

2018 CONSUMER CONFIDENCE REPORT

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JANUARY 1 – DECEMBER 31, 2018

The South Cheyenne Water and Sewer District (SCWSD) are proud to release the Consumer Confidence Report for Annual Drinking Water Quality, for calendar year 2018. This report is designed to provide details about where your water comes from, what it contains, and how it compared to standards set by regulatory agencies.

IS CHEYENNE'S WATER SAFE?

YES! The SCWSD is proud to report that Cheyenne's drinking water is safe and meets or exceeds federal and local requirements.

NO VIOLATIONS

A detect but no violation: As you can see by the data in our table, our water system had no violations. We're proud that the drinking water provided by SCWSD and the Board of Public Utilities (BOPU) meets or exceeds all Federal requirements. We have learned through monitoring and testing that some constituents have been detected. The EPA has determined that Cheyenne's water **IS SAFE** at these levels.

The SCWSD and BOPU Water Treatment Division routinely monitors for potential contaminants in accordance with Federal laws. The tables below show the most recent results of our monitoring (through 12/31/2018), completed in accordance with the US EPA Drinking Water Regulations.

WHERE DOES CHEYENNE'S WATER COME FROM?

Cheyenne's water comes from both surface water and groundwater sources. A Source Water Assessment and Protection report was completed in 2004. To view a copy of this report, call (307) 637-6460.

ABOUT OUR WATER SUPPLY

The BOPU receives both surface water and ground. Surface water is collected from the Douglas Creek Drainage, located in the Snowy Range Mountains, about 75 miles west of Cheyenne. The water is stored in Rob Roy Reservoirs and transported to Granite and Crystal Reservoirs via two water delivery pipelines. Surface water is also collected from the Crow Creek Drainage, located in the Pole Mountain/Vedauwoo area, about 30 miles west of Cheyenne. Crow Creek water is collected and stored in North Crow Reservoir (North Crow Creek Drainage), in Granite and Crystal Reservoirs (Middle Crow Creek Drainage) and South Crow Reservoir (South Crow Creek Drainage). Water is delivered from these reservoirs to the R.L. Sherard water treatment plant by pipelines. The City owns and operates about 35 groundwater wells located west and northwest of Cheyenne. The wells pump from the Ogallala and White River Aquifers. Cheyenne also collects surface water in the Little Snake River Drainage (LSRD). The LSRD is located about 110 miles west of Cheyenne on the western slope of the Continental Divide. This water is transported through a tunnel and stored in Hog Park Reservoir located on the eastern slope of the Divide. Water released from Hog Park Reservoir is traded for surface water from the Douglas Creek Drainage. As water is released from Hog Park Reservoir, Cheyenne is allowed to collect water from the Douglas Creek Drainage and store the water in Rob Roy Reservoir for use in the drinking water system.

A NOTE FROM THE EPA ABOUT DRINKING WATER SOURCES AND REGULATIONS

Sources of drinking water (both tap water and bottled water) include rivers, streams, lakes, reservoirs, ponds, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, 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 storm water 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 agricultural, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals which are by-products of industrial process and petroleum production, and can also come from gas stations, urban storm water 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, the Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 1 (800) 426-4791 or by visiting <https://www.epa.gov/sdwa>.

DEFINITIONS

In the table below, you will find many terms and abbreviations which might not be familiar. To help you better understand these terms, we've provided the following definitions.

Action Level (AL) - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Contaminant Level (MCL) - The "Maximum Allowed" is 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.

Maximum Contaminant Level Goal (MCLG). The "Goal" is 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

Nephelometric Turbidity Unit (NTU) - Nephelometric Turbidity Unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable by the average person.

Parts per billion (ppb) or microgram per Liter (ug/L) - one part per billion corresponds to one minute in 2,000 years, or one penny in \$10,000,000.

Parts per million (ppm) or milligram per Liter (mg/L) - one part per million corresponds to one minute in two years, or one penny in \$10,000.

Picocurie per Liter (pCi/L) - Picocurie per Liter is a measure of radioactivity.

Treatment Technique (TT) - A treatment technique is a required process intended to reduce the level of contaminant in drinking water.

Table Referencing Contaminant Detects and/or Violations R – Round Top Storage Tank S – Sherard Plant

Contaminant	Violation Yes/No	Level Detected	MCLG	MCL	Likely Source of Contamination/ Comments	
Total Coliform Bacteria Positive samples on 10/08/18 and 10/15/18	No	Presence/ Absence Testing All follow up tests were negative	0	Presence of coliform in >5% of monthly samples	Naturally present in the environment. 720 samples were required for Regulatory Compliance. Of that number, only 2 samples resulted in a Total Coliform positive result. Upon retesting, those positives indicated negative results.	
Turbidity	No	0.04 NTU 100%	N/A	TT 95%<0.3	Soil runoff. Maximum allowable filtered water turbidity is 0.3 NTU in 95% of all samples. Turbidity values are recorded every 4 hours from all filters in operation and values reported monthly to the EPA.	
Lead	No	BOPU 3.3 90th percentile, based on 30 samples collected (27th highest) in August 2017 SCWSD 4.0 90th percentile, based on 20 samples collected (18th highest) in August 2017	ppb ppb	0 0	AL=15 AL=15	Corrosion of household plumbing systems, erosion of natural deposits. This sample was taken from a private residence.
Copper	No	BOPU 0.4 90th percentile, based on 30 samples taken (27th highest value) in 08/2017 SCWSD .23 90th percentile, based on 20 samples taken (18th highest value) in August 2017	ppm ppm	1.3 1.3	AL=1.3 AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives. This sample was taken from a private residence on the system.

