

Department of Public Works – Water Utility 2200 S. Pine St., Burlington, WI, 53105 (262) 342-1173 – (262) 539-3773 fax

# **BURLINGTON WATERWORKS**

2014 DNR Consumer Confidence Report

Public Water System #25201770

#### Water System Information

The Burlington City Council meets on the first and third Tuesday of each month. Meetings are held in the Common Council Chambers, located at 224 East Jefferson Street, at 6:30 pm. You may obtain the agenda of upcoming meetings on the City's website (www.burlington-wi.gov), or by contacting City Hall at (262) 342-1161. If you would like to know more about the information contained in this report, or would like to request a copy en Española, please contact Craig Workman, Director of Public Works, at (262) 342-1173.

#### Health Information

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 (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 systems 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 Environmental Protection Agency's safe drinking water hotline (800-426-4791).

# Source(s) of Water

The source of water for the Burlington water distribution system consists of five drilled groundwater municipal wells (numbered 7-11), each finished in the deep sandstone aquifer. A summary of each facility is as follows:

**Well No. 7**: Located at the intersection of Origen Street and Reynolds Avenue. The well discharges at a rate of 1,000 gallons per minutes (gpm) directly into the 300,000 gallon elevated tank located to the northwest of the pump house.

- **Well No. 8**: Located on Sheldon Street near Beloit Street on the southwest side of the City. The well discharges at a rate of 1,000 gpm directly into a 300,000 gallon ground storage reservoir.
- **Well No. 9**: Located at Clover Drive and Weiler Road on the east side of the City. The well has the ability to either pump directly to the system or to a 300,000 gallon ground storage reservoir at a rate of 1,000 gpm.
- **Well No. 10**: Located on Karyl Street in the Bear Meadows Subdivision. The well discharges at a rate of 1,200 gpm directly into a 300,000 gallon ground storage reservoir.
- Well No. 11: Located at the intersection of Liberty Drive and South Pine Street. The well discharges at a rate of 1,300 gpm directly into a 500,000 gallon ground storage reservoir. The Burlington Water Utility is working with the DNR on a feasible, cost effective solution to the Radium issues at Well #11.

Source ID	Source	Depth (ft)	Status
7	Groundwater	1492	Active
8	Groundwater	1475	Active
9	Groundwater	1454	Active
10	Groundwater	1560	Active
11	Groundwater	1550	Active

To obtain a summary of the Source Water Assessment, please contact Craig Workman at (262) 342-1173.

#### Educational Information

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 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 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, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which shall provide the same protection for public health.

#### **Detected Contaminants**

Your water was tested for many contaminants last year. We are allowed to monitor for some contaminants less frequently than once a year. The following tables list only those contaminants which were detected in your water. If a contaminant was detected last year, it will appear in the following tables without a sample date. If the contaminant was not monitored last year, but was detected within the last 5 years, it will appear in the tables below along with the sample date.

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2014)	Violation	Typical Source of Contaminant
HAA5 (ppb)	D- 10	60	60	0	0		No	By-product of drinking water chlorination
TTHM (ppb)	D- 10	80	0	6.2	6.2		No	By-product of drinking water chlorination

#### Disinfection Byproducts

#### Inorganic Contaminants

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2014)	Violation	Typical Source of Contaminant
ARSENIC (ppb)		10	n/a	1	0 - 1		No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
BARIUM (ppm)		2	2	0.160	0.074 - 0.160		No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits



Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2014)	Violation	Typical Source of Contaminant
FLUORIDE (ppm)		4	4	0.6	0.5 - 0.6		No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NICKEL (ppb)		100		1.9000	1.7000 - 1.9000		No	Nickel occurs naturally in soils, ground water and surface waters and is often used in electroplating, stainless steel and alloy products.
SODIUM (ppm)		n/a	n/a	7.20	5.00 - 7.20		No	n/a

# Inorganic Contaminants w/ Action Level

Contaminant (units)	Action Level	MCLG	90th Percentile Level Found	# of Results	Sample Date (if prior to 2014)	Violation	Typical Source of Contaminant
COPPER (ppm)	AL=1.3	1.3	0.0830	0 of 20 results were above the action level.		No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD (ppb)	AL=15	0	7.20	0 of 20 results were above the action level.		No	Corrosion of household plumbing systems; Erosion of natural deposits



Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2014)	Violation	Typical Source of Contaminant
GROSS ALPHA, EXCL. R & U (pCi/l)		15	0	10.2	7.3 - 10.2		No	Erosion of natural deposits
RADIUM, (226 + 228) (pCi/l)		5	0	5.3	2.7 - 7.6		No	Erosion of natural deposits
GROSS ALPHA, INCL. R & U (n/a)		n/a	n/a	10.2	7.3 - 10.2		No	Erosion of natural deposits
COMBINED URANIUM (ug/l)		30	0	0.4	0.4		No	Erosion of natural deposits

#### Radioactive Contaminants

# Additional Health 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. Burlington Waterworks 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.

# Information on Monitoring for Cryptosporidium and Radon

Our water system did not monitor our water for cryptosporidium or radon during 2014. We are not required by State or Federal drinking water regulations to do so.

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 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.
MFL	million fibers per liter

# Definition of Terms



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.
mrem/year	millirems per year (a measure of radiation absorbed by the body)
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/I)
ppt	parts per trillion, or nanograms per liter
ppq	parts per quadrillion, or picograms per liter
TCR	Total Coliform Rule
тт	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.