



# 2022 WATER QUALITY REPORT FOR CITY OF ESTHERVILLE, IOWA



We are pleased to provide you with the 2022 Annual Water Quality Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is and always has been, to provide you a safe and dependable supply of drinking water.

This report contains important information regarding the water quality in our water system. The source of our water is groundwater. Our groundwater is drawn from the Ordovician-Cambrian (Jordan) aquifer.

We have five (5) wells drilled to a depth of approximately 750 feet. Water from these wells is pumped to our treatment plant where it is filtered and softened before going to the consumer. The water is also disinfected with chlorine, and fluoride is added to help prevent tooth decay.

**We are pleased to report our drinking water is safe and meets all federal and state requirements.**

The Estherville Water Plant monitors for contaminants in your drinking water according to federal and state laws. These agencies determine how often our water must be tested for certain contaminants. Our water quality testing shows the following items detected:

CONTAMINANT	MCL – (MCLG)	Compliance		Date	Violation	Source
		Type	Value & (Range)			
Lead (ppb)	AL=15 (0)	90 <sup>th</sup>	1.00 (ND – 4)	2021	No	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	AL=1.3 (1.3)	90 <sup>th</sup>	0.16 (0.06 – 0.21)	2021	No	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	1.42 (0.68 – 2.10)	2022	No	Water additive used to control microbes
Total Trihalomethanes (ppb) [TTHM]	80 (N/A)	LRAA	43.00 (43 – 43)	2022	No	By-products of drinking water chlorination
Total Haloacetic Acids (ppb) [HAA5]	60 N/A	LRAA	11.00 (11 - 11)	2022	No	By-products of drinking water disinfection
01 - #4,7,8,9, OR 10/TRMTN PLT SMP TAP,						

CONTAMINANT	MCL - (MCLG)	Compliance		Date	Violation	Source
		Type	Value & (Range)			
Gross Alpha, inc (pCi/L)	15 (0)	SGL	6.8	10/01/2019	No	Erosion of natural deposits
Combined Radium (pCi/L)	5 (0)	SGL	1	10/01/2019	No	Erosion of natural deposits
Fluoride (ppm)	4 (4)	SGL	.67 (.6-.73)	2022	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Sodium (ppm)	N/A (N/A)	SGL	410	1/5/2022	No	Erosion of natural deposits. Added to water during treatment process
Nitrate [as N] (ppm)	10 (10)	SGL	1.8	2022	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

**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. **MCLs are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink two (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.**
- ◆ 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. One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- ◆ ppm – parts per million. One part per million corresponds to one minute in 2 years, or a single penny in \$10,000.
- ◆ pCi/L - picocuries per liter. Measure of the radioactivity in water.
- ◆ 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

### **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 the water poses 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).

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. Estherville Water Plant 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>.

### **SOURCE WATER ASSESSMENT INFORMATION**

The City of Estherville obtains its water from the Ordovician-Cambrian (Jordan) aquifer. The Ordovician-Cambrian (Jordan) aquifer was determined to be not susceptible to contamination because the characteristics of the aquifer and overlying materials prevent easy access of contaminants to the aquifer. The wells will not be susceptible to most contaminant sources except through pathways to the aquifer such as abandoned or poorly maintained wells. A detailed evaluation of your source water was completed by the IDNR, and is available from the City of Estherville at 712-362-7771.

### **CONTACT INFORMATION**

For questions regarding this information, please contact the City of Estherville at 712-362-7771 during the following hours: Monday through Friday from 8:00 a.m. – 4:30 p.m.

Decisions regarding the water system are made at the city council meetings held on the first and third Mondays of the month at 5:00 p.m. at the city council chambers, 2 North 7<sup>th</sup> Street, and are open to the public.

**This report is published by the City of Estherville for our customers' information. We are proud of the quality of the water we produce for the Estherville, Wallingford, Gruver and Superior areas. We hope that by showing you the standards under which we operate and the results of our water analysis, you will feel comfortable using the water we produce. We do not distribute this report to each customer at this time, but it is available at City Hall.**