## **CONSUMER CONFIDENCE REPORT**

### PWSID: 1040002

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. 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 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.

## Conservation

Conservation is important, even in the land of 10,000 lakes.

Despite our seeming abundance of water, conservation is still essential in Minnesota. For example, it is anticipated that in parts of the metropolitan area groundwater levels are dropping much faster than the water can be replenished. In addition, some agricultural regions in Minnesota are especially vulnerable to drought which can affect crop yields and municipal supplies. It's important we use our water wisely. Below are some tips to help you and your family conserve.

The U.S. Environmental Protection Agency's website has great tips about how you can conserve, and save money in the process! Visit it here: http://www.epa.gov/WaterSense/pubs/fixleak.html

Some examples of easy things you can do to help conserve water:

- Fix running toilets—they can waste around 200 gallons a day or more.
- Turn the faucet off while brushing your teeth.
- Shower instead of bathe. Taking a bath uses (on average) more water than showering.
- Only run full loads of laundry, and set the washing machine to the correct water level.
- Only run a dishwasher when it's full.
- Use water-efficient appliances (look for the WaterSense label).

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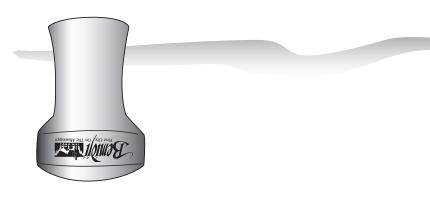
## Bemidji

In February 2009, the Minnesota Department of Health (MDH) began sampling selected municipal water supplies for an expanded list of perfluorochemicals (PFCs) related to Class B firefighting foams. These systems were chosen based on the volume of reported use of Class B firefighting foams in training centers and the vulnerability of the wells. The City of Bemidji was one of those municipal water supplies.

The laboratory analysis noted a trace amount of PFCs, which are below the health based exposure limit, for the city of Bemidji. On-going monitoring will be conducted as a public health action.

If you have questions regarding PFCs and investigative sampling at municipal water systems, you can find additional information at http://www.health.state.mn.us/divs/eh/hazardous/topics/pfcs/classbfoam.html.

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POSTAL CUSTOMER

\*\*\*\*\*ECBM28/EDDW





## CONSUMER CONFIDENCE REPORT

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### **City of Bemidji**

2014 Drinking Water Report

The City of Bemidji 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 Bemidji provides drinking water to its residents from a groundwater source: five wells ranging from 157 to 198 feet deep, that draw water from the Quaternary Water Table and Quaternary Buried Artesian aguifers.

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 218-333-1854 if you have questions about the City of Bemidji 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.)

### Key to abbreviations:

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.

Bemidji, Minnesota 56601-3116 City Hall = 317 4" Street NW CITY & OF & BEMIDJI



## **CONSUMER CONFIDENCE REPORT**

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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.

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 ( $\mu$ g/l).

nd-No Detection.

N/A—Not Applicable (does not apply).

			Level Found		
Contaminant (units)	MCLG	MCL	Range (2014)	Average/ Result*	Typical Source of Contaminant
Barium (ppm)	2	2	N/A	.04	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride (ppm)	4	4	1.1-1.2	1.19	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	1.3-2.4	2.4	By-product of drinking water disinfection.
Nitrate (as Nitrogen) (ppm)	10.4	10.4	N/A	.18	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
TTHM (Total trihalomethanes) (ppb)	0	80	4.5-5.6	5.6	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	.0164	.16	Water additive used to control microbes.

\*\*\*\*Highest and Lowest Monthly Average.

\*\*\*\*\*Highest Quarterly Average.

Contaminant			90% Level	# sites	
(units)	MCLG	AL		over AL	Typical Source of Contaminant
Copper (ppm)	1.3	1.3	.29	0 out of	Corrosion of household plumbing systems; Erosion of
(06/11/2013)				30	natural deposits.
Lead (ppb)	0	15	nd	0 out of	Corrosion of household plumbing systems; Erosion of
(06/11/2013)				30	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 Bemidji 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.

Monitoring for unregulated contaminants as required by U.S. Environmental Protection Agency rules (40 CFR 141.40) was conducted in 2014. Results of the unregulated contaminant monitoring are available upon request from Cindy Swanson, Minnesota Department of Health, at 651/201-4656.

**Compliance with National Primary Drinking Water Regulations** 

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## **Cross Connection Control**

### Do your part to help prevent the problems caused by backflow and cross connections.

Backflow, or backsiphonage, occurs when the pressure of a polluted source exceeds that of the drinking water supply, which can pull contaminants back into the drinking water supply. It can result in contaminants, including hazardous chemicals and bacteria, mixing with drinking water. Cross connections—an actual or potential connection between a drinking water and non-drinking water supply—are sources of backflow problems.

Residential and commercial property owners should be concerned and diligent about backflow and cross connections. A garden hose can often be a cross connection. Someone spraying an herbicide with a cross connection could have some of the herbicide pulled back into the home plumbing, especially if there is a drop in the water pressure while the garden hose with the herbicide is attached.

The Minnesota Department of Health and American Water Works Association recommend the following precautions:

- Do not submerge hoses in buckets, pools, tubs, or sinks.
- Keep the end of the hose clear of possible contaminants.
- Do not use spray attachments without a backflow prevention device, and attach these devices to threaded faucets. Such devices are inexpensive and available at hardware stores.
- If a plumber is used to install backflow prevention devices, make sure the plumber is licensed to ensure that local codes and manufacturer's recommendations are met.
- Commercial property owners should develop a cross connection plan to minimize the risk of drawing contaminants into uncontaminated areas.
- Maintain air gaps (vertical separations between an outlet and the flood-level rim of a vessel of at least twice the diameter of the water supply outlet, and at least one inch) between hose outlets and any liquids.

#### Thanks for doing your part!

#### The Pros and Cons of Home Water Softening

Water softeners are a common water treatment device in many homes. They are effective for removing water hardness (dissolved calcium and magnesium) in water. The benefits of soft water include an increased efficiency for soaps and detergents, a reduction in mineral staining on fixtures and in pipes, and a potential increase in the lifespan of water heaters. Like all water system components, water softeners must be installed and maintained properly in order to operate safely and effectively.

Softened water can contain elevated sodium levels, so people on low-sodium diets should consult a physician if they plan on regularly consuming softened water.

Water softeners have operation and maintenance costs, and many produce salt brine as a byproduct. Minimizing the amount of salt brine used can help minimize downstream affects at wastewater treatment plants and the ecosystem. Some softeners also use a salt-free system.

When considering whether or not to use a water softener, contact your public water system to find out if the water is considered hard. Many systems treat for hardness, making water softeners unnecessary.

### **Preventing Pollution**

Many of our daily activities contribute to the pollution of Minnesota's surface water and groundwater. Below are some simple steps you can take to ensure that our water continues to be safe and healthy:

- Don't flush leftover medication down the toilet. A number of counties hold regularly scheduled drug take-back events, and many police and sheriff facilities have permanent drop boxes.
- Pick up after your pet.
- Minimize your use of fertilizers and pesticides.
- Clean up chemical spills, and store chemicals safely away from wells, lakes, rivers, streams, and storm water drains.
- Check your car for leaking fluids. When changing car oil, catch and dispose of the oil properly. Don't let it runoff the driveway into the storm drain.