Minnehaha Community Water Corp.

Annual Drinking Water Quality Report

January 1, 2017 – December 31, 2017

The purpose of this report is to inform you of the quality of the drinking water that we provide. We are required by the U.S. Environmental Protection Agency (EPA) to test our water frequently for the presence and concentrations of over 80 different substances. The South Dakota Department of Environment and Natural Resources (DENR) reviews all of our testing data to ensure that 1) we are providing safe drinking water to our customers, and 2) we are complying with EPA regulations.

We want you to fully understand the information contained in this report. If you have any questions, please contact: Brian Benda at (605) 428-3374

Where does our water come from?

We serve more than 12,805 customers and average of 2,393,000 gallons of water per day. MCWC has two sources for our drinking water. The first source is ground water from the Big Sioux Aquifer. This is a shallow aquifer that lies near the Big Sioux River. The second source is the Lewis & Clark Regional Water System, which operates ground water wells along the Missouri River near Vermillion, SD. MCWC purchased 13% of our water from Lewis & Clark RWS in 2017.

Due to the shallow nature of the Big Sioux Aquifer, in which water-bearing material can be found at less than 20 feet in depth, we all need to be aware of the possibility of contamination. Common practices used by homeowners, landowners and producers can have the potential to impact this aquifer in a negative way. Those who live and work near the Big Sioux River should be aware of the contaminants they have on site and take steps to prevent contamination.

Why do we test our drinking water?

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 land surface or through the ground, it dissolves naturally occurring minerals, 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, or runoff from mining or farming activities.

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 occur naturally in some of the rock formations in this region.

Information provided by the EPA

In order to ensure that tap water is safe to drink, the 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 that 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 (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 microbiological contaminants are available from the Safe Drinking Water Hotline (800) 426-4791.

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. The Minnehaha Community Water Corp public water supply system 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*.

Definition of Terms

The following definitions are provided to assist you in understanding our water quality test results and the following discussion of the results.

Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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.

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.

**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)*

2017 Table of Detected Contaminants

The attached table lists all the drinking water contaminants that we detected during the 2017 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 – December 31, 2017. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

Substance	**Sample Date**	**Highest Level Detected**	**Range of Detection**	**Ideal Goals (MCLG)**	**Highest Level Allowed (MCL)**	**Likely source of substance**
Fluoride	4/13/17	0.83 ppm	0.61-0.83	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Fluoride *	3/7/17	0.76 ppm	0.59-0.76	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Haloacetic Acids	8/29/17	2.67 ppb		0	60	Byproduct of drinking water chlorination
Nitrate (as Nitrogen)	4/12/17	0.8 ppm		10	10	Fertilizer runoff; leaking septic tanks; erosion of natural deposits
Nitrate (as Nitrogen) *	10/3/17	0.7 ppm		10	10	Fertilizer runoff; leaking septic tanks; erosion of natural deposits
Total Trihalo-methanes	8/29/17	7.61 ppb		0	80	By-products of drinking water chlorination
Substance	**Date Sampled**	**90% Level**	**# of Samples >action limit**	**Ideal Goals (MCLG)**	**Highest Level Allowed**	**Likely source of substance**
Copper	9/11/15	0.0 ppm	0	0	AL=1.3	Corrosion of household plumbing systems; Erosion of natural deposits, leaching from Wood preservatives
Lead	6/25/12	1 ppb	0	0	AL=15	Corrosion of household plumbing systems; Erosion of natural deposits

* - Lewis & Clark Regional Water System (2288) test result.

Fluoride and Chlorine

MCWC adds fluoride to the water to comply with a state requirement that is aimed at preventing tooth decay, particularly in children. It has been found that a level of 0.70 ppm is the optimum level and MCWC's average level in 2017 was 0.66 ppm.

MCWC uses chloramine disinfection to make our water safe to drink. The total chlorine level in the distribution system varies with location. The water close to the treatment plant has a higher level than the water at the extreme ends of the system. We typically detect at least 2.5 ppm of total chlorine throughout our system which is more than adequate to ensure the safety of our customers.

Hardness, Iron and Manganese

The well water that we use at MCWC is fairly hard water, we typically see about 500 ppm or 29 grains of hardness measured as calcium carbonate.

The treatment plant removes over 60% of the hardness so the water going out to the distribution system averages around 190 ppm or 11 grains per gallon of hardness. This is moderately soft by South Dakota standards.

Iron and manganese are two minerals that some people are all too familiar with; these minerals can cause brown water, staining of fixtures and laundry as well as taste and odor problems. Our well water has significant quantities of these minerals but they are almost completely removed in the treatment process and most customers will not experience any problems with these minerals.

Summary of 2017 Water Quality Test Results

We are pleased to report that in 2017 we provided over 869 million gallons of safe, good tasting, high quality drinking water that was in compliance with all EPA and state water quality standards.

Public water suppliers are one of the most heavily regulated of all industries in the United States. The safety of our product is always our number one concern and you can rest assured that our water is safe to drink.