

2022 WATER QUALITY REPORT

for Southshore Water System

Iowa Regional Utilities Association (IRUA) strives to provide you with a safe, dependable supply of drinking water that is in compliance with the guidelines established by the Environmental Protection Agency. This report contains important information regarding the water quality in the Southshore water system. Water for this system is purchased through a bulk connection with Knoxville Water Works. Knoxville Water Works obtains their water from 3 wells located in the sandstone and dolomite of the Cambrian-Ordovician aquifers. Our water quality testing shows the following results:

Iowa Regional Utilities Association – Southshore System

Contaminant	MCL (MCLG)	Compliance		Year Tested	Violation	Source
		Type	Result (Range)			
Lead (ppb)	AL=15 (0)	90th	ND	2022	No	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	AL=1.3 (1.3)	90th	0.0654 (0.0071 - 0.0775)	2022	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Southshore Distribution System						
Chlorine (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	0.9 (0.1 – 2.06)	2022	No	Water additive used to control microbes
Nitrate [as N] (ppm)	1 (1)	SGL	0.640 (ND – 0.640)	2022	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Knoxville Finished Water After Treatment						
Gross Alpha (pCi/L)	15 (0)	SGL	5.2	2020	No	Erosion of natural deposits.
Barium (ppm)	2 (2)	SGL	0.0139	2022	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride (ppm)	4 (4)	SGL	1.3	2022	No	Water additive which promotes strong teeth; Erosion of natural deposits, Discharge from fertilizer and aluminum factories.
Selenium (ppb)	50 (50)	SGL	1.20	2022	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Sodium (ppm)	N/A (N/A)	SGL	154	2022	No	Erosion of natural deposits; Added to water during treatment process.

NOTE: The EPA requires monitoring of over 80 drinking water contaminants. Those listed above are the only contaminants detected in your drinking water. 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

DEFINITIONS CONTINUED

- 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 the water poses a health risk. More information about contaminants or potential health effects can be obtained by calling the EPA'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. Iowa Regional Utilities Association – Southshore 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 drinking 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>.

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

The water supply for this system is obtained from the Knoxville Water Works where the water is pumped 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 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 IRUA at 641-792-7011.

OTHER INFORMATION

Iowa Regional Utilities Association – Southshore 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 any part of the water system, please contact us at (641) 792-7011 or the local police/sheriff department. We appreciate your assistance in protecting the water system.

CONTACT INFORMATION

For questions regarding this information, please contact Mike Wildung at (641) 792-7011. Decisions regarding the water system are made by the Iowa Regional Utilities Association (IRUA) Board of Directors during their monthly meetings. If you wish to speak with the Board, please contact IRUA at (641) 792-7011.