

# 2010 WATER QUALITY REPORT FOR

## City of Maquoketa

PWS ID# 4950029

This report contains important information regarding the water quality in our water system. The City of Maquoketa has three active public water wells. Wells 4,5, and 6 are open in the Cambrian-Ordovician aquifer. Well 3 is open in the Pleistocene aquifer and is designated emergency standby only. Our water quality testing shows the following results:

CONTAMINANT	MCLG	MCL	DETECTED LEVEL	DATE SAMPLED	RANGE OF DETECTION	VIOLATION	SOURCE
Lead (ppb)	0	AL=15	4	6/1/08 to 9/30/10	ND - 4	No	Corrosion of household plumbing systems; erosion of natural deposits
Chlorine (ppm)	MRDLG =4.0	MRDL=4.0	0.83	RAA 2010	0.78 to .83	No	Water additive used to control microbes
Fluoride (ppm)	4	4	1.46	1/1/10 to 12/31/10	.26 to 1.46	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Sodium (ppm)	N/A	N/A	107	6/2/10	89 to 107	N/A	Erosion of natural deposits; Added to water during treatment process
Alpha emitters (pCi/L)	0	15	5.6	12/8/09 to 12/10/09	4.73 to 5.6	No	Erosion of natural deposits
Combined radium (pCi/L)	0	5	4.79	12/8/09 to 12/10/09	2.73 to 4.79	No	Erosion of natural deposits
Copper (ppm)	1.3	AL=1.3	0.131	6/1/08 to 9/30/10	0.0307-0.198	No	Corrosion of household plumbing systems; Erosion of natural deposits
TTHM (ppb) [Total trihalomethanes]	N/A	80	19.10	8/07/08	NA	No	By-products of drinking water disinfection
Haloacetic Acids (HAA5) (ppb)	N/A	60	6.07	8/07/08	NA	No	By-products of drinking water disinfection
Total Coliform Bacteria	0	Presence of coliform bacteria in >5% of monthly samples	1 detected sample	3/2010	NA	No	Naturally present in the environment

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

## **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. The City of Maquoketa 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**

Fluoride in children's drinking water at levels of approximately 1 mg/L reduces the number of dental cavities. The City of Maquoketa has chosen to add fluoride to prevent tooth decay.

Infants and young 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).

## **SOURCE WATER ASSESSMENT INFORMATION**

The Maquoketa water supply obtains its water from the Cambrian - Ordovician aquifer. The Cambrian - Ordovician aquifer was determined to be not susceptible to contamination because the characteristics of the aquifer and overlying materials prevent easy access of contaminants to the Cambrian - Ordovician aquifers. The wells will not be susceptible to most contaminants sources except through pathways to the aquifer such as abandoned or poorly maintained wells.

A detailed evaluation of your source water was completed by the IDNR, and is available from The City of Maquoketa at 563-652-2484.

## **OTHER INFORMATION**

The City's water utility is making every effort to protect the water system from potential security threats. You, as customers, can also help. If you see any suspicious activity near the water tower, treatment plant, wells or fire hydrants, please contact us at 563-652-2484 or the local police/sheriff department at 563-652-2468. We appreciate your assistance in protecting your water system. More information on water system security can be found at [www.iowawatersecurity.org](http://www.iowawatersecurity.org). This information is also available on the City of Maquoketa's web site at: [www.maquoketaia.com](http://www.maquoketaia.com)

## **CONTACT INFORMATION**

For questions regarding this information, please contact City Hall at 563-652-2484 during the following hours: 8:00 am to 4:00 pm, Monday through Friday. Decisions regarding the water system are made at the City Council meetings held on first and third Mondays of the month at 7:00 p.m. at 201 E. Pleasant Street and are open to the public.