

2021 WATER QUALITY REPORT FOR ALVORD MUNICIPAL WATER SUPPLY

This report contains important information regarding the water quality in our water system. The source of our water is groundwater. All of the water is purchased. Purchased water comes from Lyon-Sioux RWS-Doon. Our water quality testing shows the following results:

CONTAMINANT	MCL - (MCLG)	Compliance		Date	Violation	Source
		Type	Value & (Range)			
Lead (ppb)	AL=15 (0)	90th	0.90 (1 - 1)	2021	No	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	AL=1.3 (1.3)	90th	1.9498 (0.2448 - 2.0849) 2 sample(s) exceeded AL	2021	Yes	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	1.1 (0.7 - 1.2)	12/31/2021	No	Water additive used to control microbes
Total Trihalomethanes (ppb) [TTHM]	80 (N/A)	SGL	15.00	08/05/2019	No	By-products of drinking water chlorination
Total Haloacetic Acids (ppb) [HAA5]	60 (N/A)	SGL	7.00	08/05/2019	No	By-products of drinking water disinfection

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 affects can be attained 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. ALVORD MUNICIPAL WATER SUPPLY 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>.

VIOLATION TYPE:

Our water system violated a drinking water standard for Copper. Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over relatively short period of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should contact their personal doctor.

SOURCE WATER ASSESSMENT INFORMATION

This Water Supply obtains some or all of its water from another public water supply. It is a consecutive water supply, where an originating parent supply provides drinking water to one or more downstream supplies.

ORIGINAL SUPPLY ID
IA60000733

ORIGINAL SUPPLY NAME
Lyon-Sioux RWS-Doon

CONTACT INFORMATION

For questions regarding this information or how you can get involved in decisions regarding the water system, please contact ALVORD MUNICIPAL WATER SUPPLY at 712-473-2246

Our system was in violation of the drinking water standard for copper. Water Quality Parameter Samples were completed (see attached results). 10 lead and copper samples will be taken between Jan. 1 2022 and June 30 2022. 10 more samples will be taken between July 1, 2022 and Dec. 31 2022.

PURCHASED WATER INFORMATION

Our water system purchases water from the system(s) shown below. Their water quality is as follows:

CONTAMINANT	MCL - (MCLG)	Compliance		Date	Violation	Source
		Type	Value & (Range)		Yes/No	
6000733 - LYON-SIOUX RWS-DOON						
01 - WELLS D1 - D12 @ DOON PLANT LAB SINK						
Gross Alpha, inc (pCi/L)	15 (0)	SGL	7.1	04/06/2021	No	Erosion of natural deposits
Sodium (ppm)	N/A (N/A)	SGL	12.81	05/07/2019	No	Erosion of natural deposits; Added to water during treatment process
Nitrate [as N] (ppm)	10 (10)	SGL	5.68 (4.62 - 5.68)	2021	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
05 - BELOIT #1/SAMPLE TAP IN BELOIT PLANT						
Cyanide (ppb)	200 (200)	SGL	6.00	06/09/2020	No	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories
Barium (ppm)	2 (2)	SGL	0.0353	06/09/2020	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Arsenic (ppb)	10 (0)	SGL	6.50	06/09/2020	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronic production wastes
Fluoride (ppm)	4 (4)	SGL	0.2	06/09/2020	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Sodium (ppm)	N/A (N/A)	SGL	15.46	06/09/2020	No	Erosion of natural deposits; Added to water during treatment process
Nitrate [as N] (ppm)	10 (10)	SGL	4.43	2021	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Department of Natural Resources

Water Quality Parameter (WQP) Report Form

Initial Reporting

Name of Water System Alvord Municipal Water Supply

Attention: Gib Van Hill

Address: 302 Main Street

Address:

City, State, Zip: Alvord, IA 51230

Date Sample Collected	Sample ID#	Address / Location	pH	Total Alkalinity, mg/L	Calcium as CaCO ₃ , mg/L	Conductivity, umho / cm @25C	Temp, C
11/3/21	DS Site 1	406 1 st St.	8.01	260	2.54	1156	6.9
11/3/21	S/EP 04	EP	7.4	348	121	1000	6.9
11/22/21	DS Site 1	406 1 st St.	7.73	295	0.645	984	7.6
11/22/21	S/EP 04	EP	7.43	285	129	899	7.6

Collect a total of 2 sets of samples at 1 site located within your distribution system (DS), and a total of 2 sample sets at source entry point 04. Collect these samples during the monitoring period in which you exceed the action level, or by December 10, 2021. The 2 sets of WQP samples should be collected at different times in the monitoring period (at least 2 weeks apart) to ensure that you have data that is representative of possible seasonal changes. These requirements change when you install corrosion control treatment or are placed on reduced monitoring.

Population	# WQP sites
10,001 to 100,000	10
3,301 to 10,000	3
501 to 3,300	2
101 to 500	1
100 or fewer	1

Mail this information no later than December 10, 2021:

Department of Natural Resources

Attn.: Water Supply Section

Wallace State Office Building, 502 E 9th St

Des Moines, IA 50319-0034

IDNR USE ONLY
PWSID # 6003032
PWS NAME: Alvord Municipal Water Supply
INITIALS:
TODAY'S DATE: 12/28/21