2022 WATER QUALITY REPORT
for the
CITY OF FAIRBANK

The City of Fairbank 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 our water system. In 2022 the City of Fairbank purchased its water through a bulk connection with Iowa Regional Utilities Association (IRUA) and receives treated water from IRUA's water treatment plant near Waverly. Results of water quality testing from our distribution system and from IRUA's water treatment plant near Waverly are provided below.

Contaminant	MCL (MCLG)	Compliance		Year Tested	Violation Yes/No	Source
		Type	Result (Range)			
City of Fairbank						
Copper (ppm)	AL=1.3 (1.3)	90th	0.0436 (ND - 0.107)	2022	No	Corrosion of plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
Lead (ppb)	AL=15 (0)	90th	4.10 (ND - 135) 1 sample exceeded AL	2022	No	Corrosion of household plumbing systems; erosion of natural deposits.
Distribution System						
Chlorine (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	2.2 (1.57 – 3.6)	2022	No	Water additive used to control microbes.
Iowa Regional Utilities Association Water Treatment Plant Source (near Waverly, IA)						
Well #1 after treatment						
Gross Alpha, inc (pCi/L)	15 (0)	SGL	1.4	2019	No	Erosion of natural deposits.
Sodium (ppm)	N/A (N/A)	SGL	11.6	2020	No	Erosion of natural deposits; Added to water during the treatment process.
Nitrate [as N] (ppm)	10 (10)	SGL	4.6 (4.300– 4.600)	2022	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Well #2 after treatment						
Sodium (ppm)	N/A (N/A)	SGL	9.85	2021	No	Erosion of natural deposits; Added to water during the treatment process.
Nitrate [as N] (ppm)	10 (10)	SGL	4.600 (4.300 - 4.600)	2022	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

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
- 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. The City of Dike 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.

The most common drinking water treatment is disinfection. Disinfection is considered to be the primary mechanism to kill bacteria and other germs to prevent the spread of waterborne diseases. Chlorine is the most widely used disinfectant. Disinfectants combine with organic and inorganic matter present in water to form chemicals called disinfectant by-products. EPA sets standards for controlling the levels of disinfectants and disinfectant by-products in drinking water.

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).

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 Silurian-Devonian well will be highly 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 (319) 240-8065

This water supply obtains its water from the dolomite and limestone of the Silurian-Devonian aquifer. The Silurian-Devonian aquifer was determined to be highly susceptible to the contamination because the characteristic of the aquifer and overlying materials provide little protection from contamination at the land surface. The Silurian-Devonian well will be highly 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 (319) 240-8065. IRUA's treatment plant near Waverly obtains its water from the dolomite Devonian aquifer. The Devonian aquifer was determined to be highly susceptible to contamination because the characteristics of the aquifer and overlying materials provide little protection from contamination at the land surface. IRUA wells are highly susceptible to leakage from underground storage tanks, wastewater discharges, sinkholes, and leakage from nearby has pipelines. A detailed evaluation of the source was completed by the Iowa Department of Natural Resources and is available from the Water Operator Iowa Regional Utilities Association at (641) 792-7011.

OTHER INFORMATION
The City of Fairbank 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 (319) 635-2869 or the local police/sheriff department. We appreciate your assistance in protecting the water system.

For questions regarding this information, please contact Brian Delagaardelle, City Water Operator at (319) 240-8065. Decisions regarding the water system are made at the Fairbank City Council meetings, which are held on the second and fourth Monday of each month at 6:00 p.m. at the Fairbank City Hall; 116 E Main Street; Fairbank, Iowa and are open to the public.