

2014 WATER QUALITY REPORT

FOR

Moravia Public Water Supply

PWSID# 0467008

This report contains important information regarding the water quality in our water system. The water source for Moravia is Rathbun Regional Water Association, Inc. RRWA obtained its source water in 2014 from the Chariton River, below Lake Rathbun Dam, a surface water source.

Our water quality testing shows the following results:

CONTAMINANT	MCL - MCLG	Type	Compliance Value & (Range)	Date	Violation	Source
Moravia						
Copper (ppm)	AL=1.3 (1.3)	90 th	0.172 (0.0188 – 0.185)	2012	No	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	AL=15 (0)	90 th	4.36 (ND – 86) 1 sample Exceeded AL	2012	No	Corrosion of household plumbing systems; erosion of natural deposits
TTHM (ppb) [Total trihalomethanes]	80 (N/A)	LRAA	48.00 (33 – 66)	12/31/2014	No	By-products of drinking water disinfection
Haloacetic Acids (HAA5) (ppb)	60 (N/A)	LRAA	22.00 (19 – 23)	12/31/2014	No	By-products of drinking water disinfection
950 – DISTRIBUTION SYSTEM						
Chlorine (ppm)	MRDL= 4.0 (MRDLG= 4.0)	RAA	3.6 (3.0 – 3.8)	03/31/2014	No	Water additive used to control microbes
RRWA						
Fluoride (ppm)	4 (4)	SGL	0.70 (0.48-0.70)	12/05/2014	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Sodium (ppm)	N/A (N/A)	SGL	25	01/07/2014	No	Erosion of natural deposits; Added to water during treatment process
Atrazine (ppb)	3 (3)	SGL	0.40	04/02/2014	No	Runoff from herbicide used on row crops
Turbidity	N/A (N/A)	TT	0.29 (100%)	2014	No	Soil runoff
Total Organic Carbon	30%	TT	(33.3 – 56.8)	2014	No	Runoff
03 - WEST PLANT @ AFTER TREATMENT						
Barium (ppm)	2 (2)	SGL	0.05	01/07/2014	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4 (4)	SGL	0.70 (0.48-0.70)	12/05/2014	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Sodium (ppm)	N/A (N/A)	SGL	26	01/07/2014	No	Erosion of natural deposits; Added to water during treatment process
Atrazine (ppb)	3 (3)	SGL	0.50	01/07/2014	No	Runoff from herbicide used on row crops
Metolachlor	N/A (N/A)	SGL	0.30	01/07/2014	No	Runoff from herbicide used on row crops
Turbidity	N/A (N/A)	TT	0.169 (100%)	2014	No	Soil runoff
Total Organic Carbon	30%	TT	(33.9 – 52.9)	2014	No	Runoff

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

UCMR3

Analyte	MCL	Compliance	Ug/L	Date	Violation	Source
Chlorate	N/A	N/A	160.0	01/29/2014	No	EPA Study Participant

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.
- Ug/L – micrograms per liter.
- N/A – Not applicable
- N/D -- Not detected at testing limit
- 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.
- NTU – Nephelometric Turbidity Units
- 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.
- RAA - Running Annual Average
- IDSE – Initial Distribution System Evaluation
- SGL – Single Sample Result
- TCR – Total Coliform Rule

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 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. MORAVIA PUBLIC WATER SUPPLY 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>.

ADDITIONAL HEALTH INFORMATION

For Lead levels above the action level (15ppm). Infants and children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

OTHER VIOLATIONS

In July 2014, we had a Consumer Confidence Report (CCR) violation for Consumer Confidence Reports Rule.

OTHER INFORMATION

Turbidity is an indicator of treatment filter performance and is regulated as a treatment technique.
UCMR is the Unregulated Contaminant Monitoring Rule, 3rd edition.

SOURCE WATER ASSESSMENT INFORMATION

The Moravia Public Water Supply obtains its water from the Rathbun Regional Water Association, Inc. whose source water in 2014 was the Chariton River after discharge from Rathbun Lake. This is a surface water source. RRWA's intake is located below the Rathbun Lake Dam. An assessment of the watershed has been completed that identifies and prioritizes potential sources of water pollution in the Rathbun Lake watershed that may impair the quality of the raw water for RRWA. These potential sources include wastewater treatment facilities, institutional, retail and industrial facilities, recreational facilities, residential and commercial areas and land used for agricultural production with characteristics that increase the likelihood of eroded soil, chemicals and livestock waste being carried in runoff to streams, rivers and the lake. For a summary of the watershed assessment results and additional information contact: RRWA at 16166 Hwy J29, Centerville, IA 52544 or call 641-647-2416.

Surface Water Name	Susceptibility
Chariton River	High

CONTACT INFORMATION

For questions regarding this information, please contact the City Clerk at Moravia City Hall at 641-724-9811 if you have any questions. Decisions regarding the water system are made at the regular scheduled meetings held on the first Tuesday of each month at 7:00 p.m. at the Moravia Municipal Building, Moravia, IA.