

City of Gregory Drinking Water Information

(System Information, Sampling Requirements, and Compliance Report)



Secretary Award For Drinking Water Excellence

Population Served: 1,295 **System Population:** 1,295

Certified Operator: Mr Mark Fortuna
PO Box 436
Gregory, SD 57533-0436

Work Phone: (605)835-8270
Home Phone:
Cell Phone:
Fax: (605)835-8422
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Financial Contact: Mr Al Cerny
PO Box 436
Gregory, SD 57533-0436

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Fax:
Email: gregcity@gwtc.net

Other Contacts: Mayor Scott Anshutz
PO Box 436
Gregory, SD 57533-0436

Work Phone:
Home Phone:
Cell Phone:
Fax:
Email:

Last Inspection: June 4, 2015

Type of System: Community

Area Served: Gregory County

Number of Service Connections: 848

Contamination Risk: moderate

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

PWS Owner Type: Local Government

Service Area: Municipality

Contract Laboratory: State Health Lab, Pierre

Monitoring/Reporting - Entry Point

City of Gregory

EPA ID: 0145

SAMPLING

Entry point: Treat Plant - 02 03

	Chemical	Sampling Frequency	Waivers	Taken Last	Due Next	Notes
1	Inorganic Chemicals					
	A. Antimony	Triennially	No	Oct-17		
	B. Arsenic	Triennially	No	Oct-17		
	C. Barium	Triennially	No	Oct-17		
	D. Beryllium	Triennially	No	Oct-17		
	E. Cadmium	Triennially	No	Oct-17		
	F. Chromium	Triennially	No	Oct-17		
	G. Cyanide		Yes			State-wide waiver
	H. Fluoride		No			This system fluoridates
	I. Mercury	Triennially	No	Oct-17		
	J. Nickel	Triennially	No	Oct-17		
	K. Selenium	Triennially	No	Oct-17		
	L. Thallium	Triennially	No	Oct-17		
2	Radiological Chemicals	Every six years	N/A			
3	VOC Chemicals	Quarterly	No	Oct-17	2017	
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	N/A	Jul-17		
6	Nitrite	Triennially	N/A	Jul-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>24</u>
B	Samples required:	<u>Two Samples Each Month.</u>
C	Survey samples:	<u>0</u>
D	Safe samples:	<u>24</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 15, 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>4.1</u> Action Level - 15 ug/l
F	Copper 90% Level	<u>0.27</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>24</u>
B	Samples required:	<u>Two Samples Each Month.</u>
C	Last Qtr Cl Residual:	<u>0.66</u> mg/l
D	Running Annual Average:	<u>0.65</u> mg/l
E	Date of last DBP test:	<u>August 15, 2017</u>
F	THM - Qtr Average:	<u>9.08</u> ug/l
G	Haa5 - Qtr Average:	<u>3.89</u> ug/l

Asbestos

A	Date of last test:	<u>November 21, 2011</u>
B	Asbestos Result:	<u>ND</u> million fibers per liter

Comments

Violations and Significant Deficiencies

City of *Gregory*

EPA ID: 0145

Violations From

January 1, 2013

To

January 1, 2018

Violation Type	Parameter	Date	Status
No Violations			

Significant Deficiency	Date Identified	Date Corrected

EPA ID#: 0145 System Name: City of Gregory

Sampler- Mr Mark Fortuna Work Phone-(605)835-8270
 Title- Water Superintendent
 Address- PO Box 436
 Gregory SD 57533-0436

