City of Chamberlain Drinking Water Information

(System Information, Sampling Requirements, and Compliance Report)

2017 Certificate of Achievement Award.

Population Served: 2,387

System Population: 2,387

Certified Operator: Mr Brad Mohror
PO Box 66
Chamberlain, SD 57325

Work Phone: (605)234-4412
Home Phone: (605)234-6249
Cell Phone:
Fax:
Email: water@midstatesd.net

Financial Contact: Ms Nicky Gaulke
PO Box 66
Chamberlain, SD 57325-0066

Work Phone: (605)234-4401
Home Phone:
Cell Phone:
Fax: (605)734-4403
Email: chamberlainng@midstatesd.net

Other Contacts: Mayor Chad Mutziger
PO Box 66
Chamberlain, SD 57325-0066

Work Phone: (605)234-4401
Home Phone:
Cell Phone:
Fax: (605)734-4403
Email:

Last Inspection: May 18, 2017

Type of System: Community

Area Served: Brule County

Number of Service Connections: 980

Contamination Risk: moderate

Water Produced And Used By The City of Chamberlain Public Water System

PWS Owner Type: Local Government

Service Area: Municipality

Contract Laboratory: State Health Lab, Pierre

Monitoring/Reporting - Entry Point

City of Chamberlain **EPA ID: 0086**

SAMPLING

Entry point: Treatment Plant

	Chemical	Sampling Frequency	Waivers	Taken Last	Due Next	Notes
1	Inorganic Chemicals					
	A. Antimony	Every nine years	Yes	May-11		
	B. Arsenic	Every nine years	Yes	May-11		
	C. Barium	Every nine years	Yes	May-11		
	D. Beryllium	Every nine years	Yes	May-11		
	E. Cadmium	Every nine years	Yes	May-11		
	F. Chromium	Every nine years	Yes	May-11		
	G. Cyanide		Yes			State-wide waiver
	H. Fluoride	Triennially	No	Oct-17		
	I. Mercury	Every nine years	Yes	May-11		
	J. Nickel	Every nine years	Yes	May-11		
	K. Selenium	Every nine years	Yes	May-11		
	L. Thallium	Every nine years	Yes	May-11		
2	Radiological Chemicals	Every nine years	N/A			
3	VOC Chemicals	Triennially	Yes	May-17	2017	Surface Water Waiver
4	SOC Chemicals					
	A. Method 515.1	Triennially	No	May-17		
	B. Method 524	Triennially	No	May-17		
	C. Method 525	Triennially	No	May-17		
	D. Method 531.1	Triennially	No	May-17		
	E. Method 547	Triennially	No	May-17		
	F. Method 548	Triennially	No	May-17		
	G. Method 549	Triennially	No	May-17		
5	Nitrate	Annually-1st Qtr	N/A	Mar-17		
6	Nitrite	Triennially	N/A	Mar-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:	24
B	Samples required:	Two Samples Each Month.
C	Survey samples:	0
D	Safe samples:	24
E	Unsafe samples:	0
F	Repeat samples:	0
H	Groundwater Samples:	

Lead and Copper Monitoring

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

A	Date Last Tested:	August 9, 2017	
B	Samples required:	10	
C	Sampling Frequency	Triennially	
D	Date Due Next	2017	
E	Lead - 90% Level	0.5	Action Level - 15 ug/l
F	Copper 90% Level	0.05	Action Level - 1.3 mg/l

Disinfectant Residual Monitoring

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

A	Samples submitted:	24	
B	Samples required:	Two Samples Each Month.	
C	Last Qtr Cl Residual:	1.29	mg/l
D	Running Annual Average:	1.25	mg/l
E	Date of last DBP test:	December 15, 2017	
F	THM - Qtr Average:	0	ug/l
G	Haa5 - Qtr Average:	0	ug/l

Asbestos

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

Comments

Violations and Significant Deficiencies

City of Chamberlain **EPA ID: 0086**

Violations From January 1, 2013 To January 1, 2018

Violation Type	Parameter	Date	Status
No Violations			

Significant Deficiency	Date Identified	Date Corrected

EPA ID#: 0086 System Name: City of Chamberlain

Sampler- Mr Brad Mohror Work Phone-(605)234-4412
Title- Water Superintendent
Address- PO Box 66
Chamberlain SD 57325

Location- City: Chamberlain County: Brule
Service Area- Municipality
PWS Owner Type- Local Government
Water Supply Type- Surface Water Supply

