

City of Estelline Drinking Water Information

(System Information, Sampling Requirements, and Compliance Report)



2017 Certificate of Achievement Award.

Population Served:	768	System Population:	768
Certified Operator:	Mr Lyle Vohlken PO Box 278 117 N Main Estelline, SD 57234	Work Phone:	(605)873-2388
		Home Phone:	
		Cell Phone:	
		Fax:	(605)873-2394
		Email:	estellsd@heartlandpower.org
Financial Contact:	Ms Mary Saathoff PO Box 278-117 N Main Estelline, SD 57234-0278	Work Phone:	(605)873-2388
		Home Phone:	
		Cell Phone:	
		Fax:	
		Email:	estellsd@heartlandpower.org
Other Contacts:	Mayor Donald Zafft PO Box 278 Estelline, SD 57234-0278	Work Phone:	
		Home Phone:	
		Cell Phone:	
		Fax:	
		Email:	
Last Inspection:	March 16, 2017		
Type of System:	Community	Area Served:	Hamlin County
Number of Service Connections:	325	Contamination Risk:	moderate
Water Produced And Used By The City of Estelline Public Water System			
PWS Owner Type:	Local Government	Service Area:	Municipality
Contract Laboratory:			State Health Lab, Pierre

Monitoring/Reporting - Entry Point

City of Estelline

EPA ID: 0119

SAMPLING

Entry point: Treat Site - Wells #3 & #4

	Chemical	Sampling Frequency	Waivers	Taken Last	Due Next	Notes
1	Inorganic Chemicals					
	A. Antimony	Triennially	No	Jun-16		
	B. Arsenic	Triennially	No	Jun-16		
	C. Barium	Triennially	No	Jun-16		
	D. Beryllium	Triennially	No	Jun-16		
	E. Cadmium	Triennially	No	Jun-16		
	F. Chromium	Triennially	No	Jun-16		
	G. Cyanide		Yes			State-wide waiver
	H. Fluoride		No			This system fluoridates
	I. Mercury	Triennially	No	Jun-16		
	J. Nickel	Triennially	No	Jun-16		
	K. Selenium	Triennially	No	Jun-16		
	L. Thallium	Triennially	No	Jun-16		
2	Radiological Chemicals	Every nine years	N/A			
3	VOC Chemicals	Quarterly	No	Jul-17	2017	
4	SOC Chemicals					
	A. Method 515.1	Triennially	No	May-17		
	B. Method 524	Not Required	Yes			
	C. Method 525	Triennially	No	May-17		
	D. Method 531.1	Not Required	Yes			
	E. Method 547	Triennially	No	May-17		
	F. Method 548	Not Required	Yes			
	G. Method 549	Not Required	Yes			
5	Nitrate	Quarterly	N/A	Jan-18		
6	Nitrite	Triennially	N/A	Nov-17		

(These values are calculated from available data. Check correspondence for verification.)

Bacteriological Monitoring

Bacteriological sampling and analysis: January 1, 2017 to January 1, 2018

A	Samples submitted:	<u>12</u>
B	Samples required:	<u>One Sample Each Month.</u>
C	Survey samples:	<u>0</u>
D	Safe samples:	<u>12</u>
E	Unsafe samples:	<u>0</u>
F	Repeat samples:	<u>0</u>
H	Groundwater Samples:	

Lead and Copper Monitoring

(These values are calculated from available data. Check correspondence for verification.)

