

# 2013 WATER QUALITY REPORT FOR DECORAH WATER DEPARTMENT

This report contains important information regarding the water quality in our water system. The source of our water is groundwater. Our groundwater is drawn from the alluvial aquifer and Middle Ordovician (Galena, Decorah, St. Peter). Our water quality testing shows the following results:

CONTAMINANT	MCL - (MCLG)	Compliance		Date	Violation Yes/No	Source
		Type	Value & (Range)			
Copper (ppm)	AL=1.3 (1.3)	90th	0.371 (0.0175 - 0.695)	09/30/2010	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	AL=15 (0)	90th	8.90 (ND - 14)	09/30/2010	No	Corrosion of household plumbing systems; erosion of natural deposits
<b>950 - DISTRIBUTION SYSTEM</b>						
Chlorine (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	0.5 (0.4 - 0.6)	12/31/2012	No	Water additive used to control microbes
Total Trihalomethanes (ppb) [TTHM]	80 (N/A)	SGL	17.00	07/12/2010	No	By-products of drinking water chlorination
Total Haloacetic Acids (ppb) [HAA5]	60 (N/A)	SGL	7.21	07/12/2010	No	By-products of drinking water disinfection
Fluoride (ppm)	4 (4)	SGL	1.02 (0.64-1.02)	05/03/2012	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
<b>01 - WATER STREET PUMP HOUSE, #1</b>						
Thallium (ppb)	2 (0.5)	SGL	0.60	02/14/2012	No	Leaching from ore-processing sites; Discharge from electronics, glass, and drug factories
Barium (ppm)	2 (2)	SGL	0.0923	02/14/2012	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4 (4)	SGL	1	02/14/2012	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Sodium (ppm)	N/A (N/A)	SGL	11.6	02/14/2012	No	Erosion of natural deposits; Added to water during treatment process
Nitrate [as N] (ppm)	10 (10)	SGL	3.700 (2.700 - 3.700)	12/31/2012	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
<b>02 - WATER STREET PUMP HOUSE, #2</b>						
Barium (ppm)	2 (2)	SGL	0.0636	02/14/2012	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4 (4)	SGL	1	02/14/2012	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Antimony (ppb)	6 (6)	SGL	1.50	02/14/2012	No	Discharge from petroleum refineries; fire retardants; ceramics; electronic; solder
Sodium (ppm)	N/A (N/A)	SGL	8.1	02/14/2012	No	Erosion of natural deposits; Added to water during treatment process

Nitrate [as N] (ppm)	10 (10)	SGL	4.300 (1.600 - 4.300)	12/31/2012	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
03 - WATER STREET PUMP HOUSE, #3						
Barium (ppm)	2 (2)	SGL	0.0768	02/14/2012	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4 (4)	SGL	0.2	02/14/2012	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Sodium (ppm)	N/A (N/A)	SGL	8.2	02/14/2012	No	Erosion of natural deposits; Added to water during treatment process
Nitrate [as N] (ppm)	10 (10)	SGL	3.600 (1.400 - 3.600)	12/31/2012	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
05 - GOOSE ISLAND DRIVE PUMP HOUSE, #6						
Fluoride (ppm)	4 (4)	SGL	0.4	02/14/2012	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Barium (ppm)	2 (2)	SGL	0.0901	02/14/2012	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Thallium (ppb)	2 (0.5)	SGL	1.30	02/14/2012	No	Leaching from ore-processing sites; Discharge from electronics, glass, and drug factories
Antimony (ppb)	6 (6)	SGL	0.60	02/14/2012	No	Discharge from petroleum refineries; fire retardants; ceramics; electronic; solder
Sodium (ppm)	N/A (N/A)	SGL	11.5	02/14/2012	No	Erosion of natural deposits; Added to water during treatment process
Nitrate [as N] (ppm)	10 (10)	SGL	4.300 (2.500 - 4.300)	12/31/2012	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
06 - BALL PARK, #7						
Fluoride (ppm)	4 (4)	SGL	0.6	02/14/2012	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Barium (ppm)	2 (2)	SGL	0.108	02/14/2012	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Sodium (ppm)	N/A (N/A)	SGL	16.1	02/14/2012	No	Erosion of natural deposits; Added to water during treatment process
Nitrate [as N] (ppm)	10 (10)	SGL	4.000 (2.400 - 4.000)	12/31/2012	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
07 - MILL STREET, #5						
Barium (ppm)	2 (2)	SGL	0.0853	02/14/2012	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4 (4)	SGL	1.6	02/14/2012	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Thallium (ppb)	2 (0.5)	SGL	1.10	02/14/2012	No	Leaching from ore-processing sites; Discharge from electronics, glass, and drug factories