Fluoride	No	R: 0.5 S: 0.4	ppm	4	4	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate (as Nitrogen)	No	R: 0.8 S: 0.5	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
TTHM Total Trihalomethanes (Sum of 4 compounds Chloroform, Bromoform, Bromadichloromethane, Dibromochloromethane)	No	R: Min. 18.7 Max 38.0 Avg: 28.4 S Min: 14.6 Max: 70.4 Avg: 42.5	ppb	0	80	By-product of drinking water chlorination
HAA5 Haloacetic Acids (Sum of 5 compounds: Monochloroacetic Acid, Dichloroacetic Acid, Trichloroacetic Acid, Monobromoacetic Acid, Dibromoacetic Acid)	No	R: Min: 14.0 Max: 26.0 Avg: 20.0 S: Min 8.4 Max 27.0 Avg: 17.7	ppb	0	60	By-product of drinking water chlorination
Radionuclides						
Gross Alpha	No	R:10.1±2.4 S: 4.3±1.9	PCi/L	None	15	Gross Alpha – Erosion of natural deposits
Radium 226	No	R:0.20±0.12 S: 0.08±0.10	PCi/L	None	15	Radium 226 and 228-Erosion of natural deposits
Radium 228	No	R:0.31±0.0.54 S: 0.22±0.52	PCi/L	None	15	
Uranium	No	R: 5.4 S: 1.5	ppb	None	30	Uranium – Naturally present in the environment.
TOC	No	TOC Raw Max: 4.8 TOC Finished Min: 2.2	ppm	N/A	TT	Total Organic Carbon is the measure of organic matter associated with water source.
Barium	No	R: 0.06 S: 0.05	ppm	2	2	Discharge of drilling wastes; erosion of natural deposits.

Sodium	No	R: 13 S: 9.1	ppm	None		Primarily water treatment chemicals. Naturally present in the environment
Arsenic	No	R: 0.06 S: 0.00	ppb	0	10	Erosion of natural deposits run off from orchards, glass and electronics production waste.
Sulfate	No	R: 5.2 S: 19	ppm	None	250	Used as a coagulation compound in the treatment of drinking water. Water additive - Ferric Sulfate.

Additionally, the BOPU tested the drinking water for the following contaminants, and found no detects:

INORGANIC CONTAMINANTS, UCMR4: Bromide, Manganese, Arsenic, Antimony, Asbestos, Beryllium, Bromate, Cadmium, Chromium, Cyanide, Mercury, Nickel, Nitrite, Selenium, Thallium

SYNTHETIC ORGANIC CONTAMINANTS INCLUDING PESTICIDES AND HERBICIDES, 2,4-D, 2,3,5-TP (Silvex), Alachlor, Atrazine, Benzo(a)pyrene, Carbofuran, Chlordane, Dalapon, Di(2-ethylhexyl)adipate, Endrin, Heptachlor, Heptachlor epoxide, Hexachlorobenzene, Hexachlorocyclopentadiene, Oxamyl (Vydate), Pentachlorophenol, Simazine, Toxaphene, Dioxin

VOLATILE ORGANIC CONTAMINANTS, Benzene, Carbon Tetrachloride, Chlorobenzene, 1,2-Dichloroethane, 1,1-Dichloroethylene, cis-1,2-Dichloroethylene, trans-1,2-Dichloroethylene, Ethylbenzene, Styrene, 1,2,4-Trichlorobenzene, 1,1,1-Trichloroethane, Toluene, Vinyl Chloride, Xylene, MTBE and Trichloroethylene

MICROBIOLOGICAL Giardia <1/Liter, Cryptosporidium <1/L

A NOTE ABOUT DRINKING WATER QUALITY AND IMMUNO-COMPROMISED PERSONS

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 healthcare providers. EPA/Centers for Disease Control and Prevention guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline at 1 (800) 426-4791.

A NOTE ABOUT LEAD

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 SCWSD and BOPU 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 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 drinking 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 at 1 (800) 426-4791 or at <http://www.epa.gov/safewater/lead>.

We encourage all of our customers to learn about Cheyenne's water system and the Safe Drinking Water Act. Help us protect our valuable water sources which are the heart of our community, our way of life and vital to our future. Learn more about Cheyenne's water by watching these videos at www.cheyennecity.org/2520/consumer-confidence-report.

Where does Cheyenne's water come from?

- Where does the Board of Public Utilities prepare drinking water?
- How does the Board of Public Utilities protect water resources?
- How does the Board of Public Utilities protect water quality as it is delivered to homes and businesses?
- Learn more about the Environmental Protection Agency's Safe Drinking Water Act.
- View Map of Cheyenne's water system.

OUR GOAL

The SCWSD and BOPU goal is to provide the community of Cheyenne with safe, quality drinking water that meets federal and local requirements at the lowest cost. We encourage all of our water customers to learn about Cheyenne's water system and the Safe Drinking Water Act requirements and to help us protect our valuable water sources, which are the heart of our community, our way of life and vital to our future.

QUESTIONS

If you have questions about this report or concerning your water utility please call Dena Hansen, General Manager at 635-5608, or email scwsd215@bresnan.net

SOUTH CHEYENNE WATER AND SEWER DISTRICT

BOARD OF DIRECTORS AND MANAGEMENT TEAM

Karen K. Hughes - President

Benjamin J. Marszalek - Vice-President

Gary Moser - Director

James Rish - Director

Robert Slesman - Director

Dena Hansen - General Manager

Scott Sprakties - Operations Manager

PUBLIC MEETINGS

We want our customers to be informed about their water. If you want to learn more about the SCWSD, please attend any of our regularly scheduled Board Meetings. District Board Meetings are held on the first Tuesday of each month, 5:30 p.m. at the SCWSD Office, 215 East Allison Road.

PROPERTY OWNERS AND MANAGERS

Please share this report with your tenants. Thank You!