

## MISSOURI VALLEY WATER WORKS 2013 WATER QUALITY REPORT

We are pleased to present this year's Consumer Confidence report. This report contains important information regarding the water quality in our water system. The data is from the calendar year 2013, as well as the previous four years (2009– 2012). This report contains important information regarding the water quality in our water system.

### Our water quality testing shows the following results

CONTAMINANT	MCL - (MCLG)	Compliance		Date	Violation	Source
		Type	Value & (Range)			
Lead (ppb)	AL=15 (0)	90th	3.80 (ND - 6)	09/30/2012	No	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	AL=1.3 (1.3)	90th	0.146 (0.0143 - 0.218)	09/30/2012	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
<b>950 - DISTRIBUTION SYSTEM</b>						
Chlorine (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	1.1 (0.64 - 2.15)	12/31/2013	No	Water additive used to control microbes
Total Trihalomethanes (ppb) [TTHM]	80 (N/A)	SGL	19.50	08/28/2013	No	By-products of drinking water chlorination
Total Haloacetic Acids (ppb) [HAA5]	60 (N/A)	SGL	7.58	08/28/2013	No	By-products of drinking water disinfection
<b>03 - WELLS 4 &amp; 5 AFTR TRTMNT @ SAMPLE TAP</b>						
Alpha Emitters (pCi/L)	15 (0)	SGL	8.5	12/04/2012	No	Erosion of natural deposits
Arsenic (ppb)	10 (0)	SGL	2.20	04/23/2013	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronic production wastes
Selenium (ppb)	50 (50)	SGL	9.20	04/23/2013	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Barium (ppm)	2 (2)	SGL	0.148	04/23/2013	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4 (4)	SGL	2.0 (0.7 – 2.0)	2013	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Sodium (ppm)	N/A (N/A)	SGL	29.700	12/31/2013	No	Erosion of natural deposits; Added to water during treatment process
Nitrate [as N] (ppm)	10 (10)	SGL	1.400	2013	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

- ◆ **“ppb”** -- “parts per billion.”
  - ◆ **“ppm”** -- “parts per million.”
  - ◆ **“pCi/l”** -- “picocuries per liter”
  - ◆ **N/A** – Not applicable
  - ◆ **Action Level (AL)** – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
  - ◆ **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.
- ◆ **ND**—Not Detected
  - ◆ **RAA** – Running Annual Average
  - ◆ **SGL** – Single Sample Result

## 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 Missouri Valley 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

The Missouri Valley water supply obtains its water from the Boyer River 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 allow contaminants to move through the aquifer fairly quickly. The wells will be most 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 Jonathan McDonald with PeopleService at 642-3146 or by e-mail at [jmcdonald@peopleservice.com](mailto:jmcdonald@peopleservice.com).

## CONTAMINANT VIOLATIONS

No contaminant violations during 2013.

## ADDITIONAL HEALTH INFORMATION

Fluoride; Some people who drinking water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL (2.0 ppm) or more may cause mottling of children's teeth, usually in children less than nine years of age. Mottling, also known as dental fluorosis, may include brown staining or pitting of the teeth, and occurs only in the developing teeth before they erupt from the gums.

## OTHER INFORMATION

Our 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 or fire hydrants, please contact us at 642-3146 or the local police/sheriff department. We appreciate your assistance in protecting the water system.

## CONTACT INFORMATION

For questions regarding this information, please contact PeopleService at 877-774-4311 ext. 22 during the following hours: 9:00 a.m. - 4:00 p.m. or Jonathan McDonald at the Missouri Valley Water Plant at 642-3146 during the following hours: 7:00 a.m. - 3:00 p.m. or e-mail [jmcdonald@peopleservice.com](mailto:jmcdonald@peopleservice.com).

Decisions regarding the water system are made at the City Council meetings held on the 1<sup>st</sup> & 3<sup>rd</sup> Tuesdays of the month at 6:00 p.m. at the Rand Community Center and are open to the public.

This CCR will **NOT** be mailed out if you wish to receive a report contact personnel above.

City of Missouri Valley 2013 Water Quality Report can be found at <http://iowaccr.org/Missouri-Valley>.