege may result in additional restrictions. We do not want a sprinkling ban any more than you do.
- Owners of private irrigation wells must register with the City on an annual basis. If you are not already registered with the City, please contact the Champlin Utilities Department at (763) 421-0154 to register your private irrigation well.

What Are PPCPs?

When cleaning out your medicine cabinet, what do you do with your expired pills? Many people flush them down the toilet or toss them into the trash. Although this seems convenient, these actions could threaten our water supply.

Recent studies are generating a growing concern over pharmaceuticals and personal care products (PPCPs) entering water supplies. PPCPs include human and veterinary drugs (prescription or over-the-counter) and consumer products, such as cosmetics, fragrances, lotions, sunscreens, and house cleaning products. Over the past five years, the number of U.S. prescriptions increased 12 percent to a record 3.7 billion, while nonprescription drug purchases held steady around 3.3 billion. Many of these drugs and personal care products do not biodegrade and may persist in the environment for years.

The best and most cost-effective way to ensure safe water at the tap is to keep our source waters clean. Never flush unused medications down the toilet or sink. Instead, check to see if the pharmacy where you made your purchase accepts medications for disposal, or contact your local health department for information on proper disposal methods and drop-off locations. You can also go on the Web at www.Earth911.com to find more information about disposal locations in your area.

Compliance with National Primary Drinking Water Regulations

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

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.

Substances 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, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may 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 by-products of industrial processes and petroleum production and may also come from gas stations, urban storm water runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

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. For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Water Conservation

You can play a role in conserving water and save yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.

Turn off the tap when brushing your teeth.

Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.

Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.

Use your water meter to detect hidden leaks. Simply turn off all taps and water-using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

Water Conservation Rates

In 2008 Minnesota adopted a statute requiring public water suppliers serving more than 1,000 people to adopt a water rate structure that encourages conservation. The conservation rate structure was to begin on or before January 1, 2010. The theory behind the conservation rate structure is to reduce the amount of water consumed by charging a higher rate for non essential consumption.

Rate structures often include a service charge (base rate) and a volume based charge. Service charges cover fixed costs, such as capital improvements, and the volume charge is for operation and maintenance costs.

The City completed an analysis of the impact of the proposed rate structure on various types of properties within the City and the cash flow implications to the City. Resulting from the statute and the analysis, the following water utility rates were implemented for 2010.

2010 CONSERVATION RATE STRUCTURE

Residential Properties

TIERS	RATE
Administrative Charge \$1.25/month	
Tier 1 Up to 16,000 gallons	\$2.02/1,000 gallons
Tier 2 Over 16,000 gallons	\$2.53/1,000 gallons

Irrigation Meters

Administrative Charge \$2.00/month	
Tier 1 Up to 30,000 gallons	\$2.02/1,000 gallons
Tier 2 Over 30,000 gallons	\$2.53/1,000 gallons

Large Irrigation Meters

Administrative Charge \$2.00/month	
Tier 1 Up to 125,000	\$2.02/1,000 gallons
Tier 2 Over 125,000	\$2.53/1,000 gallons
Commercial Per 1,000 gallons	\$2.02/1,000 gallons

The utility rate study reviewed the costs of the current operations plus the cost of depreciation of infrastructure. Based on a review of these costs, an increase of 4 percent is needed for a positive operating income in the Water Utility Fund. The above rates include a 4 percent rate increase in the 1,000 gallon rate, based on the utility rate study (from \$1.94 to \$2.02), and increases the monthly administrative fee for residential properties from \$1.09 to \$1.25 and to \$2.00 for commercial/irrigation meters. For a residential account with median consumption (7,750 gallons per month) the increase for normal water usage would be approximately \$0.72 per month.

Lead and Drinking Water

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 Champlin 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 www.epa.gov/safewater/lead.

Radon

Radon is a radioactive gas that occurs naturally in some ground water. It poses a lung cancer risk when gas is released from water into air (as occurs during showering, bathing, 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 (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 Maximum Contaminant Level (MCL) of 300 pCi/L may apply. Minnesota plans to adopt an indoor air program once the Radon Rule is finalized.

Results of Monitoring

During the past year we have taken numerous water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water.

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 table that follows shows the contaminants that were detected in trace amounts last year. (Some contaminants are sampled less frequently than once a year: as a result, not all contaminants were sampled for in 2009. 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.)

REGULATED SUBSTANCES							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Barium (ppm)	2009	2	2	0.1	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chlorine ¹ (ppm)	2009	[4]	[4]	0.48	ND-1.55	No	Water additive used to control microbes
Combined Radium (pCi/L)	2009	5.4	0	0.5	ND-1	No	Erosion of natural deposits
Fluoride (ppm)	2009	4	4	1.13	0.9-1.2	No	The State of Minnesota requires all municipal water systems to add fluoride to the drinking water to promote strong teeth; Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Tetrachloroethylene (ppb)	2009	5	0	0.7	NA	No	Leaching from PVC pipes; Discharge from factories and dry cleaners
TTHMs [Total Trihalomethanes]- IDSE Results (ppb)	2009	80	0	2.3	NA	No	By-product of drinking water disinfection

Tap water samples were collected for lead and copper analyses from sample sites throughout the community (lead was not detected at the 90th percentile)

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2007	1.3	NA	0.81	1/30	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

UNREGULATED SUBSTANCES				
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Radon ² (pCi/L)	8/25/2005	262	NA	Erosion of natural deposits
Sodium (ppm)	2009	20	7.7-20	Erosion of natural deposits
Sulfate (ppm)	2009	46.3	7.18-46.3	Erosion of natural deposits

¹For chlorine, the Range is the highest and lowest monthly average, and the Amount Detected is the highest quarterly average.

²This is the value used to determine compliance with federal standards. It sometimes is 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.

Definitions

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.

MRDL (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

pCi/L (picocuries per liter): A measure of radioactivity.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).