

# 2016 WATER QUALITY REPORT FOR VERNON TOWNSHIP

This report contains important information prepared by the City of Dubuque, regarding the water quality in the Vernon Township Water System in 2016. The source of the water was groundwater water.

## Vernon Township Water Quality testing shows the following results:

CONTAMINANT	MCL - (MCLG)	COMPLIANCE		DATE	VIOLATION	TYPICAL SOURCE
		TYPE	VALUE & (RANGE)			
Copper (ppm)	AL= 1.3 -1.3	90th	0.856 (0.0134 - 0.984)	2014	NO	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	AL = 15 (0)	90th	0.80 (ND - 2)	2014	NO	Corrosion of household plumbing systems; Erosion of natural deposits
<b>DISTRIBUTION SYSTEM</b>						
Chlorine (ppm)	MRDL = 4.0 (MRDLG = 4.0)	RAA	1.1 (ND - 2.6)	12/31/2016	NO	Water additive used to control microbes
Total Coliform Bacteria	TT (TT)	RTCR	1 Sample Positive	7/31/2016	NO	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other water borne pathogens may be present, or that a potential pathway exists through which contamination may enter the drinking water
Total Trihalomethanes (ppb)	80 (N/A)	SGL	2.32	8/11/2015	NO	By-products of drinking water chlorination
<b>FINISHED WATER TAP</b>						
Combined Radium (pCi/L)	5 (0)	SGL	3.3	4/20/2016	NO	Erosion of natural deposits
Barium (ppm)	2 (2)	SGL	0.0761	3/11/2014	NO	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4 (4)	SGL	0.3	3/18/2014	NO	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Sodium (ppm)	N/A (N/A)	SGL	24.2	3/11/2014	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.

## TABLE DEFINITIONS

**AL (Action Level):** The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow

**MCL (Maximum Contaminant Level):** 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 technology.

**MCLG (Maximum Contaminant Level Goal):** The level of a contaminant in drinking water below which there is no known or expected risk to health

**MRDL (Maximum Residual Disinfectant Level):** 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.

**MRDLG (Maximum Residual Disinfectant Level Goal):** The level of a drinking water disinfectant below which there is no known or expected risk to health

**N/A:** Not Applicable. A Drinking Water Standard has not yet been determined.

**ND:** Not Detected

**NTU:** Nephelometric Turbidity Units

**pCi/L:** picocuries per liter

**ppb:** parts per billion (or micrograms per liter)

**ppm:** parts per million (or milligrams per liter)

**RAA:** Running Annual Average

**Range (Low - High):** This column represents a range of individual sample results, from lowest to highest, that were collected during the reporting year

**RTCR:** Revised Total Coliform rule

**SGL:** Single Monitoring Period Sample

**TT (Treatment Technique):** A required process intended to reduce the level of contaminant in drinking water.

## 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 Dubuque 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>.

## SOURCE WATER ASSESSMENT INFORMATION

This water supply obtains its water from the sandstone and dolomite of the Cambrian-Ordovician aquifer. The Cambrian-Ordovician aquifer was determined to have low susceptibility to contamination because the characteristics of the aquifer and overlying materials provide natural protection from contaminants at the land surface. The Cambrian-Ordovician well will have low susceptibility to surface contaminants such as leaking underground storage tanks, contaminant spills, and excess fertilizer application. The Iowa Department of Natural Resources completed a detailed evaluation of the source water; you may call 563-589-4291 to obtain a copy of the report.

## **CONTACT INFORMATION**

For more information about this report, or for any questions relating to your drinking water, please contact Denise Ihrig, P.E., Water Department Manager, at 563-589-4291, or Brant Schueller, Water Distribution Supervisor, at 563-589-4303.