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

Population Served- 1,295 Service Connections- 848

Sources for Gregory

Source	Name	Year Built	Depth (feet)	Diameter (inches)	Availability	Type	Vulnerability	Treatment
01	TOWN WELL FIELD-IRRIGATION	1905	55	18	Emergency	Groundwater	Non-Vulnerable	No Treatment
02	MALCHOW WELL FIELD	1972	50	8	Permanent	Groundwater	Vulnerable	Treatment At Plant
03	SATTLER WELL FIELD	1995	60	8	Permanent	Groundwater	Non-Vulnerable	Treatment At Plant
04	TREAT PLANT- 02 03				Permanent	Treatment Plant	Non-Vulnerable	Aeration Disinfection - Gas Chlorine Fluoridation - H2SiF6
07	WEMPE WELL					Groundwater	Non-Vulnerable	Treatment At Plant
11	#11-MALCHOW	1985	155	8	Permanent	Groundwater	Non-Vulnerable	Treatment At Plant
12	#13-MALCHOW	1985	70	8	Permanent	Groundwater	Non-Vulnerable	Treatment At Plant
13	#14-MALCHOW	1985	70	8	Permanent	Groundwater	Non-Vulnerable	Treatment At Plant
14	#12-MALCHOW	1985	70	10	Permanent	Groundwater	Non-Vulnerable	Treatment At Plant
15	#10-MALCHOW	1985	100	6	Permanent	Groundwater	Non-Vulnerable	Treatment At Plant
16	#9-MALCHOW	1985	84	6	Permanent	Groundwater	Non-Vulnerable	Treatment At Plant
17	#8-MALCHOW	1976	77	6	Permanent	Groundwater	Non-Vulnerable	Treatment At Plant
18	#7-MALCHOW	1976	65	18	Permanent	Groundwater	Non-Vulnerable	Treatment At Plant
19	#6-MALCHOW	1976	71	6	Permanent	Groundwater	Non-Vulnerable	Treatment At Plant
20	#5-MALCHOW	1976	81	6	Permanent	Groundwater	Non-Vulnerable	Treatment At Plant
21	#4-MALCHOW	1976	76	6	Permanent	Groundwater	Non-Vulnerable	Treatment At Plant
22	#3-MALCHOW	1976	65	18	Permanent	Groundwater	Non-Vulnerable	Treatment At Plant
23	#2-MALCHOW	1976	69	18	Permanent	Groundwater	Non-Vulnerable	Treatment At Plant
24	#1-MALCHOW	1976	75	18	Permanent	Groundwater	Non-Vulnerable	Treatment At Plant
25	TOWN-9				Emergency	Groundwater	Non-Vulnerable	No Treatment
26	TOWN-2B				Emergency	Groundwater	Non-Vulnerable	No Treatment
27	TOWN-2C				Emergency	Groundwater	Non-Vulnerable	No Treatment

EPA ID#: 0145 System Name: City of Gregory

Source	Name	Year Built	Depth (feet)	Diameter (inches)	Availability	Type	Vulnerability	Treatment
28	TOWN-2D				Emergency	Groundwater	Non-Vulnerable	No Treatment
29	TOWN-2E				Emergency	Groundwater	Non-Vulnerable	No Treatment
30	SATTLER-LOCAL WELL-#15	1995	70	8	Permanent	Groundwater	Non-Vulnerable	Treatment At Plant
31	SATTLER-WEST WELL-#16	1995	69	8	Permanent	Groundwater	Non-Vulnerable	Treatment At Plant
32	SATTLER-NE WELL-#17	1995	82	6	Permanent	Groundwater	Non-Vulnerable	Treatment At Plant
33	SATTLER-SE WELL-#18	1995	60	8		Groundwater	Non-Vulnerable	Treatment At Plant
34	TREAT BLDG - 020307					Treatment Plant	Non-Vulnerable	Aeration Disinfection - Gas Chlorine Fluoridation - H2SiF6
36	TRIPP COUNTY WATER USERS	2005			Emergency	Purchased Groundwater	Non-Vulnerable	Water Treated By Seller - Purchased Surface Only
37	#15-MALCHOW	2012	155	6	Permanent	Groundwater	Non-Vulnerable	Treatment At Plant

