



The Quality of your Drinking Water

Welcome!

We are pleased to present this annual report on the quality of your drinking water! Each year, this report will give you an update on the quality of the water delivered to you and other city residents and businesses.

Water is vital to our community and we are fortunate in Cedarburg to have a relatively pristine water supply. One of our priorities is protecting this natural resource!

If you have any questions, please contact me, come to one of your utility's monthly meetings held the third Monday of each month, or visit our website at www.cedarburglightandwater.org.

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Cedarburg's Water

The City of Cedarburg draws its supply of drinking water from five deep wells located throughout the community tapping into the Niagra-Plattville-Trenten Aquifers. The depth of these wells range from 500 to 1200 feet, which yields a thirst-quenching 52-degree drink of water. Each well feeds into a common water distribution system that is divided into two pressure zones identified as the High Level Pressure Zone (HLPZ), and the System Pressure Zone. The area north of Bridge Road and west of Harrison Avenue is part of the HLPZ due to its topography. All of the homes and businesses in this area have been built on land that is higher than 850 feet US elevation. Given this, gravity cannot be utilized to supply the water pressure needed for fire flow or residential purposes. Booster pumps at one of the well houses provide the needed "boost" in pressure for residents in this area.

Cedarburg residents and businesses currently use over 450 million gallons of water each year. On a peak day, the community uses about 2.1 million gallons. The system is oversized for fire fighting, and capable of producing in excess of 5 million gallons a day.

Treating Your Water

Cedarburg's public water supply meets or exceeds all federal and state drinking water standards. For your added protection the water is treated with a bacterial fighting agent, fluoride, and an orthophosphate. The treatment process is approved by the State of Wisconsin Department of Natural Resources (DNR).

Treatment of the water ensures safe and healthy water for our community. Here's a little more information on the three components used to treat Cedarburg's water.

- ✓ Sodium Hypochlorite disinfects the water as it is pumped from the well.
- ✓ Fluoride, at a level of 0.6 to 0.8 parts per million, helps combat childhood tooth decay. *Addition of fluoride in public water supplies is a normal practice. It is required by ordinance in Cedarburg.*
- ✓ Orthophosphate controls mineral build-up in water pipes. It also creates a barrier between the piping and the water; helping to prevent minute amounts of lead and copper from being deposited into the water from service laterals and interior home plumbing.

In addition to the above, water from three of Cedarburg's wells is run through an "air stripping" process to remove volatile organic compounds that were detected in the water supply. This treatment technology is extremely effective in removing this type of compound and is used by many utilities across the country. The process ensures all of Cedarburg's water meets or exceeds safe drinking water standards.

Shown on the following pages is a summary of all the required tests performed on Cedarburg's water.



Testing Your Water

Through regular tests by certified labs, Cedarburg Light & Water Utility routinely monitors for contaminants in your drinking water according to federal and state laws.

The tables on the following pages show results of the monitoring for the period of January 1 to December 31, 2017. You will note that in all areas, Cedarburg's water is at or below the acceptable standards (maximum contaminant level --- MCL).

In addition to the results listed, tests were run on numerous other contaminants -- all showing no detection in Cedarburg's water. Copies of the complete listing are available on the DNR website -- or stop in and pick one up, we're just two blocks east of Washington Ave. on Lincoln Blvd.

As you review the test results, you may find the definitions shown to the right helpful.

It's also important to understand that water containing contaminants below the MCL does not pose a short-term or long-term health risk, as stated by the EPA. All contaminants fall below the MCL in the public water supply distributed to Cedarburg Light & Water customers.

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, for example, can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers.

More information about contaminants and potential health effects, and EPA/CDC guidelines on appropriate means to lessen the risk of infection by microbiological contaminants can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791. You may also visit Wisconsin Rural Water Association's website for more information at www.wrwa.org.