A	Date Last Tested:	<u>August 7, 2017</u>
B	Samples required:	<u>10</u>
C	Sampling Frequency	<u>Triennially</u>
D	Date Due Next	<u>2017</u>
E	Lead - 90% Level	<u>0.8</u> Action Level - 15 ug/l
F	Copper 90% Level	<u>0.02</u> Action Level - 1.3 mg/l

Disinfectant Residual Monitoring

Residual sampling and analysis: January 1, 2017 to January 1, 2018

A	Samples submitted:	<u>12</u>
B	Samples required:	<u>One Sample Each Month.</u>
C	Last Qtr Cl Residual:	<u>0.3</u> mg/l
D	Running Annual Average:	<u>0.32</u> mg/l
E	Date of last DBP test:	<u>August 7, 2017</u>
F	THM - Qtr Average:	<u>0</u> ug/l
G	Haa5 - Qtr Average:	<u>0</u> ug/l

Asbestos

A	Date of last test:	<u>Waiver - Testing Not Required</u>
B	Asbestos Result:	<u></u> million fibers per liter

Comments

Violations and Significant Deficiencies

City of Estelline

EPA ID: 0119

Violations From **January 1, 2013** To **January 1, 2018**

Violation Type	Parameter	Date	Status
Failure to Monitor	Nitrate	01/01/2014	Public Notice Requested
	Nitrate		Public Notice Received
	Nitrate		Compliance Achieved

Significant Deficiency	Date Identified	Date Corrected

EPA ID#: 0119 System Name: City of Estelline

Sampler- Mr Lyle Vohlken Work Phone-(605)873-2388
 Title- Utilities Manager
 Address- PO Box 278 117 N Main
 Estelline SD 57234

Location- City: Estelline County: Hamlin
 Service Area- Municipality
 PWS Owner Type- Local Government
 Water Supply Type- Groundwater Supply

Population Served- 768 Service Connections- 325

Sources for Estelline

Source	Name	Year Built	Depth (feet)	Diameter (inches)	Availability	Type	Vulnerability	Treatment
01	TREAT SITE - #1					Treatment Plant	Non-Vulnerable	Aeration Disinfection - Hypochlorites Fluoridation - H2SiF6
02	TREAT SITE - NEW WELL #3				Emergency	Treatment Plant	Non-Vulnerable	Aeration Disinfection - Hypochlorites Fluoridation - H2SiF6
06	SIOUX RWS				Emergency	Purchased Groundwater	Non-Vulnerable	Water Treated By Seller - Purchased Surface Only
07	#1	1908	20	192		Groundwater	Vulnerable	Treatment At Plant
08	#2	1973	45	10		Groundwater	Vulnerable	No Treatment
09	#3	2009	23	12	Permanent	Groundwater	Non-Vulnerable	Treatment At Plant
10	TREAT SITE-WELLS #3 & #4				Permanent	Treatment Plant	Non-Vulnerable	Aeration Disinfection - Hypochlorites Fluoridation - H2SiF6
11	#4	2011	23	12	Permanent	Groundwater	Non-Vulnerable	Treatment At Plant

EPA ID#: 0119 System Name: City of Estelline

Common Ion Data

(All chemical data are reported in milligrams per liter (mg/l) except pH and Langelier Index)

Please refer to Private Well Data for more information about these test results.

Source	Type	Date	TDS	Conductance	pH	Alk-M	Alk-P	Na	K	Ca	Mg	Fe	Mn	Cl	SO4	HCO3	CO3	Hardness	Langelier	NO3	F
02	Raw	01/09/92	475	758	7.33	292	0	9	3.8	96.6	34.2	0.06	0.05	6.0	76	356	0	382	-0.08	10.8	1.11

