



2014 Drinking Water Report City of Cloquet, Minnesota

The City of Cloquet is issuing the results of monitoring done on its drinking water for the period from January 1 to December 31, 2014. The purpose of this report is to advance consumers' understanding of drinking water and heighten awareness of the need to protect precious water resources.

Source of Water

The City of Cloquet provides drinking water to its residents from a groundwater source: five wells ranging from 68 to 120 feet deep, that draw water from the Quaternary Water Table and Quaternary Buried Artesian aquifers.

The Minnesota Department of Health has made a determination as to how vulnerable our systems' source(s) 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 (and press 5) during normal business hours. Also, you can view it on line at www.health.state.mn.us/divs/eh/water/swp/swa.

Call (218) 879-6758 or visit the Public Works and Utilities section of the City's website at <u>www.ci.cloquet.mn.us</u> if you have questions about the City of Cloquet drinking water or would like information about opportunities for public participation in decisions that may affect the quality of the water.

Results of Monitoring

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 2014. 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.)

Results of Monitoring (Continued)

January 1 to December 31, 2014

Key to abbreviations in following tables below:

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.

AL — Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirement which a water system must follow.

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 5 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).

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

Ppb – Parts per billion, which can also be expressed as micrograms per liter (μ g/l).

Nd – No Detection.

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

			Level Found		
Contaminant (units)	MCL G	MCL	Range (2014)	Average/ Result*	Typical Source of Contaminant
Alpha Emitters (pCi/l)	0	15.4	nd-5.9	5.9	Erosion of natural deposits.
Arsenic (ppb) (12/15/2011)	0	10	N/A	2.27	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium (ppm) (12/15/2011)	2	2	N/A	0.05	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.

	Level Found				
Contaminant (units)	MCL G	MCL	Range (2014)	Average/ Result*	Typical Source of Contaminant
Fluoride (ppm)	4	4	0.95-1.2	1.2	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.
Haloacetic Acids (HAA5) (ppb)	0	60	9.3-10.3	10.3	By-product of drinking water disinfection.
Nitrate (as Nitrogen) (ppm)	10.4	10.4	nd-2.2	2.2	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
TTHM (Total trihalomethanes) (ppb)	0	80	19.4-31.6	31.6	By-product of drinking water disinfection.

*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 the detected values. If it is an average, it may contain sampling results from the previous year.

Contaminant (units)	MRDLG	MRDL	***	****	Typical Source of Contaminant
Chlorine (ppm)	4	4	0.4-1.1	0.78	Water additive used to control microbes.

****Highest and Lowest Monthly Average.

*****Highest Quarterly Average.

Contaminant			90%	# sites	
(units)	MCLG	AL	Level	over AL	Typical Source of Contaminant
Copper (ppm) (07/17/2013)	1.3	1.3	0.52	0 out of 30	Corrosion of household plumbing systems; Erosion of natural deposits.
Lead (ppb) (07/17/2013)	0	15	1.2	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. City of Cloquet 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 http://www.epa.gov/safewater/lead. Monitoring may have been done for additional contaminants that do not have MCLs established for them and are not required to be monitored under the Safe Drinking Water Act. Results may be available by calling 651-201-4700 or 1-800-818-9318 during normal business hours.

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 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.

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.

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 and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

Groundwater and Well Water Protection

As a society, we have become more and more environmentally conscious and better informed about the effects our lifestyles have on the world around us. Yet the demand for our most valuable natural resource – drinking water – continues to grow. Our groundwater source is not infinite and we need to do whatever we can to protect it.

The Federal Safe Drinking Water Act amendments, passed in 1986, required states to develop programs to protect the water quality in public water supply wells. The process for achieving this is referred to as Wellhead Protection. In Minnesota, wellhead protection was mandated by the State's 1989 Groundwater Bill and required all public water supplies to develop individual Wellhead Protection Plans for their community wells. The City of Cloquet developed its first Wellhead Protection Plan back in 2002 and it is currently in the process of updating that Plan.

Groundwater is the main source of drinking water for three out of every four Minnesotans. Protecting groundwater is everybody's business.

What Can You Do To Help Protect our Groundwater and Well Water Resource?

Sealing Unused Wells: Unused, unsealed or abandoned wells are a direct conduit for contamination to enter our groundwater aquifer system and drinking water supply. They also pose a safety hazard. Sealing is the process of clearing an unused well of debris and filling the well with a special material called grout. Remember, only a licensed well contractor can seal wells in Minnesota, including sand-points and large diameter dug wells. In many cases funding assistance or grants are available to assist with the cost of proper well sealing. If you are aware of an abandoned or unused well, please contact the Cloquet Public Works Department at (218) 879-6758.

Water Conservation: Water conservation is a form of protection that not only saves this precious commodity but at the same time saves us money. Numerous water saving technologies have been developed to help conserve water. And while strong progress has been made, there are several simple steps that consumers can take to help preserve our water supply for future generations.

You can save water and lower your monthly water and sewer bills by following these tips:

- ✓ Stop those leaks! Check your indoor water using appliances and outside faucets for leaks. Even a small leak can cost you hundreds of dollars.
- Replace the old Toilet, the largest water user inside your home! If your home was built before 1992 and the toilet has never been replaced, then it is very likely you do not have a water efficient 1.6 gallon per flush toilet. Update your old toilets NOW!
- ✓ Replace your Clothes Washer, the second largest water user in your home! Energy Star rated washers can use 35-50% less water and 50% less energy per load. That saves you money not only on your water and sewer bill but also your energy bill as well.

For more information on Water Conservation, log on to: <u>http://www.h2ouse.org</u>

For more information on Drinking Water Protection, try <u>http://health.state.mn.us/divs/eh/water</u>

And as always, if you have any questions or concerns with your water supply or water service, feel free to contact the Cloquet Water Department at (218) 879-6758.