

City of Ellendale

Annual Drinking Water Quality Report

2022

We're pleased to present to you this year's *Annual Drinking Water Quality Report*. This report is designed to inform you about the safe clean water we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source is purchased from Southeast Water Users.

We have a wellhead protection plan available in the Southeast Water Users office in Mantador, ND that provides more information, such as, potential sources of contamination.

Our public water system, in cooperation with the North Dakota Department of Environmental Quality, has completed the delineation and contaminant/land use inventory elements of the North Dakota Source Water Protection Program. Based on the information from these elements, the North Dakota Department of Environmental Quality has determined that our source water is “moderately susceptible” to potential contaminants.

If you have any questions about this report or concerning your water utility, please contact Candace Middlestead at (701) 349-3252. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the second Monday of the month at 6:00 pm at Ellendale City Hall. If you are aware of non-English speaking individuals who need help with the appropriate language translation, all efforts will be made to provide assistance.

The City of Ellendale would appreciate it if large volume water customers post copies of the CCR in conspicuous locations or distribute them to tenants, residents, patients, students, and/or employees, so individuals who consume the water, but do not receive a water bill can learn about our water system.

Ellendale routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st to December 31st, 2022 or the most recent data available.

As authorized and approved by EPA, the state has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of our data [e.g., for organic contaminants], though representative, is more than one year old.

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 poses a health risk. More information about contaminants and potential effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds,

reservoirs, springs and wells. As water travels over the surface of the land, or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining or farming.

Pesticides and herbicides, which come from a variety of sources such as agriculture, urban storm water runoff and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may come from gas stations, urban storm water runoff and septic systems.

Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we have provided the following definitions:

Not Applicable (NA) - laboratory analysis indicates that the contaminant is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter ($\mu\text{g/l}$) - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

Micromhos per centimeter (umho/cm) – micromhos per centimeter is a measure of conductivity in water.

Observations (obsvns) – observations/field at 100 Power.

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

Treatment Technique (TT) - A treatment technique is a required process intended to reduce the

level of a contaminant in drinking water.

Maximum Contaminant Level - The “Maximum Allowed” (MCL) is 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 - The “Goal” (MCLG) is 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.

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.

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.

Range – The range of detections, the lowest to the highest result value recorded during the required monitoring timeframe for systems with multiple entry points.

TEST RESULTS for Ellendale								
Contaminant	MCLG	MCL	Level Detected	Unit Measurement	Range	Date (year)	Violation Yes/No Other Info	Likely Source of Contamination
Inorganic Contaminants								
Arsenic	0	10	1.85	ppb	NA	2016	NO	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barum	2	2	0.0461	ppm	N/A	2018	NO	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium	100	100	4.8	ppb	N/A	2018	NO	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride	4	4	0.266	ppm	N/A	2018	NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories

Nitrate-Nitrite (as Nitrogen)	10	10	.422	ppm	N/A	2022	NO	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	50	50	2.52	ppb	N/A	2018	NO	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Lead	0	AL=15	6.55 90 th % Value	ppb	NA	2020	1 Site exceeded AL	Corrosion of household plumbing systems, erosion of natural deposits
Copper	0	AL=1.3	.949 90 th % Value	ppm	NA	2020	1 Site exceeded AL	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
<u>DISINFECTION BY-PRODUCTS</u>	<u>MCLG</u>	<u>MCL</u>	<u>LEVEL DETECT</u>	<u>UNITS</u>	<u>RANGE</u>	<u>DATE</u>	<u>VIOLATION</u>	<u>Likely Source of Contamination</u>
Haloacetic Acids (HAA5 - IDSE) *samples taken 1/1/22 to 12/31/22	NA	60	11	ppb	9.29 to 10.95	2022	NO	By-product of drinking water chlorination
Trihalomethanes (TTHM - IDSE) *samples taken 1/1/22 to 12/31/22	NA	80	47	ppb	42.92 to 46.55	2022	NO	By-product of drinking water chlorination
<u>DISINFECTANTS</u>	<u>MCLG</u>	<u>MCL</u>	<u>LEVEL DETECT</u>	<u>UNITS</u>	<u>RANGE</u>	<u>DATE</u>	<u>VIOLATION</u>	<u>Likely Source of Contamination</u>
Chlorine	MRDL= 4.0	MRDL= 4	1.3	ppm	0.41 to 2.78	2022	NO	Water additives used to control microbes
<u>RADIOACTIVE CONTAMINANTS</u>	<u>MCLG</u>	<u>MCL</u>	<u>LEVEL DETECT</u>	<u>UNITS</u>	<u>RANGE</u>	<u>DATE</u>	<u>VIOLATION</u>	<u>Likely Source of Contamination</u>
Gross Alpha, Including RA, Excluding RN & U	MRDL= 15	MRDL= 15	6.72	pCi/l	NA	2017	NO	Erosion of natural deposits
RADIUM Combined (226, 228)	MRDL=	MRDL= 5	0.4	pCi/l	NA	2017	NO	Erosion of natural deposits
URANIUM, Combined	MRDL=	MRDL= 30	1.05	ppb	NA	2017	NO	Erosion of natural deposits

<u>UNREGULATED CONTAMINANTS</u>	<u>MCLG</u>	<u>MCL</u>	<u>LEVEL DETECTED</u>	<u>UNITS</u>	<u>RANGE</u>	<u>DATE</u>	<u>VIOLATIONS</u>	<u>Likely Source of Contamination</u>
Alkalinity, Total			334	ppm	N/A	2018	NO	
Bicarbonate as HCO3			407	ppm	N/A	2018	NO	
Calcium			129	ppm	N/A	2018	NO	
Chloride			138	ppm	N/A	2018	NO	
Conductivity @ 25 C UMHOS/CM			1410	umho/cm	N/A	2018	NO	
Hardness, Total (AS CaCO3)			474	ppm	N/A	2018	NO	
Magnesium			36.9	ppm	N/A	2018	NO	
Nickel			0.00386	ppm	NA	2018	NO	
PH			7.41	PH	N/A	2018	NO	
Potassium			8.2	ppm	N/A	2018	NO	
Sodium			99.9	ppm	N/A	2018	NO	
Sodium Adsorption Ratio			1.99	obsvns	N/A	2018	NO	
Sulfate			236	ppm	232-236	2018	NO	
TDS			850	ppm	N/A	2018	NO	
ZINC			0.521	ppm	N/A	2018	NO	

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

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

As you can see by the table, our system had no violation. We are proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some contaminants have been detected. The EPA has determined that your water IS SAFE at these levels.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Thank you for allowing us to provide your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements sometimes require rate structure adjustments.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as, persons with cancer undergoing

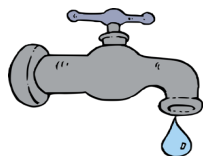
chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

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. City of Ellendale is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. **Use water from the cold tap for drinking and cooking. When your water has been setting 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>

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Please call our office if you have questions. 701-349-3252

The City of Ellendale works diligently to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.



The City of Ellendale is an Equal Opportunity Employer and Provider