

# Elk Creek Village Drinking Water Information

(System Information, Sampling Requirements, and Compliance Report)



## 2017 Certificate of Achievement Award.

|   |   |                            |                         |
|---|---|----------------------------|-------------------------|
| <b>Population Served:</b>   | 110   | <b>System Population:</b>  | 110                     |
| <b>Certified Operator:</b>  | Mr Bob Powles<br>7963 Deerview Road<br>Piedmont, SD 57769 | <b>Work Phone:</b>         |                         |
|   |   | <b>Home Phone:</b>         | (605)787-5261           |
|   |   | <b>Cell Phone:</b>         |                         |
|   |   | <b>Fax:</b>                | (605)787-5271           |
|   |   | <b>Email:</b>              | powlesjanet@msn.com     |
| <b>Financial Contact:</b>   | Mr Bob Powles<br>7963 Deerview Road<br>Piedmont, SD 57769 | <b>Work Phone:</b>         |                         |
|   |   | <b>Home Phone:</b>         | (605)787-5261           |
|   |   | <b>Cell Phone:</b>         |                         |
|   |   | <b>Fax:</b>                | (605)787-5271           |
|   |   | <b>Email:</b>              | powlesjanet@msn.com     |
| <b>Other Contacts:</b>  | Mr. Chuck Even<br>PO Box 43<br>Piedmont, SD 57769-0043    | <b>Work Phone:</b>         |                         |
|   |   | <b>Home Phone:</b>         |                         |
|   |   | <b>Cell Phone:</b>         |                         |
|   |   | <b>Fax:</b>                |                         |
|   |   | <b>Email:</b>              |                         |
| <b>Last Inspection:</b>   | September 24, 2015  |                            |                         |
| <b>Type of System:</b>  | Community   | <b>Area Served:</b>        | Meade County            |
| <b>Number of Service Connections:</b>                                       | 44  | <b>Contamination Risk:</b> | moderate                |
| <b>Water Produced And Used By The Elk Creek Village Public Water System</b> |   |                            |                         |
| <b>PWS Owner Type:</b>  | Private Ownership   | <b>Service Area:</b>       | Housing Development     |
| <b>Contract Laboratory:</b>   |   |                            | Midcontinent Laboratory |

# Monitoring/Reporting - Entry Point

Elk Creek Village

EPA ID: 2237

## SAMPLING

Entry point: Treat Site - Well #1&#2

|   | Chemical               | Sampling Frequency | Waivers | Taken Last | Due Next | Notes             |
|---|------------------------|--------------------|---------|------------|----------|-------------------|
| 1 | Inorganic Chemicals    |                    |         |            |          |                   |
|   | A. Antimony            | Every nine years   | Yes     | Jul-13     |          |                   |
|   | B. Arsenic             | Every nine years   | Yes     | Jul-13     |          |                   |
|   | C. Barium              | Every nine years   | Yes     | Jul-13     |          |                   |
|   | D. Beryllium           | Every nine years   | Yes     | Jul-13     |          |                   |
|   | E. Cadmium             | Every nine years   | Yes     | Jul-13     |          |                   |
|   | F. Chromium            | Every nine years   | Yes     | Jul-13     |          |                   |
|   | G. Cyanide             |                    | Yes     |            |          | State-wide waiver |
|   | H. Fluoride            | Every nine years   | Yes     | Jul-13     |          |                   |
|   | I. Mercury             | Every nine years   | Yes     | Jul-13     |          |                   |
|   | J. Nickel              | Every nine years   | Yes     | Jul-13     |          |                   |
|   | K. Selenium            | Every nine years   | Yes     | Jul-13     |          |                   |
|   | L. Thallium            | Every nine years   | Yes     | Jul-13     |          |                   |
| 2 | Radiological Chemicals | Every six years    | N/A     |            |          |                   |
| 3 | VOC Chemicals          | Quarterly          | No      | Aug-16     | 2019     |                   |
| 4 | SOC Chemicals          |                    |         |            |          |                   |
|   | A. Method 515.1        | Triennially        | No      | Aug-16     | 2019     |                   |
|   | B. Method 524          | Triennially        | No      | Aug-16     | 2019     |                   |
|   | C. Method 525          | Triennially        | No      | Aug-16     | 2019     |                   |
|   | D. Method 531.1        | Triennially        | No      | Aug-16     | 2019     |                   |
|   | E. Method 547          | Triennially        | No      | Aug-16     | 2019     |                   |
|   | F. Method 548          | Triennially        | No      | Aug-16     | 2019     |                   |
|   | G. Method 549          | Triennially        | No      | Aug-16     | 2019     |                   |
| 5 | Nitrate                | Annually           | N/A     | Oct-17     |          |                   |
| 6 | Nitrite                | Triennially        | N/A     | Jul-15     |          |                   |

