

Ayrshire Water Works 2017 Water Quality Report

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 Yes/No	Source
		Type	Value & (Range)			
Copper (ppm)	AL=1.3 (1.3)	90th	1 (0.05 - 1.6) 1 sample(s) exceeded AL	2015	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	AL=15 (0)	90th	12.00 (ND - 22) 1 sample(s) exceeded AL	2015	No	Corrosion of household plumbing systems; Erosion of natural deposits
DISTRIBUTION SYSTEM						
Chlorine (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	3.6 (2.6 - 4.8)	12/31/2017	No	Water additive used to control microbes
Nitrite [as N] (ppm)	1 (1)	SGL	0.35 (ND - 0.35)	2017	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
WATER TREATMENT PLANT						
Fluoride (ppm)	4 (4)	SGL	0.3	6/10/2013	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Sodium (ppm)	N/A (N/A)	SGL	110	4/26/2016	No	Erosion of natural deposits; Added to water during treatment process
Nitrite [as N] (ppm)	1 (1)	SGL	0.14	2017	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Total Trihalomethanes (ppb) [TTHM]	80 (N/A)	LRAA	2	7/27/2016	No	By-products of drinking water chlorination
Total Haloacetic Acids (ppb) [HAA5]	60 (N/A)	LRAA	6	7/27/16	No	By-products of drinking water disinfection

Contaminates with dates indicate results from the most recent testing done in accordance with regulations.

Definitions for the abbreviations are noted below.

DEFINITIONS

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 treatment 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. 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

LRAA-Locational Running Annual Average

TT (Treatment Technique)-A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

AL (Action Level)-The concentration of a contaminant which, if exceeded, triggers treatment or other requirements, which a water system must follow.

MRDLG (Maximum Residual Disinfectant Level Goal)-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.

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.

SGL-Single Sample Result

RTCR-Revised Total Coliform Rule

2017 Water Quality Report

Ayrshire Water Works is pleased to present the Water Quality Report, designed to inform you about the quality of water and services we deliver.

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. Ayrshire 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>.

ADDITIONAL HEALTH INFORMATION

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

Nitrite in drinking water at levels above 1 ppm is a health risk for infants of less than six months of age. High nitrite levels in drinking water can cause blue baby syndrome. Nitrite 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 of the Buried Sand and Gravel aquifer. The Buried Sand and Gravel 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 Buried Sand and Gravel wells will have low susceptibility 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 712-262-8847.

Please contact Kelly Graplar
with any questions at
Iowa Lakes Regional Water
1301 38th Avenue West
Spencer, IA 51301
Phone: 712-262-8847
E-mail: kelly.graplar@ilrw.org

For questions regarding this information or how you can get involved in decisions regarding the water system, please contact the Ayrshire Water Works System.