Source	Type	Date	TDS	Conductance	pH	Alk-M	Alk-P	Na	K	Ca	Mg	Fe	Mn	Cl	SO4	HCO3	CO3	Hardness	Langelier	NO3	F
03	Treated	10/26/93	467	770	7.81	268	0	10	5.1	102.0	34.2	0.07	0.02	13.0	67	327	0	395	+0.78	14.4	1.22
01	Treated	03/14/96	453	654	7.45	307	0	11	3.5	95.3	35.9	0.06	0.02	14.0	44	375	0	386	+0.37	5.9	1.01
01	Treated	01/28/99	459	744	7.58	321	0	11	3.6	93.1	33.9	0.02	0.02	15.2	41	392	0	372	+0.51	6.1	1.10
01	Treated	12/04/01	444	761	7.65	322	0	10	3.6	93.2	35.0	0.03	0.02	15.0	33	393	0	377	+0.59	6.7	0.71
01	Treated	06/22/05	517	798	7.41	317	0	11	3.7	101.0	37.2	0.03	0.02	21.0	57	387	0	405	+0.36	8.5	0.89
02	Treated	06/22/05	474	750	7.31	293	0	0	10.4	2.9	33.8	0.03	0.02	21.0	59	357	0	376	+0.21	7.1	1.23
01	Treated	01/03/08	431	711	7.78	310	0	9	3.1	92.3	33.0	0.03	0.02	16.0	32	378	0	366	+0.70	5.9	0.53
10	Treated	05/28/14	362	577	7.51	267	0	8	1.3	72.5	26.4	0.00	0.00	13.0	22	326	0	290	+0.28	5.0	0.46
10	Treated	03/16/17	370	632	7.80	272	0	9	1.8	81.0	30.3	0.07	0.00	12.0	25	332	0	327	+0.62	7.5	1.12
Averages			442	711	7.59	297	0	9	4.0	81.5	33.3	0.04	0.02	15.6	42	363	0	366		7.5	0.92

You can contact us by calling
(605)873-2388 or write us at
PO Box 278-117 N Main
Estelline SD 57234-0278

City of Estelline

2017 Drinking Water Report

It's your tap water!



EPA ID: 0119



Water Quality

Last year, the City of Estelline monitored your drinking water for possible contaminants. This brochure is a snapshot of the quality of the water that we provided last year. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies.

Water Source

We serve more than 768 customers an average of 72,000 gallons of water per day. Our water is groundwater that we produce from local wells. The state has performed an assessment of our source water and they have determined that the relative susceptibility rating for the Estelline public water supply system is medium.

For more information about your water and information on opportunities to participate in public meetings, call (605)873-2388 and ask for Mary Saathoff.

Additional Information

The sources of drinking water (both tap water 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 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 stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- *Pesticides and herbicides*, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater 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, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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 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 can be obtained by calling the Environment Protection Agency's 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. The City of Estelline public water supply system 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>.

Detected Contaminants

The attached table lists all the drinking water contaminants that we detected during the 2017 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 – December 31, 2017. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

2017 Table of Detected Contaminants For Estelline (EPA ID 0119)

Terms and abbreviations used in this table:

- * *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.*
- * *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.*
- * *Action Level(AL): the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow. For Lead and Copper, 90% of the samples must be below the AL.*
- * *Treatment Technique(TT): A required process intended to reduce the level of a contaminant in drinking water. For turbidity, 95% of samples must be less than 0.3 NTU*
- * *Running Annual Average(RAA): Compliance is calculated using the running annual average of samples from designated monitoring locations.*

Units:

- *MFL: million fibers per liter
- *mrem/year: millirems per year(a measure of radiation absorbed by the body)
- *NTU: Nephelometric Turbidity Units
- *pCi/l: picocuries per liter(a measure of radioactivity)
- *ppm: parts per million, or milligrams per liter(mg/l)
- *ppb: parts per billion, or micrograms per liter(ug/l)
- *ppt: parts per trillion, or nanograms per liter
- *ppq: parts per quadrillion, or picograms per liter
- *pspm: positive samples per month

Substance	90% Level	Test Sites > Action Level	Date Tested	Highest Level Allowed (AL)	Ideal Goal	Units	Major Source of Contaminant
Copper	0.0	0	08/07/17	AL=1.3	0	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead	1	0	08/07/17	AL=15	0	ppb	Corrosion of household plumbing systems; erosion of natural deposits.

Substance	Highest Level Detected	Range	Date Tested	Highest Level Allowed (MCL)	Ideal Goal (MCLG)	Units	Major Source of Contaminant
Fluoride	1.32	0.34 - 1.32	11/06/17	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.

Please direct questions regarding this information to Mr Lyle Vohlken with the Estelline public water system at (605)873-2388.