Antimony (ppb)	6 (6)	SGL	2.50	02/14/2012	No	Discharge from petroleum refineries; fire retardants; ceramics; electronic; solder
Selenium (ppb)	50 (50)	SGL	2.00	02/14/2012	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Sodium (ppm)	N/A (N/A)	SGL	10.5	02/14/2012	No	Erosion of natural deposits; Added to water during treatment process
Nitrate [as N] (ppm)	10 (10)	SGL	5.300 (2.800 - 5.300)	12/31/2012	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
08 - BUSINESS PARK SAMPLE TAP, #8						
Fluoride (ppm)	4 (4)	SGL	0.1	04/20/2009	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Barium (ppm)	2 (2)	SGL	0.0649	04/08/2009	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Sodium (ppm)	N/A (N/A)	SGL	2.4	04/08/2009	No	Erosion of natural deposits; Added to water during treatment process

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
- IDSE – Initial Distribution System Evaluation
- 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
- 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 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. DECORAH 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 or at <http://www.epa.gov/safewater/lead>.

#### **ADDITIONAL HEALTH INFORMATION**

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

#### **SOURCE WATER ASSESSMENT INFORMATION**

This water supply obtains a portion of its water from the sand and gravel, sandstone of the Alluvial-Ordovician aquifer. The Alluvial-Ordovician aquifer was determined to be highly susceptible to contamination because the characteristics of the aquifer and overlying materials provide little protection from contamination at the land surface. The Alluvial-Ordovician wells will be highly susceptible to surface contaminants such as leaking underground storage tanks, contaminant spills, and excess fertilizer application. A detailed evaluation of your source water was completed by the IDNR, and is available from Todd Ihde at Decorah Water Department at 800 W. Water St. or by phone at 382-5171.

#### **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, wells or fire hydrants, please contact us at Decorah Water Dept. 382-5171 or the local police/sheriff department by dialing 911. We appreciate your assistance in protecting the water system. The City of Decorah also tested water for Unregulated Contaminant Monitoring Regulation (UCMR). We had no detection from these samples.

#### **CONTACT INFORMATION**

For questions regarding this information, please contact Todd Ihde, Decorah Water Superintendent at 382-5171 during the following hours: 7-4 Monday – Friday.

Decisions regarding the water system are made at the Utility Comm meetings and then approved at the City Council meetings. These meetings are posted 24 hours in advance and are held on the 1<sup>st</sup> and 3<sup>rd</sup> Mondays at 7:30 pm at City Hall and are open to the public. These meetings are also submitted to media. Citizens may also contact City Hall or the Decorah Water Dept. for more information regarding such meetings.

#### **YOU MAY PICK UP COPIES OF THIS CONSUMER CONFIDENCE REPORT AT THE FOLLOWING LOCATIONS:**

DECORAH CITY HALL	400 CLAIRBORNE DR	563-382-3651
DECORAH PUBLIC LIBRARY	202 WINNEBAGO ST.	563-382-3717
DECORAH WATER DEPT.	800 WATER ST.	563-382-5171

Please Note: This report will not be mailed to individual customers.