

2024 WATER QUALITY REPORT

PWSID 2171071



Spencer Municipal Utilities is happy to provide you with this Consumer Confidence Report on water quality for the year 2023. This report is found on our website at www.smunet.net. SMU believes that providing an abundant supply of safe drinking water is vital to the community. This report is designed to educate you about the steps SMU takes to ensure a safe, abundant water supply for your home and business, and to list the contaminants that were detected in SMU's water in 2023, which were all below regulated standards for safe drinking water.

SMU: Delivering Quality To Your Tap

Spencer's water supply comes from wells which tap the Ocheyedan-Little Sioux aquifer. The Ocheyedan-Little Sioux aquifer is considered an "alluvial aquifer," consisting mostly of rocks and gravel left over from glacial deposits. Every aquifer has a degree of susceptibility to contamination because of the characteristics of the aquifer, overlying material, nearby development or agricultural activity, and abandoned or poorly maintained wells. A detailed evaluation of your water source was completed by the Iowa Department of Natural Resources, and is available from this water supply. To help protect Spencer's ground water supply, SMU and the City of Spencer have implemented a Wellhead Protection Plan that provides guidelines for activities in the area around the wells. A copy of this plan, as well as a groundwater assessment conducted by the Iowa Department of Natural Resources, is available at SMU's office.



Pharmaceutical DISPOSAL

SMU encourages proper disposal of pharmaceuticals. The Clay County Sheriff's office located at 3121 West 4th Street and the Spencer Police Department located at 712 Grand Avenue can take unused pharmaceuticals during their normal business hours.

Water Treatment Process

Ground water from SMU's wells is pumped to the water treatment plant. The ground water is considered hard, so SMU first aerates and then reduces hardness by adding lime, soda ash, and coagulants in a softening process. Next the water's pH is reduced to a stable level by adding carbonic acid. Then the water flows through sand filters to remove particulate matter. Next chlorine is added as a disinfectant, fluoride is added for dental health, and phosphate is added for corrosion control. A 1.5 million gallon tank provides water storage onsite. From there water is pumped to the distribution system filling the north and south towers adding storage and fire protection while maintaining system water pressure.

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. Immune-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. Spencer Municipal Utilities 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://water.epa.gov/drink/info/lead/index.cfm>.

Our water utility is making every effort to protect the water system from potential security threats. You, as a customer, can also help. If you see any suspicious activity near the water towers, treatment plant, wells or fire hydrants, please contact us at 580.5800 or the local police department. We appreciate your assistance in protecting the water system.

For more information on this Consumer Confidence Report or water quality, please contact us at: Spencer Municipal Utilities, Daren Baxter, Water Manager, 520 2nd Avenue East, Suite 1, Spencer, IA 51301, p: 712.580.5800, f: 712.580.5888, e: through our website at www.smunet.net

Our water quality testing shows the following results:

NOTE: Contaminants with dates indicate results from the most recent testing done in accordance with regulations.

CONTAMINANT	MCL - (MCLG)	COMPLIANCE TYPE	COMPLIANCE VALUE & (RANGE)	DATE	VIOLATION	SOURCE
Lead (ppb)	AL=15 (0)	90th	ND (ND-4)	2023	NO	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	AL=1.3 (1.3)	90th	0.02 (ND-0.03)	2023	NO	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Chlorine (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	1.2 (0.41-1.99)	12/31/2023	NO	Water additive used to control microbes
Total Trihalomethanes (PPB) [TTHM]	80 (N/A)	LRAA	30.00 (22-42)	12/31/2023	NO	By-products of drinking water chlorination
Total Haloacetic Acids (ppb) [HAA5]	60 (N/A)	LRAA	3.00 (ND-6)	3/31/2023	NO	By-products of drinking water disinfection
Fluoride (ppm)	4 (4)	SGL	0.52	4/12/2021	NO	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Sodium (ppm)	N/A	SGL	20	4/12/2021	NO	Erosion of natural deposits; Added to water during treatment process
Nitrate [as N] (ppm)	10 (10)	SGL	<0.25	2023	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Manganese (ppm)	N/A	Health Advisory=0.004	<0.02	1/8/2024	NO	Naturally present in the environment

The U.S. Environmental Protection Agency required cities our size to take samples in 2023 for an assessment monitoring program for the Unregulated Contaminant Monitoring Rule (UCMR5). Detection levels were set at the parts per billion range (ppb). The EPA will review the findings of this nationwide assessment to determine if any new regulations are needed. One contaminant was detected in our testing.

Contaminant: Lithium Average: 11 ppb Sample Taken: 9/11/2023. Naturally occurring metal that may concentrate in brine waters; lithium salts are used as pharmaceuticals, used in electrochemical cells, batteries, and in organic syntheses.

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

pCi/L - picocuries per liter

ppm - parts per million

N/A - Not applicable

ND - No detect

RAA - Running Annual Average

LRAA - Locational 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.

Minimum Reporting Level (MRL) - Level based on the capability of laboratories to perform the analytical method, not based on a level established as "significant" or "harmful."

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

TCR - Total Coliform Rule

Public Meeting Information We encourage our customers to attend and participate in the meetings of our water utility. Spencer Municipal Utilities (SMU) is governed by the SMU Board of Trustees. Trustee meetings are open to the public. Monthly information is published in the Spencer Daily Reporter. Meeting dates and times, as well as other utility information, are also posted on SMU's webpage at www.smunet.net.