

2016 WATER QUALITY REPORT FOR City of Dyersville

This report is being published and sent to all water customers of the City of Dyersville and the request of the Dept. of Nat. Resources. 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 Cambrian Jordan Sandstone aquifer(s). Our water quality testing shows the following results:

950-Distribution System

CONTAMINANT	MCLG	MCL	DETECTED LEVEL	DATE SAMPLED	RANGE OF DETECTION	VIOLATION	SOURCE
Copper (ppm)	1.3	AL=1.3	0.38	2013	0.0291 - .395	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	0	AL=15	3.70	2013	ND -54 1 sample exceeded AL	No	Corrosion of household plumbing systems; erosion of natural deposits
Chlorine (ppm)	MRDLG =4.0	MRDL=4.	1.6	RAA	.1-2.6	No	Water additive used to control microbes

Finished Water Tap, #4

CONTAMINANT	MCLG	MCL	DETECTED LEVEL	DATE SAMPLED	RANGE OF DETECTION	VIOLATION	SOURCE
Alpha emitters (pCi/L)	0	15	13.5	1-08-15	N/A	No	Erosion of natural deposits
Combined radium (pCi/L)	0	5	6.7	1-1-15 – 12-31-15	5.7-6.7	Yes	Erosion of natural deposits
Sodium (ppm)	N/A	N/A	30.2	1/13/15	NA	No	Erosion of natural deposits; Added to water during treatment process
Nitrate [as N] (ppm)	10	10	<0.1	1/13/15	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Fluoride (ppm)	4	4	1.0	1/5/12	N/A	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Barium (ppm)	2	2	0.0669	1/4/2012	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits

Finished Water Tap #5

CONTAMINANT	MCLG	MCL	DETECTED LEVEL	DATE SAMPLED	RANGE OF DETECTION	VIOLATION	SOURCE
Alpha emitters (pCi/L)	0	15	5.52	1-12-10	N/A	No	Erosion of natural deposits
Combined radium (pCi/L)	0	5	2.8	1/8/13	NA	No	Erosion of natural deposits
Barium (ppm)	2	2	0.039	4/3/07	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	1.2	4/3/07	N/A	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Sodium (ppm)	N/A	N/A	52.3	4-5-13	NA	No	Erosion of natural deposits; Added to water during treatment process
Nitrate [as N] (ppm)	10	10	<0.1	1/13/15	NA	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
- 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.
- RAA – Running Annual Average

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. Dyersville 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>.

CONTAMINATION VIOLATIONS

In 2015 our combined radium average was 6.1pCi/l. With this number our running annual average is over 5pCi/l. Combined Radium 226 and 228 is above the EPA recommended level. Some people who drink water containing Radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer. The City of Dyersville is in the process of building a treatment system to remove combine radium. This system should be in place by this fall. Potential adverse health effects are unknown at this time.

SOURCE WATER ASSESSMENT INFORMATION

The Dyersville water supply obtains its water from the Cambrian Jordan Sandstone aquifer. The Cambrian Jordan Sandstone aquifer was determined to be not susceptible to contamination because the characteristics of the aquifer and overlying materials prevent easy access of contaminants to the aquifer. The wells are somewhat susceptible to activities such as not be susceptible to most contaminant sources except through pathways to the aquifer such as abandoned or poorly maintained wells. A detailed evaluation of your source water was completed by the IDNR, and is available from Keith Mensen at 563-875-7724.

CONTACT INFORMATION

For questions regarding this information, please contact City Hall at 563-875-7724 during the following hours: 8:00 am – 5:00 pm. Decisions regarding the water system are made at the Council meetings held on first and third Mondays at 6:30 p.m. at City Hall Basement and are open to the public.