2022 WATER QUALITY REPORT FOR

RATHBUN REG WATER ASSN (FT MADISON)

This report contains important information regarding the water quality in our water system. The source of our water is surface water and groundwater. All of the water is purchased. Purchased water comes from Ft Madison Muni Water Works and Keokuk Municipal Water Works. Our water quality testing shows the following results:

CONTAMINANT	MCL - (MCLG)	Compliance		Date	Violation	Source			
		Type	Value & (Range)		Yes/No				
Total Trihalomethanes (ppb) [TTHM] DB01	80 (N/A)	LRAA	11	3 rd Quarter	No	By-products of drinking water chlorination			
Total Trihalomethanes (ppb) [TTHM] DB03	80 (N/A)	LRAA	53 (30 - 69)	3 rd Quarter	No	By-products of drinking water chlorination			
Total Trihalomethanes (ppb) [TTHM] DB04	80 (N/A)	LRAA	54 (31 - 72)	3 rd Quarter	No	By-products of drinking water chlorination			
Total Haloacetic Acids (ppb) [HAA5] DB03	60 (N/A)	LRAA	19 (10 - 29)	3 rd Quarter	No	By-products of drinking water disinfection			
Total Haloacetic Acids (ppb) [HAA5] DB04	60 (N/A)	LRAA	27 (8 - 27)	3 rd Quarter	No	By-products of drinking water disinfection			
Lead (ppb) Keokuk System	AL=15 (0)	90th	1 (ND - 2)	2021	No	Corrosion of household plumbing systems; erosion of natural deposits			
Copper (ppm) Fort Madison System	AL=1.3 (1.3)	90th	0.06 (ND - 0.16)	2021	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives			
Copper (ppm) Keokuk System	AL=1.3 (1.3)	90th	0.15 (0.01 - 0.20)	2021	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives			
950 - DS 950 GW (FORT MADISON IA, 5625062)									
Chlorine (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	1.54 (1.3 – 1.7)	12/31/2022	No	Water additive used to control microbes			
951 - DS 951 SW (KEOKUK, IA5640019)									
Chlorine (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	1.26 (0.7 – 1.9)	12/31/2022	No	Water additive used to control microbes			
Nitrite [as N] (ppm)	1 (1)	SGL	0.35 (ND - 0.35)	2022	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits			

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

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.
- ppb -- parts per billion.
- ppm -- parts per million.
- pCi/L picocuries per liter
- N/A Not applicable
- ND -- Not detected
- RAA Running Annual Average

- Treatment Technique (TT) A required process intended to reduce the level of a contaminant in drinking water.
- Action Level (AL) The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a
 water system must follow.
- 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.
- SGL Single Sample Result
- RTCR Revised Total Coliform Rule
- NTU Nephelometric Turbidity Units

GENERAL 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 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. RATHBUN REG WATER ASSN (FT MADISON) 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 some or all of its water from another public water supply. It is a consecutive water supply, where an originating parent supply provides drinking water to one or more downstream supplies.

Original Supply ID	Original Supply Name			
IA5625062	Ft Madison Muni Water Works			
IA5640019	Keokuk Municipal Water Works			

OTHER INFORMATION

Turbidity is an indicator of treatment filter performance and is regulated as a treatment technique.

CONTACT INFORMATION

For questions regarding this information or how you can get involved in decisions regarding the water system, please contact RATHBUN REG WATER ASSN (FT MADISON) at 641-647-2416.

PURCHASED WATER INFORMATION

Our water system purchases water from the system(s) shown below. Their water quality is as follows:

CONTAMINANT	MCL - (MCLG)	Compliance		Date	Violation	Source				
		Type	Value & (Range)		Yes/No					
5625062 - FT MADISON MUNI WATER WORKS										
03 - SEP WELLS 6,7 8 9,10 (LAB TAP)										
Combined Radium (pCi/L)	5 (0)	SGL	2	07/06/2021	No	Erosion of natural deposits				
Barium (ppm)	2 (2)	SGL	0.15	07/14/2020	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits				
Sodium (ppm)	N/A (N/A)	SGL	6	07/14/2020	No	Erosion of natural deposits; Added to water during treatment process				
Fluoride (ppm)	4 (4)	SGL	1.10 (0.67–1.10)	2022	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories				
5640019 - KEOKUK M	5640019 - KEOKUK MUNICIPAL WATER WORKS									
01 - S/EP FROM MISSI	01 - S/EP FROM MISSISSIPPI RI									
Fluoride (ppm)	4 (4)	SGL	0.82 (0.68-0.82)	2022	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories				
Sodium (ppm)	N/A (N/A)	SGL	24	04/05/2022	No	Erosion of natural deposits; Added to water during treatment process				
Nitrate [as N] (ppm)	10 (10)	SGL	4.9 (ND - 4.9)	2022	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits				
Atrazine (ppb)	3 (3)	SGL	0.20	06/14/2022	No	Runoff from herbicide used on row crops				
Dalapon (ppb)	200 (200)	SGL	1.00	06/14/2022	No	Runoff from herbicide used on rights of way				
Turbidity (NTU)	N/A (N/A)	TT	0.10 (100%)	2022	No	Soil runoff				
Total Organic Carbon (TOC)	35%	RAA	46.00% - 67.24%	2022	No	Naturally Present in the Environment				