ANNUAL DRINKING WATER QUALITY REPORT

March 2023

CITY OF MARQUETTE

We are pleased to present to you this year's Annual Quality Drinking Water Report. This report is designed to inform you about the water quality and services we deliver to you every day. Our goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source is supplied by two wells that draw water from the Cambrian Sandstone Aquifer. The water supply is then partially softened and disinfected to further insure the safety and quality of your public water supply.

This system has a current combined radium level of 3.7 pCi/L (testing performed 02/2020 at the South St. Well #3 and 1.46 pCi/L on 08/2022 at Nature's Drive Well #4 which is below the maximum contaminant level (5).

The City of Marquette has tested for water sodium content. The result of this sample taken on 01/2022 is 62 milligrams per liter at Well #3 and on 04/2022 is 62.6 milligrams per liter on 04/2022 at Well #4.

The Marquette water supply obtains its water from the Cambrian aquifer. The Cambrian aquifer was determined to be susceptible to contamination because the characteristics of the aquifer and overlying materials allow contaminants to move through the aquifer fairly quickly. The Marquette wells will be somewhat susceptible to activities such as dry cleaners, gas stations, industrials site, and municipal wastewater discharges. In April 2006 the City of Marquette adopted Ordinance 326 entitled PROTECTION OF PUBLIC WATER WELLS, which restricts the location of potential sources of contamination near our public water wells. A detailed evaluation of our source water was completed by the Iowa Department of Natural Resources, and is available from the Marquette Water Department.

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 City of Marquette 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 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.

If you have any questions about this report or concerning your water utility, please contact Jason Sullivan, Water Superintendent at (563) 873-3386. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the second Tuesday of each month at 6:00 PM at City Hall located at 102 North Street.

The City of Marquette routinely monitors for constituents in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1, 2017 through December 2022. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It is important to remember that the presence of these constituents does not necessarily pose a health risk. Copies of this report will not be mailed to individual residents, but will be available upon request at the City of Marquette City Hall office located at 102 North Street.

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we have provided these definitions:

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

Parts Per Million (ppm) or Milligrams Per Liter (mg/1) *one part per million corresponds to one minute in two years or a single penny in $10,000.*

Parts Per Billion (ppb) or Micrograms Per Liter *one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.*

Picocuries Per Liter (pCi/L) *picocuries per liter is a measure of the radioactivity in water.*

Maximum Contaminant Level (MCL) *The "Maximum Allowed"(MCL) is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLGs as feasible using the best available treatment technology.*

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, 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.

Maximum Contaminant Level Goal (MCLG) *The "Goal" (MCLG) is 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.*

Combined Radium: The potential adverse health effects is that some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer. Our use of Ion exchange softeners at the wells reduces the amount of radium in the water. Repeat sampling continues to be performed and results will be published in your water billings. Please refer to the test result table.

Lead: Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified and removed, replaced or reduced.

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or are man-made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials.

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminates does not necessarily indicate that the 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.

Test Results

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Radioactive Contaminants						
Alpha Emitters *Tested 1/17 &4/17*	N	Well #3 4.8 Well #4 3.7	pCi/L	0	15	Erosion of natural deposits
Combined Radium *Tested 2/20 &8/22*	N	Well #3 3.7 Well #4 1.46	pCi/L	0	5	Erosion of natural deposits
Barium *Tested 09/21*	N	.0451	pCi/L	0	2	Discharge of drilling wastes; discharge from metal refineries, erosion of natural deposits
Inorganic Contaminants						
Copper *Tested 2021*	N	0.0711	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead *Tested 2021*	N	7.8	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits.
Fluoride *Tested 9/21*	N	0.4	ppm	0	AL=4	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Sodium *Tested 1/22&4/22*	N	Well #3 62 Well #4 62.6	ppm	0	N/A	Erosion of natural deposits, added to water during treatment process
Chlorine *Tested 12/2022*	N	1.1	ppm	4.0	4.0	Water additive used to control microbes
Total Trihalomethanes *Tested 9/22*	N	4	ppb	0	80	By-products of drinking water chlorination

Contaminant Violations

No violations.

General Information

In our continuing efforts to maintain a safe and dependable water supply it may be necessary to make improvements in your water system. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements.

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 at 1-800-426-4791.

We at the Marquette Water Department work around the clock to provide top quality water to every tap. If you have any questions, please feel free to call our office at (563) 873-3386. We ask that all our customers help us protect our water resources, which are the heart of our community, our way of life and our children's future.