



Regional Water  
Urban Bluffs North System  
2017 Quality On Tap Report for 2016 Testing Results  
Released: May 22, 2017



This report contains important information regarding the water quality in our water system. All of Regional Water’s water supply for this distribution system is provided from the Council Bluffs Water Works. The source of this water is both groundwater and surface water. The groundwater is drawn from an alluvial aquifer. The surface water is drawn from the Missouri River and its tributaries. 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, 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.

Our goal is to provide you with a safe and dependable supply of drinking water. Our water quality testing (and results submitted to us from the Council Bluffs Water Works in accordance with IDNR consecutive source reporting requirements and Federal and State drinking water law) shows the following results:

CONTAMINANT	MCLG	MCL	DETECTED LEVEL	DATE SAMPLED	RANGE OF DETECTION	VIOLATION	SOURCE
Chlorine	MRDLG = 4	MRDL = 4	2.09 Ppm *	06/2016 09/2016	1.89 to 2.28 Ppm	NO	Water additive: Used to control microbes
Total Trihalomethanes (TTHM)	N/A	80	59 Ppb **	09/30/2016	30 to 87 Ppb	NO	By-products of drinking water chlorination
Haloacetic Acids (HAA5)	N/A	60	25 Ppb **	09/30/2016	15 to 33 Ppb	NO	By-products of drinking water chlorination
Lead (ppb) (No tests over the AL)	0	AL=15	ND	2014	ND	NO	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm) (No tests over the AL)	0	AL = 1.3	ND	2014	ND	NO	Corrosion of household plumbing systems; erosion of natural deposits
Regional Water is a consecutive system. This means that we receive all of the water for the Urban Bluffs North Water System from the Council Bluffs Water Works (PWS Permit #7820080). The following test results are from the Council Bluffs Water Works' testing:							
Turbidity (TT = Lowest monthly % of samples meeting limit)	N/A	TT	0.16 NTU's	2016	0.03 – 0.16 TT = 100% of samples < 0.3 NTU	NO	Soil Runoff
Fluoride	4	4	0.86 Ppm	2016	0.55 to 0.86 Ppm	NO	Water additive: Promotes strong teeth
Nitrate	10	10	7.2 Ppm	2016	ND-7.2 Ppm	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Chlorite	0.8	1.0	0.19 Ppm	2015	ND to 0.19 Ppm	NO	By-product of drinking water disinfection
Carbon, Total Organic (removal ratio)	N/A	TT	1.7	2016	0.8 to 3.2 Ppm	NO	Naturally Present in the Environment
Sodium	N/A	N/A	72 Ppm	2016	N/A	NO	Erosion of natural deposits/ Added to water during treatment process
Chromium	100	100	1.1 Ppb	2013	.5 to .27 Ppb	NO	A group of man-made compounds used in the production of stainless steel, chromate chemicals, and pigments

\*These are Running Annual Averages (RAA)

\*\*These are Locational Running Annual Averages (LRAA)

## DEFINITIONS

- Maximum Contaminant Level (MCL) – 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.
- Maximum Contaminant Level Goal (MCLG) -- 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.
- Parts per billion (Ppb) or Micrograms per liter – Corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- Parts per million (Ppm) or Milligrams per liter (mg/l) – Corresponds to one minute in two years or a single penny in \$10,000.
- Not applicable (N/A) – Does not apply or a maximum contaminant level has not been set.
- Non-Detects (ND) -- Not detected; Laboratory analysis indicates that the contaminant is not present at any detectable level.
- Treatment Technique (TT) – A required process intended to reduce the level of a contaminant in drinking water. Treatment techniques are set for acrylamide, epichlorohydrin, turbidity, lead, and copper.
- Action Level (AL) – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. Action levels are set for lead and copper.
- Turbidity (NTU) – Nephelometric Turbidity Units are a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person. Turbidity is an indicator of treatment filter performance and is regulated as a treatment technique.
- Maximum Residual Disinfectant Level Goal (MRDLG) – The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- Maximum Residual Disinfectant Level (MRDL) – 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.
- Removal Ratio - A ratio between the percentage of a substance actually removed to the percentage of the substance required to be removed.
- TCR - Total Coliform Rule
- SGL - Single Sample Result

## **GENERAL INFORMATION**

All 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 posed a health risk. **More information about contaminants or potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).**

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day, at the MCL level, for a lifetime to have a one-in-a-million chance of having the described health effect. Our drinking water meets all current Federal and State requirements. As you can see, our system had no violations. We are very proud that your drinking water meets all Federal and State requirements. We have learned through our monitoring and testing that some regulated contaminants have been detected. The Environmental Protection Agency (EPA) has determined that your water IS SAFE at these levels.

Some people may be more vulnerable to contaminants in drinking water than the general population. The City of Council Bluffs Water Works and Regional Water constantly monitor the water supply for various contaminants, including cryptosporidium. Cryptosporidium, a protozoan parasite and one-celled animal, is too small to be seen without a microscope. It is common in surface waters throughout the U.S., especially when these waters contain sewage or animal waste. Sampling conducted by the Council Bluffs Water Works has detected cryptosporidium in their source 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. Regional Water is responsible for providing high quality drinking water, but cannot control the variety of materials used in your privately owned 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 are available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

The Council Bluffs Water Works utilizes the multiple barrier treatment process that effectively removes and inactivates cryptosporidium. Although Cryptosporidium has never been detected in any finished drinking water samples, we believe it is important for you to know that cryptosporidium may cause serious illness in 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. These people should seek advice 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 <http://water.epa.gov/drink/hotline>. The treatment processes consistently produce a low turbidity finished water, which is very effective in removing cryptosporidium. Cryptosporidium can be spread through means other than drinking water.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause "blue baby syndrome". Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

## **CONTAMINANT VIOLATIONS**

NONE

## **OTHER VIOLATIONS**

NONE

## **SOURCE WATER ASSESSMENT INFORMATION**

Regional Water Rural Water Association's Urban Bluffs Distribution System obtains its water from the Council Bluffs Water Works (CBWW), who in turn gets a portion their water from the Missouri River alluvial aquifer and the rest from the Missouri River itself.

Reservoirs and streams are highly susceptible to contamination because contaminants can move through them quickly. Council Bluffs' water supply will be susceptible to contaminant releases from landfills and livestock confinements. A portion of the Council Bluffs' water supply is obtained from an alluvial aquifer. The alluvial aquifer was determined to be highly susceptible to contamination because the characteristics of the aquifer and overlying materials allow contaminants to move through the aquifer quickly. The City of Council Bluffs' wells will be most susceptible to activities such as dry cleaners, gas stations, industrial sites, and municipal wastewater discharges. A detailed evaluation of this source water was completed by the Iowa Department of Natural Resources, and is available from Mr. John Meads, Purification Manager at (712) 328-1006 – Ext. 1020, between the hours of 8:00 am and 3:00 pm Monday thru Friday, except holidays.

## **CONTACT INFORMATION**

The management and staff of Regional Water Rural Water Association and of the Council Bluffs Water Works work diligently around the clock to provide top quality water to you the consumer. We ask all of our members and customers to help us protect our water sources, which are the heart of our communities, our way of life, and our children's future. If you have any questions about this report or concerning either Regional Water or the Council Bluffs Water Works, please contact our Distribution Superintendent, Kerry Kiesel, at (712) 343-2413, between the hours of 8 a.m. and 4 p.m., Monday thru Friday, except for Holidays.

Decisions regarding the water system are made at the Association's monthly board meetings held on the third Thursday of each month at 7:00 p.m. at Regional Water's Main Office at 108 Highway 59, Avoca, Iowa and are open to the public.