

# City of Burke Drinking Water Information

(System Information, Sampling Requirements, and Compliance Report)



## Secretary Award For Drinking Water Excellence

<b>Population Served:</b>	604	<b>System Population:</b>	604
<b>Certified Operator:</b>	Mr Wade Broome PO Box 312 Burke, SD 57523-0312	<b>Work Phone:</b>	(605)775-2692
		<b>Home Phone:</b>	(605)775-2746
		<b>Cell Phone:</b>	
		<b>Fax:</b>	
		<b>Email:</b>	burkesupt@goldenwest.net
<b>Financial Contact:</b>	Mr Mike Glover PO Box 250 Burke, SD 57523	<b>Work Phone:</b>	
		<b>Home Phone:</b>	
		<b>Cell Phone:</b>	
		<b>Fax:</b>	
		<b>Email:</b>	burkecc@gwtc.net
<b>Other Contacts:</b>	Mayor Thomas Glover PO Box 250 Burke, SD 57523-0250	<b>Work Phone:</b>	
		<b>Home Phone:</b>	
		<b>Cell Phone:</b>	
		<b>Fax:</b>	
		<b>Email:</b>	
<b>Last Inspection:</b>	March 25, 2015		
<b>Type of System:</b>	Community	<b>Area Served:</b>	Gregory County
<b>Number of Service Connections:</b>	410	<b>Contamination Risk:</b>	moderate
<b>Water Purchased From:</b>			Tripp County Water User District (0520)
<b>PWS Owner Type:</b>	Local Government	<b>Service Area:</b>	Municipality
<b>Contract Laboratory:</b>			State Health Lab, Pierre

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### 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 9, 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>1.9</u> Action Level - 15 ug/l
F Copper 90% Level	<u>0.19</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>0.32</u> mg/l
D Running Annual Average:	<u>0.39</u> mg/l
E Date of last DBP test:	<u>August 2, 2017</u>
F THM - Qtr Average:	<u>5.79</u> ug/l
G Haa5 - Qtr Average:	<u>4.06</u> ug/l

### Asbestos

A Date of last test:	<u>March 29, 2011</u>
B Asbestos Result:	<u>ND</u> million fibers per liter

Comments

# Violations and Significant Deficiencies

City of Burke

EPA ID: 0079

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

Violation Type	Parameter	Date	Status
No Violations			

Significant Deficiency	Date Identified	Date Corrected

**EPA ID#: 0079 System Name: City of Burke**

Sampler- Mr Wade Broome                      Work Phone-(605)775-2692  
 Title- Utilities Manager  
 Address- PO Box 312  
           Burke SD 57523-0312

Location-                      City: Burke      County: Gregory  
 Service Area- Municipality  
 PWS Owner Type- Local Government  
 Water Supply Type- Purchased Groundwater Supply

Population Served- 604 Service Connections- 410

**Sources for Burke**

Source	Name	Year Built	Depth (feet)	Diameter (inches)	Availability	Type	Vulnerability	Treatment
02	TREAT- #2 - NOELLE					Treatment Plant	Non-Vulnerable	Aeration Disinfection - Hypochlorites Fluoridation - H2SiF6
03	TREAT-#3 - DUERFELDT					Treatment Plant	Non-Vulnerable	Aeration Disinfection - Hypochlorites Fluoridation - H2SiF6
04	TREAT SITE - #4				Emergency	Treatment Plant	Non-Vulnerable	Aeration Disinfection - Hypochlorites Fluoridation - H2SiF6
05	TREAT SITE - #5					Treatment Plant	Non-Vulnerable	Aeration Disinfection - Hypochlorites Fluoridation - H2SiF6
06	TREAT SITE - #6					Treatment Plant	Non-Vulnerable	Aeration Disinfection - Hypochlorites Fluoridation - H2SiF6
07	TREAT SITE - #7					Treatment Plant	Non-Vulnerable	Aeration Disinfection - Hypochlorites Fluoridation - H2SiF6
08	TREAT SITE - #8				Emergency	Treatment Plant	Non-Vulnerable	Aeration Disinfection - Hypochlorites Fluoridation - H2SiF6
09	EP #4#8 (HILLCREST)				Emergency		Non-Vulnerable	No Treatment
10	ENTRY POINT #5 #6						Non-Vulnerable	No Treatment
13	#2	1952	133	24		Groundwater	Vulnerable	Treatment At Plant
14	#3	1962	150	24		Groundwater	Vulnerable	Treatment At Plant
15	#4	1969	150	18	Emergency	Groundwater	Vulnerable	Treatment At Plant
16	#5	1975	150	16		Groundwater	Vulnerable	Treatment At Plant
17	#6	1978	160	16		Groundwater	Vulnerable	Treatment At Plant
18	#7	1989	160	12		Groundwater	Vulnerable	Treatment At Plant
19	#8	1991	160	16	Emergency	Groundwater	Vulnerable	Treatment At Plant
20	TRIPP COUNTY WATER USER DISTRICT	2004			Permanent	Purchased Groundwater	Non-Vulnerable	Water Treated By Seller - Purchased Surface Only