Population Served- 2,387 Service Connections- 980

Sources for Chamberlain

Source	Name	Year Built	Depth (feet)	Diameter (inches)	Availability	Type	Vulnerability	Treatment
01	MISSOURI RIVER	0000	0000	0000	Permanent	Surface Water	Vulnerable	Treatment At Plant
05	TREATMENT PLANT				Permanent	Treatment Plant	Non-Vulnerable	Aeration Coagulation, Softening - Iron Salts Lime Soda Ash NaAlO3 Disinfection - Gas Chlorine Chlorine Dioxide Filtration - Rapid Sand Mixing Device Recarbonation Sedimentation Fluoridation - H2SiF6
06	AURORA BRULE RW	1999			Emergency	Purchased Surface	Non-Vulnerable	Water Treated By Seller - Purchased Surface Only

Date Of This Report: August 29, 2017

EPA ID#: 0086 System Name: City of Chamberlain

Common Ion Data

(All chemical data are reported in milligrams per liter (mg/l) except pH and Langlier 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	Langlier	NO3	F
01	Raw	11/17/93	483	749	8.44	155	0	75	4.6	60.8	24.4	0.28	0.05	14.0	245	179	0	252	+0.94	0.1	0.56
01	Raw	06/04/96	517	795	8.55	166	5	83	5.6	59.5	23.9	0.49	0.06	17.0	222	190	6	245	+0.99	0.1	0.48
05	Raw	03/25/99	513	762	8.34	155	1	72	4.6	54.1	21.9	0.23	0.02	11.7	229	187	1	225	+0.71	0.1	0.45
05	Raw	06/12/02	520	799	8.41	174	3	75	5.5	59.7	24.7	0.90	0.22	13.0	223	205	4	251	+0.87	0.1	0.48
Averages			508	776	8.44	163	2	76	5.1	58.5	23.7	0.48	0.09	13.9	230	190	3	243		0.1	0.49

Source	Type	Date	TDS	Conductance	pH	Alk-M	Alk-P	Na	K	Ca	Mg	Fe	Mn	Cl	SO4	HCO3	CO3	Hardness	Langlier	NO3	F
01	Treated	11/17/93	419	654	8.22	87	0	91	4.7	33.5	15.5	0.02	0.02	16.0	248	106	0	147	+0.22	0.1	1.19
01	Treated	06/04/96	437	689	8.75	77	7	97	5.9	30.1	12.4	0.06	0.02	18.0	230	77	8	126	+0.58	0.1	1.05
05	Treated	03/25/99	456	686	8.53	75	5	88	4.8	29.1	12.6	0.08	0.02	15.7	232	79	6	125	+0.33	0.1	1.07
05	Treated	06/12/02	415	659	8.89	55	4	86	5.4	23.0	11.5	0.03	0.02	18.0	224	57	5	105	+0.46	0.1	1.33
05	Treated	06/23/05	395	614	8.94	49	5	79	5.6	29.2	8.7	0.05	0.02	20.0	220	48	6	109	+0.57	0.1	1.00
05	Treated	06/24/08	396	569	8.83	51	4	74	5.7	32.4	6.5	0.03	0.02	16.0	201	52	5	108	+0.52	0.2	1.02
05	Treated	06/14/11	402	614	8.47	60	1	74	5.2	31.2	12.5	0.03	0.03	21.0	205	71	1	129	+0.21	0.2	1.10
Averages			417	641	8.66	65	4	84	5.3	29.8	11.4	0.04	0.02	17.8	223	70	4	121		0.1	1.11

Date Of This Report: August 29, 2017

You can contact us by calling
(605)234-4401 or write us at
PO Box 66
Chamberlain SD 57325-0066

City of Chamberlain

2017 Drinking Water Report

It's your tap water!

EPA ID: 0086

Water Quality

Last year, the City of Chamberlain 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 2,387 customers an average of 374,000 gallons of water per day. We get our water from surface water sources. The state has performed an assessment of our source water and they have determined that the relative susceptibility rating for the Chamberlain public water supply system is medium.

For more information about your water and information on opportunities to participate in public meetings, call (605)234-4401 and ask for Nicky Gaulke.

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 Chamberlain 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 Chamberlain (EPA ID 0086)

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*

**pCi/l: picocuries per liter(a measure of radioactivity)*

**ppt: parts per trillion, or nanograms per liter*

**mrem/year: millirems per year(a measure of radiation absorbed by the body)*

**ppm: parts per million, or milligrams per liter(mg/l)*

**ppq: parts per quadrillion, or picograms per liter*

**NTU: Nephelometric Turbidity Units*

**ppb: parts per billion, or micrograms per liter(ug/l)*

**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	0.1	0	08/09/17	AL=1.3	0	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead	1	0	08/09/17	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	0.54		10/24/17	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Haloacetic Acids (RAA)	2.27		12/15/17	60	0	ppb	By-product of drinking water chlorination. Results are reported as a running annual average of test results.
Total trihalomethanes (RAA)	2.24		12/15/17	80	0	ppb	By-product of drinking water chlorination. Results are reported as a running annual average of test results.

Please direct questions regarding this information to Mr Brad Mohror with the Chamberlain public water system at (605)234-4401.