EPA ID#: 0145 System Name: City of Gregory

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
18	Raw	10/18/05	394	577	7.49	232	0	24	9.9	82.6	12.5	0.52	0.02	14.0	50	283	0	258	+0.25	2.0	0.33
30	Raw	10/18/05	247	338	7.56	147	0	8	5.9	51.4	6.9	0.55	0.02	3.0	15	179	0	157	-0.05	4.0	0.30
30	Raw	09/17/08	257	356	7.72	147	0	7	5.3	50.6	6.5	0.13	0.02	5.0	10	179	0	153	+0.10	4.6	0.29
13	Raw	09/17/08	446	658	7.47	247	0	24	9.0	85.4	13.5	0.03	0.02	20.0	70	301	0	269	+0.25	1.5	0.34
Averages			336	482	7.56	193	0	16	7.5	67.5	9.9	0.31	0.02	10.5	36	236	0	209		3.0	0.32

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	01/05/83	518	796	7.38	243	0	27	10.4	104.0	18.3	0.02	0.02	32.7	54	296	0	335	-0.02	15.0	0.00
01	Treated	11/04/92	261	333	7.45	159	0	14	6.7	51.7	7.0	0.02	0.02	7.7	16	194	0	158	-0.48	3.1	1.26
02	Treated	11/16/94	270	432	7.47	153	0	13	6.5	45.8	7.3	0.02	0.02	8.3	14	187	0	144	-0.18	3.2	1.66
02	Treated	10/19/84	214	322	7.35	150	0	14	6.3	49.0	7.2	0.16	0.04	9.9	12	183	0	152	-0.57	2.7	1.67
04	Treated	03/27/97	289	378	7.51	158	0	13	6.6	55.4	8.1	0.24	0.02	6.0	22	193	0	172	-0.05	3.3	1.05
04	Treated	06/14/00	281	393	7.48	159	0	11	5.6	53.0	7.6	0.02	0.02	6.7	16	194	0	164	-0.09	3.6	1.02
04	Treated	10/22/02	299	437	7.45	169	0	13	7.0	60.8	8.2	0.06	0.02	11.0	12	206	0	186	-0.04	3.5	1.06
04	Treated	09/17/08	298	423	7.47	164	0	13	6.7	56.7	7.8	0.05	0.02	10.0	22	200	0	174	-0.06	3.7	1.47
04	Treated	02/14/12	305	435	7.17	142	0	13	6.6	58.7	8.3	0.09	0.12	14.0	26	173	0	181	-0.41	2.9	11.00
04	Treated	06/04/15	329	439	7.86	180	0	14	7.2	63.3	8.8	0.08	0.06	4.0	27	220	0	194	+0.41	2.6	1.17
Averages			306	439	7.46	168	0	14	7.0	59.8	8.9	0.08	0.04	11.0	22	205	0	186		4.4	2.14

You can contact us by calling
(605)835-8270 or write us at
PO Box 436
Gregory SD 57533-0436

City of Gregory

2017 Drinking Water Report

It's your tap water!



EPA ID: 0145



Water Quality



Secretary's Award

The City of Gregory has supplied eleven 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 1,295 customers an average of 140,000 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 Gregory public water supply system is medium.

For more information about your water and information on opportunities to participate in public meetings, call (605)835-8270 and ask for Al Cerny.

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 Gregory 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 Gregory (EPA ID 0145)

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	0.3	0	08/15/17	AL=1.3	0	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead	4	0	08/15/17	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
Alpha emitters	5	ND - 5	05/20/14	15	0	pCi/l	Erosion of natural deposits.
Antimony	0.25		10/11/17	6	6	ppb	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder.
Barium	0.133		10/11/17	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride	0.78	0.68 - 0.78	06/05/17	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Haloacetic Acids (RAA)	3.89		08/15/17	60	0	ppb	By-product of drinking water chlorination. Results are reported as a running annual average of test results.
Nitrate (as Nitrogen)	2.8		07/25/17	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Selenium	3.6		10/11/17	50	50	ppb	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.
Total trihalomethanes (RAA)	9.08		08/15/17	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 Mark Fortuna with the Gregory public water system at (605)835-8270.