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

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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>July 28, 2016</u>                 |
| B | Samples required:  | <u>5</u>                             |
| C | Sampling Frequency | <u>Triennially</u>                   |
| D | Date Due Next      | <u>2019</u>                          |
| E | Lead - 90% Level   | <u>1</u> Action Level - 15 ug/l      |
| F | Copper 90% Level   | <u>0.195</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>0.77</u> mg/l              |
| D | Running Annual Average: | <u>0.75</u> mg/l              |
| E | Date of last DBP test:  | <u>August 1, 2016</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

Elk Creek Village

EPA ID: 2237

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

| Violation Type             | Parameter          | Date       | Status              |
|----------------------------|--------------------|------------|---------------------|
| Lack of Certified Operator | Certified Operator | 02/01/2015 | Reminder Notice     |
|                            | DBP                |            | Compliance Achieved |

| Significant Deficiency | Date Identified | Date Corrected |
|------------------------|-----------------|----------------|
|                        |                 |                |
|                        |                 |                |

**EPA ID#: 2237 System Name: Elk Creek Village**

Sampler- Mr Bob Powles Work Phone-  
Title- Certified Operator  
Address- 7963 Deerview Road  
Piedmont SD 57769

Location- City: Piedmont County: Meade  
Service Area- Homeowners Association  
PWS Owner Type- Private Ownership  
Water Supply Type- Groundwater Supply

Population Served- 110 Service Connections- 44

**Sources for Elk Creek Village**

| Source | Name               | Year Built | Depth (feet) | Diameter (inches) | Availability | Type            | Vulnerability  | Treatment                    |
|--------|--------------------|------------|--------------|-------------------|--------------|-----------------|----------------|------------------------------|
| 01     | #1                 | 1978       | 365          | 7                 | Permanent    | Groundwater     | Non-Vulnerable | Treatment At Plant           |
| 02     | TREAT SITE - #1&#2 |            |              |                   | Permanent    | Treatment Plant | Non-Vulnerable | Disinfection - Hypochlorites |
| 04     | #2                 | 2004       | 455          | 6                 | Permanent    | Groundwater     | Non-Vulnerable | No Treatment                 |

**EPA ID#: 2237 System Name: Elk Creek Village**

**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       | Treated | 10/16/03 | 345 | 647         | 7.93 | 281   | 0     | 36 | 1.1 | 59.1 | 31.5 | 0.05 | 0.05 | 42.0 | 10  | 342  | 0   | 277      | +0.65    | 0.5 | 0.24 |
| 02       | Treated | 04/25/07 | 296 | 580         | 7.91 | 270   | 0     | 16 | 1.5 | 51.5 | 30.2 | 0.12 | 0.01 | 20.5 | 10  | 329  | 0   | 253      | +0.55    | 0.5 | 0.22 |
| 02       | Treated | 06/08/10 | 243 | 497         | 7.93 | 273   | 0     | 7  | 3.3 | 47.5 | 27.5 | 0.05 | 0.01 | 3.0  | 10  | 333  | 0   | 232      | +0.54    | 0.4 | 0.25 |
| 02       | Treated | 06/04/13 | 265 | 500         | 7.51 | 262   | 0     | 4  | 2.0 | 58.0 | 32.0 | 0.00 | 0.00 | 5.0  | 10  | 319  | 0   | 280      | +0.29    | 0.4 | 0.40 |
| 02       | Treated | 09/24/15 | 268 | 514         | 7.72 | 255   | 0     | 6  | 1.7 | 63.1 | 27.5 | 0.00 | 0.00 | 4.4  | 21  | 311  | 0   | 271      | +0.42    | 0.0 | 0.27 |
| Averages |         |          | 283 | 548         | 7.80 | 268   | 0     | 14 | 1.9 | 55.8 | 29.7 | 0.04 | 0.01 | 15.0 | 12  | 327  | 0   | 263      |          | 0.4 | 0.28 |

You can contact us by calling or  
write us at  
7963 Deerview Road  
Piedmont SD 57769

# Elk Creek Village

## 2017 Drinking Water Report

• • • • •  
*It's your tap water!*



EPA ID: 2237



# Water Quality

*Last year, the Elk Creek Village 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 110 customers an average of 18,000 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 Elk Creek Village 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 Bob Powles.

## 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 Elk Creek Village 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 Elk Creek Village (EPA ID 2237)

### 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    | 0.2       | 0                         | 07/28/16    | AL=1.3                     | 0          | ppm   | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives. |
| Lead      | 1         | 0                         | 07/27/16    | 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 | 08/16/16    | 15                          | 0                 | pCi/l | Erosion of natural deposits.   |
| Arsenic         | 5                      |        | 07/30/13    | 10                          | 0                 | ppb   | Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.                    |
| Barium          | 0.308                  |        | 07/30/13    | 2                           | 2                 | ppm   | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.                                |
| Combined Radium | 2                      | ND - 2 | 08/16/16    | 5                           | 0                 | pCi/l | Erosion of natural deposits.   |
| Fluoride        | 0.2                    |        | 07/30/13    | 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 Bob Powles with the Elk Creek Village public water system.