

# WATER QUALITY REPORT FOR 2011

## March 30, 2012

# Hiawatha Water Department

This year's Water Quality Report is designed to inform you about our water and services we deliver to you every day. Our goal is to provide you with a safe and dependable supply of drinking water. Our water comes from 6 deep wells ranging from 250 feet to 530 feet. We adjust the fluoride in our water; we add poly-orthophosphate for corrosion control; we disinfect with chlorine to ensure the safety and quality of our water; and we have an iron removal plant to help reduce iron in our water. We have added a 6<sup>th</sup> well to our system and our Well #4 has an inactive status. The hardness of Hiawatha's water ranges anywhere from 14 to 20 grains per hardness (gph).

This report contains important information regarding the water quality in our water system. The source of our water is groundwater which is drawn from the Silurian aquifer(s). Our water quality testing shows the following results:

CONTAMINANT	MCLG	MCL	DETECTED LEVEL	DATE SAMPLED	RANGE OF DETECTION	VIOLATION	SOURCE
Barium (ppm)	2	2	0.13	7/11/11	ND – 0.13	NO	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Copper (ppm)	1.3	AL=1.3	0.76	09/30/11	0.03– 1.2	NO	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from woo preservatives
Chlorine (ppm)	MRDLG =4.0	MRDL=4.0	0.67	MONTHLY	0.58-0.79	NO	Water additive used to control microbes
Fluoride (ppm)	4	4	0.80	07/06/10	<0.50 – 0.80	NO	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Haloacetic Acids (HAA5) (ppb)	N/A	60	5.8	08/16/10		NO	By-products of drinking water disinfection
Lead (ppb)	0	AL=15	1	09/30/11	ND – 28	NO	Corrosion of household plumbing systems; erosion of natural deposits
Nitrate [as N] (ppm)	10	10	4.3	01/01/11	ND –4.3	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (ppm)	N/A	N/A	16	02/22/10	3.5-16	NO	Erosion of natural deposits; Added to water during treatment process
TTHM (ppb) [Total Trihalomethanes]	N/A	80	18	08/16/10		NO	By-products of drinking water disinfection

Note: Contaminants with dates indicate results from the most recent testing done in accordance with regulations. The information in this report is from data collected January 2007 to December 2011.

### 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
- 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).

Lead. Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or, high blood pressure.

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 Hiawatha 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 (800-426-4791) or at <http://www.epa.gov/safewater/lead>.

## SOURCE WATER ASSESSMENT INFORMATION

The Hiawatha Water Department water supply obtains its water from the Silurian aquifer. The Silurian aquifer was determined to have medium susceptibility to contamination because the characteristics of the aquifer and overlying materials allow contaminants to move through the aquifer fairly quickly. The wells will be somewhat susceptible to activities such as dry cleaners, gas stations, industrial sites, and municipal wastewater dischargers. A detailed evaluation of your source water was completed by the IDNR, and is available from the Hiawatha Water Department at 101 Emmons St., 319-393-5556. The City has also adopted a Wellhead Protection Ordinance and a Geothermal Ordinance. Both ordinances can be viewed on our website, [www.hiawatha-iowa.com](http://www.hiawatha-iowa.com) or a copy can be obtained at the Water Department.

## CONTACT INFORMATION

For questions regarding this information, please contact Carl Ransford, Water Superintendent at 319-393-5556 or email [watersuper@hiawatha-iowa.com](mailto:watersuper@hiawatha-iowa.com).

Decisions regarding the water system are made at the Water Board of Trustees meetings held on the third Tuesday of each month at 6:30 pm in the City Hall, 101 Emmons Street. The meetings are open to the public.

Hiawatha Water Department 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 the Water Department at 319-393-5556 opt. #4 or the local Police Department at 319-393-1212. We appreciate your assistance in protecting the water system.