**EPA ID#: 0079 System Name: City of Burke**

**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
02	Raw	11/16/94	337	540	7.72	185	0	11	7.9	69.3	10.3	0.02	0.02	14.5	16	226	0	215	+0.25	9.6	0.26
05	Raw	09/28/88	232	345	7.61	168	0	6	6.4	51.4	7.5	3.65	0.31	9.9	10	205	0	159	-0.24	0.2	0.24
06	Raw	09/28/88	215	313	7.93	152	0	8	6.1	47.3	7.4	0.10	0.01	8.0	10	185	0	149	-0.00	1.8	0.22
08	Raw	11/16/94	224	324	7.92	146	0	7	5.6	43.5	7.4	0.22	0.02	2.3	10	178	0	139	+0.16	2.8	0.17
19	Raw	10/18/05	213	275	7.91	110	0	7	5.7	37.6	6.2	0.32	0.02	3.0	10	134	0	119	+0.05	5.6	0.18
15	Raw	10/18/05	181	229	7.89	106	0	8	5.3	31.4	4.0	0.11	0.02	3.0	10	129	0	95	-0.05	1.8	0.26
15	Raw	09/16/08	207	285	8.33	130	1	5	6.0	44.1	2.5	1.44	0.02	3.0	10	156	1	120	+0.61	1.5	1.08
Averages			230	330	7.90	142	0	7	6.1	46.4	6.5	0.84	0.06	6.2	11	173	0	142		3.3	0.34

Source	Type	Date	TDS	Conductance	pH	Alk-M	Alk-P	Na	K	Ca	Mg	Fe	Mn	Cl	SO4	HCO3	CO3	Hardness	Langlier	NO3	F
07	Treated	11/16/94	231	324	7.60	142	0	6	5.5	42.0	6.9	0.08	0.02	5.4	10	173	0	133	-0.18	2.1	0.78
02	Treated	08/30/90	186	264	7.62	110	0	8	4.7	37.3	6.1	0.55	0.02	11.2	10	134	0	118	-0.55	2.1	1.42
03	Treated	11/16/94	351	540	7.56	191	0	13	7.8	70.4	10.6	0.02	0.02	16.9	17	233	0	219	+0.11	7.8	0.85
04	Treated	11/16/94	202	324	7.92	125	0	7	5.4	40.9	6.5	0.02	0.02	3.1	10	153	0	129	+0.16	3.1	0.19
09	Treated	03/27/97	230	315	7.72	131	0	6	4.9	43.7	6.7	0.06	0.02	1.0	10	160	0	137	*0.00	3.5	1.07
02	Treated	03/27/97	272	378	7.66	156	0	7	5.6	55.4	8.1	0.26	0.05	3.0	14	190	0	172	+0.10	5.2	1.38
03	Treated	03/27/97	254	324	7.69	143	0	7	5.6	51.6	7.4	0.39	0.02	2.0	13	174	0	159	+0.07	4.3	1.09
03	Treated	06/15/00	438	600	7.51	222	0	13	7.9	86.9	12.8	0.02	0.02	21.0	23	271	0	270	+0.26	11.3	1.24
02	Treated	06/15/00	308	415	7.65	173	0	8	6.1	0.3	8.5	0.02	0.02	6.5	10	211	0	186	+0.16	6.2	0.86
09	Treated	06/15/00	242	332	7.64	140	0	6	4.9	47.2	6.8	0.03	0.02	3.0	10	171	0	146	-0.02	4.5	1.14
02	Treated	10/02/02	255	346	7.68	141	0	6	5.4	51.3	6.6	0.26	0.03	3.0	10	172	0	155	+0.05	4.5	1.70
19	Treated	09/16/08	255	344	7.89	123	0	6	5.7	45.8	6.9	0.85	0.02	4.0	10	150	0	143	+0.15	9.4	0.17
Averages			269	376	7.68	150	0	8	5.8	47.7	7.8	0.21	0.02	6.7	12	183	0	164		5.3	0.99

You can contact us by calling or  
write us at  
PO Box 250  
Burke SD 57523

City of Burke

# 2017 Drinking Water Report

*It's your tap water!*



EPA ID: 0079



# Water Quality



## *Secretary's Award*

*The City of Burke has supplied seventeen consecutive years of safe drinking water to the public it serves and has been awarded the Secretary's Award for Drinking Water Excellence by the South Dakota Department of Environment and Natural Resources. 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 604 customers an average of 129,000 gallons of water per day. Our water is groundwater that we purchase from another water system. The state has performed an assessment of our source water and they have determined that the relative susceptibility rating for the Burke public water supply system is medium.

For more information about your water and information on opportunities to participate in public meetings, call and ask for Mike Glover.

### **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 Burke 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.



The City of Burke public water system purchases 100% of their water from Tripp County Water User District (0520).

## 2017 Table of Detected Contaminants For Burke (EPA ID 0079)

### 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	0.2	0	08/09/17	AL=1.3	0	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead	2	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 *	0.77	0.63 - 0.77	09/19/17	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Haloacetic Acids (RAA)	4.06		08/02/17	60	0	ppb	By-product of drinking water chlorination. Results are reported as a running annual average of test results.
Nitrate (as Nitrogen) *	3.1		07/17/17	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Total trihalomethanes (RAA)	5.79		08/02/17	80	0	ppb	By-product of drinking water chlorination. Results are reported as a running annual average of test results.
Total trihalomethanes (RAA) *	3.97		08/29/17	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 Wade Broome with the Burke public water system.

\* Tripp County Water User District (0520) test result.