

2024 WATER QUALITY REPORT FOR EMMETSBURG MUNICIPAL WATER DEPARTMENT

This report contains important information regarding the water quality in our water system. The source of our water is groundwater. Our water quality testing shows the following results:

GENERAL INFORMATION - Emmetsburg Municipal Utilities is pleased to present you this year's Annual Water Quality Report. This report is designed to inform you about the quality water and services we provide to you every day. Included in this report are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. Our constant goal is to provide you with safe and a 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.

If you have any questions or concerns about this report or concerning your water utility, please call 712-852-2550 (City Hall) or 712-852-2592 (Water Dept.) and ask for John Hedding. We want our valued customers to be informed about their water utility. Our Utility Board meets on the 2nd & 4th Tuesday of each month at 7:00 a.m. in the Council Chambers of City Hall. Please feel free to participate in these meetings.

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).

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 microbial 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. EMMETSBURG MUNICIPAL WATER DEPARTMENT 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>.

SOURCE WATER ASSESSMENT INFORMATION - This water supply obtains its water from 6 wells. Four of these municipal wells are at a depth of about 40 feet into the sand and gravel of the Alluvial aquifer. The Alluvial aquifer was determined to be highly susceptible to contamination because the characteristics of the aquifer and overlying materials provide little protection from contamination at the land surface. The Alluvial wells will be highly susceptible to surface contaminants such as leaking underground storage tanks, contaminant spills, industrial sites, wastewater discharges and excess fertilizer application. A detailed evaluation of your source water was completed by the Iowa Department of Natural Resources and is available from the Water Operator (John Hedding) at 712-852-2592.

This water supply also obtains its water from two deep wells. The sandstone of the Dakota aquifer. These wells are at a depth of about 285 feet. The Dakota aquifer was determined to have low susceptibility to contamination because the characteristics of the aquifer and overlying materials provide natural protection from contaminants at the land surface. The Dakota wells will have low susceptibility to surface contaminants such as leaking underground storage tanks, contaminant spills, and excess fertilizer application. A detailed evaluation of your source water was completed by the Iowa Department of Natural Resources and is available from the Water Operator at (John Hedding) at 712-852-2592.

These wells are located near the Emmetsburg Municipal Water Plant on the west side of town and near the Emmetsburg Municipal Fields. Emmetsburg Municipal Utilities owns the land around these wells and restricts any activity that could contaminate them. Once the water is pumped to the Water Plant, we treat it to remove several contaminants and add disinfectant to protect you against microbial contaminants. Emmetsburg Municipal Utilities also has a Well Head Protection Program around all these wells.

The Emmetsburg Municipal Utilities is making every effort to protect our water system from potential security threats. You, as customers, can also help. If you notice any suspicious activity near the Water Treatment Plant, the water tower, any wells or fire hydrants, please contact us at 712-852-2550 (City Hall), 712-852-2592 (Water Plant), 712-480-2552 (Emergency on-call phone) or the local police/sheriff department. We appreciate your assistance in protecting the water system.

WATER QUALITY DATA - The table below lists all the drinking water contaminants we detected during the 2023 calendar year. Contaminants with dates indicate results from the most recent testing done in accordance with regulations. However, some of the data, though representative of the water quality, is more than one year old. 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 from January 1st - December 31st, 2023. 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.

CONTAMINANT	MCL - (MCLG)	Compliance		Date	Violation	Source
		Type	Value & (Range)			
Total Haloacetic Acids (ppb) [HAA5]	60 (N/A)	LRAA	<5.00 (5 - 5)	8/9/2023	No	By-products of drinking water disinfection
Total Trihalomethanes (ppb) [TTHM]	80 (N/A)	LRAA	2.00 (2-2)	9/30/2023	No	By-products of drinking water chlorination
Lead (ppb)	AL=15 (0)	90th	2.90 (ND - 12)	2021	No	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	AL=1.3 (1.3)	90th	1.26 (0.0362 - 1.430) 1 sample(s) exceeded AL	2021	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
950 - DISTRIBUTION SYSTEM						
Chlorine (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	2.5 (2.4 - 2.6)	12/31/23	No	Water additive used to control microbes
01 - WELLS 1,4,5,6,7 OR 8/TRITMNT PLNT SINK						
Gross Alpha, inc (pCi/L)	15 (0)	SGL	3.13	11/13/23	No	Erosion of natural deposits
Sodium (ppm)	N/A (N/A)	SGL	57.1	1/12/21	No	Erosion of natural deposits; Added To water during treatment process
Fluoride (ppm)	4 (4)	SGL	.58 (.31 - .58)	7/5/2023	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Nitrate [as N] (ppm)	10 (10)	SGL	0.300	8/9/2023	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite [as N] (ppm)	1 (1)	SGL	<0.10 (0.10)	8/9/2023	No	Runoff from Fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium (ppb)	50 (50)	SGL	4.90	1/31/2018	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Barium (ppm)	2 (2)	SGL	0.0709	1/31/2018	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits

Note: Contaminants with dates indicate results from the most recent testing done in accordance with regulations.

CONTAMINANTS - There are several contaminants that may be present in the source water before treatment:

- **Microbial contaminants**, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- **Inorganic contaminants**, such as salts and metals 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** may come from a variety of sources, such as agriculture and residential uses.
- **Radioactive contaminants** are naturally occurring.
- **Organic chemical contaminants**, including synthetic and volatile chemicals are by-products of industrial processes and petroleum production and can also come from gas stations, urban storm water runoff and septic systems.

In order to ensure that the tap water is safe to drink, EPA prescribes regulations which limits the amount of certain contaminants in the water provided by public water systems. We treat our water according to EPA's regulations. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health. We are pleased to report that our drinking water is safe and meets federal and state requirements

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 Residual Disinfectant Level Goal (MRDLG) - 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.		
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		
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.		
Action Level (AL) - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.		
Treatment Technique (TT) - A required process intended to reduce the level of a contaminant in drinking water.		
TT-Treatment Technique - A required process intended to reduce the level of a contaminant in drinking water	IDSE - Initial Distribution System Evaluation	LRAA - Locational Running Annual Average
ppm - parts per million.	NTU - Nephelometric Turbidity Units	ppb - parts per billion
pCi/L - picocuries per liter	RTCR - Revised Total Coliform Rule	SGL - Single Sample Result
N/A - Not applicable	ND - Not detected	RAA - Running Annual Average

CONTACT INFORMATION - For questions regarding this information or how you can get involved in decisions regarding the water system, please contact EMMETSBURG MUNICIPAL WATER DEPARTMENT at 712-852-2592.

Facility Name: Emmetsburg Municipal Utilities
PWSID#: 7428021
Date: 5/14/2024

PUBLIC NOTIFICATION

MONITORING VIOLATION OF THE WATER TESTING SCHEDULE - Our water system violated a drinking water standard(s) over the past year. Even though these were not emergencies, as our customers, you have a right to know what happened and what we did to correct these situations. We, the Emmetsburg Municipal Utilities Public Water Supply (include a description of the areas served if it is not evident from the supply name) are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During 4th Quarter of 2023 we did not take 1 Sample for Combined Radium and therefore cannot be sure of the quality of our drinking water during that time.

What should I do? - There is nothing you need to do at this time.

What Happened? What is being done? - The Lab that does our testing sent the wrong bottles, therefore the correct test was not preformed, we have since then, sampled in the 1st Quarter of 2024.

For more information, please contact Emmetsburg Municipal Utilities Water Dept. @ 712-852-2592