Definitions

Term	Definition
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 ensures that drinking water does not pose either a short-term or long-term health risk. EPA sets MCLs at levels that are economically and technologically feasible
MCLG	Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health
MFL	Million fibers per liter
mpl	Micrograms per liter
mrem/year	Millirems per year (a measure of radiation absorbed by the body)
ND	Not Detected or No Detect
NTU	Nephelometric Turbidity Units
pCi/l	Picocuries per liter (a measure of radioactivity)
ppm	Parts per million, or milligrams per liter (mg/l)
ppb	Parts per billion, or micrograms per liter (ug/l)



A vital natural resource at the heart of our community, our way of life, and our children's future.

PPWS ID 24601082 CEDARBURG L & W COMMISSION for 2017

Disinfection Byproducts

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2017)	Violation?	Typical Source of Contaminant
HAA5 (ppb)	60	60	1-3	1-3		NO	By-product of drinking water chlorination
TTHM (ppb)	80	0	4.8-7.1	4.8-7.1		NO	By-product of drinking water chlorination

Inorganic Contaminants

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2017)	Violation?	Typical Source of Contaminant
ARSENIC (ppb)	10	n/a	3	0-3		NO	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
BARIUM (ppm)	2	2	.140	.074-.140		NO	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
COPPER (ppm)	AL=1.3	1.3	1.1000	2 of 30 results were above the action level		NO	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
FLUORIDE (ppm)	4	4	0.4	.2-.4		NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
LEAD (ppb)	AL=15	0	6.60	3 of 30 results were above the action level		NO	Corrosion of household plumbing systems
NICKEL (ppb)	100		2.0000	1.7000-2.0000		NO	Nickel occurs naturally in soils, ground water and surface waters and is often used in electroplating, stainless steel and alloy products
NITRATE (NO ₃ -N) (ppm)	10	10	1.10	0.00-1.10		NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
SODIUM (ppm)	n/a	n/a	36.00	17.00-36.00		NO	n/a
THALLIUM TOTAL (ppB)	2	0.5	0.1	0.00-0.10	3/4/2014	NO	Leaching from ore-processing sites; Discharge from electronics, glass, and drug factories

*Systems exceeding a lead and/or copper level must take actions to reduce lead and/or copper in drinking water. The lead and copper values represent the 90th percentile of all compliance samples collected. If you would like information on the number of sites or the actions taken to reduce these levels, please contact the utility.

Radioactive Contaminants

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2017)	Violation?	Typical Source of Contaminant
COMBINED URANIUM (ug/l)	30	0	0.7	0.7		NO	Erosion of natural deposits

Volatile Organic Contaminants

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2017)	Violation?	Typical Source of Contaminant
TRICHLOROETHYLENE (ppb)	5	0	.1	0.0-0.2		NO	Discharge from metal degreasing sites and other factories
VINYL CHLORIDE (ppb)	.2	0	.2	0.0-0.8		NO	Leaching from PVC piping; Discharge from plastics factories

Unregulated Contaminants (UCMR3)

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. EPA required us to participate in this monitoring.

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2017)	Violation?	Typical Source of Contaminant
1,4-DIOXANE (mpl)	n/a	n/a	0.14	0.14	3/4/2014	NO	n/a
CHROMIUM (mpl)	n/a	n/a	0.11	0.077-0.14	3/4/2014	NO	n/a
CHLORATE (mpl)	n/a	n/a	107	72-190	3/4/2014	NO	n/a
DICAMBA (ppb)	n/a	n/a	0.35	0.0-0.35		NO	n/a
MOLYBDENUM (mpl)	n/a	n/a	1.2	1.0-1.2	3/4/2014	NO	n/a
STRONTIUM (mpl)	n/a	n/a	1003	8.6-2100	3/4/2014	NO	n/a
SULFATE (ppm)	n/a	n/a	65	46-65	3/4/2014	NO	n/a

Please see code definitions on page 2.

Monitoring and Reporting Violations Not Being Addressed - NONE

Additional Information

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. Cedarburg Light & Water Utility 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 choose 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 at 1-800-426-4791 or at www.epa.gov/safewater/lead.