



Water Quality Report For Spencer Municipal Utilities

PWSID 2171071

Spencer Municipal Utilities is happy to provide you with this Consumer Confidence Report on water quality for the year 2011. SMU believes that providing an abundant supply of safe drinking water is important for 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 2011.

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.

Water Treatment Process

Ground water from SMU's wells is pumped to the SMU water treatment plant. The water is considered hard, so SMU first aerates and then reduces hardness by adding lime to it. Next, the water flows into a basin where carbon dioxide is added to reduce the water's pH level. After flowing through sand filters to remove any particulate matter, chlorine and fluoride are added. A 1.5 million gallon tank provides water storage on site. From there, the water is pumped to the distribution system, filling the north and south water towers to maintain water pressure.



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

N/A—Not applicable

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.



Our water utility 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 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 Additional Information

For more information on this Consumer Confidence Report or water quality, please contact us at:

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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.

Note: The EPA requires monitoring of over 80 drinking water contaminants. Those listed on the back are the only contaminants detected in your drinking water. For a complete list, contact SMU.

Our water quality testing shows the following results:

Substance	MCLG	MCL	Detected Level	Date Sampled	Range of Detection	Violation	Source
Copper (ppm)	1.3	AL=1.3	.06	30 samples 06-01/2007 — 09/30/2009	0-0.09	NO	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	0	AL=15	0	30 samples 06-01/2007 — 09/30/2009	0-2.0	NO	Corrosion of household plumbing systems; Erosion of natural deposits
Total Trihalomethanes (TTHM)							
Total Trihalomethanes (ppb) [TTHM]	N/A	80	37	07/19/2011	N/A	NO	By-products of drinking water chlorination
Haloacetic Acids (HAA5)							
Total Haloacetic Acids (ppb) [HAA5]	N/A	60	6	7/19/2011	N/A	NO	By-products of drinking water disinfection
Inorganic Chemicals (IOC) - Regulated							
Sodium (ppm)	N/A	N/A	4.4	05/06/2009	N/A	NO	Erosion of natural deposits; Added to water during treatment process
Fluoride (ppm)	4	4	1.2		.42-1.2	NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Synthetic Organic Chemicals (SOC) - Regulated							
Atrazine (ppb)	3	3	.1	07/05/2006	N/A	NO	Runoff from herbicide used on row crops
Chlorine Residual Report							
Chlorine (ppm)	MRDLG=4.0	MRDL=4.0	1.6	01/01/2011 — 12/31/2011	.16-1.6	NO	Water additive used to control microbes

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. 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>.

