2017 WATER QUALITY REPORT
FOR
DOW CITY WATER WORKS

This report contains important information regarding the water quality in our water system. The source of our water is groundwater. Our water quality testing shows the following results:

CONTAMINANT	MCL - (MCLG)	Compliance		Date	Violation	Source
		Type	Value & (Range)		Yes/No	
Total Trihalomethanes (ppb) [TTHM]	80 (N/A)	LRAA	4.00 (4 - 4)	09/30/2016	No	By-products of drinking water chlorination
Lead (ppb)	AL=15 (0)	90th	4.00 (ND - 9)	2014	No	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	AL=1.3 (1.3)	90th	0.73 (ND - 0.77)	2014	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
950 - DISTRIBUTION SYSTEM						
Chlorine (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	0.8 (0.5 - 1.1)	12/31/2016	No	Water additive used to control microbes
02 - WELLS 2 & 3 @ WEST WELL HOUSE HYDRANT						
Combined Radium (pCi/L)	5 (0)	SGL	3.7	07/07/2015	No	Erosion of natural deposits
Fluoride (ppm)	4 (4)	SGL	0.34	02/10/2016	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Selenium (ppb)	50 (50)	SGL	10.00	02/10/2016	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Barium (ppm)	2 (2)	SGL	0.3	02/10/2016	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Nitrate [as N] (ppm)	10 (10)	SGL	12.00 (7.5 - 12.00)	2016	Yes	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
03 - WELL 3 @ WEST WELL HOUSE HYDRANT						
Nitrate [as N] (ppm)	10 (10)	SGL	7.0 (6.9 - 7.0)	2016	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

- 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

- 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
- RTCR – Revised Total Coliform Rule
- NTU – Nephelometric Turbidity Units

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. DOW CITY WATER WORKS 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.

CONTAMINANT VIOLATIONS

Violation Type	Contaminant	Begin date	End Date
Our water system violated a drinking water standard for Nitrate (as N). Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.			
MCL (Chem-Rad), Single Sample	Nitrate (as N)	10/01/2016	10/31/2016

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 its water from the buried sand and gravel and sandstone of the Buried Sand and Gravel-Dakota aquifer. The Buried Sand and Gravel-Dakota aquifer was determined to be susceptible to contamination because the characteristics of the aquifer and overlying materials provide some protection from contaminants from the land surface. The Buried Sand and Gravel-Dakota wells will be 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 Iowa Department of Natural Resources, and is available from the Water Operator at 712-674-3350 .

CONTACT INFORMATION

For questions regarding this information or how you can get involved in decisions regarding the water system, please contact DOW CITY WATER WORKS at 712-674-3350.