Coleman County SUD 2018 Annual Drinking Water Report

(Also known as the Consumer Confidence Report) Water System Identification Number – TX0420034

Annual Water Quality Report for the period of January 1 to December 31, 2018

Coleman County SUD purchases treated surface water from the
City of Coleman which treats surface water from Coleman Lake and Hords Creek Lake
and Brookesmith SUD which purchases water from Brown County WID which treats surface water from Lake Brownwood .

some of the contaminants detected in both systems are listed below.

For more information regarding this report contact: Travis Rhoads at (325) 625-2133.

Este reporte incluye informacion sobre el agua para tomar. Para asistencia en espanol, favor de llamar at telephono (325) 625-2133.

PUBLIC PARTICIPATION OPPORTUNITIES AT WATER BOARD MEETINGS

Date: Second Wednesday of Every Month Time: 2:00 PM Location: Water Office – 214 Santa Anna Ave., Coleman, Texas 76834

Sources of Drinking Water

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, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. 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 EPAs Safe Drinking Water Hotline at (800) 426-4791.

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 agriculture, urban storm water 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 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, 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.

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact the system's business office. You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly, or immunocompromised persons such as those undergoing chemotherapy for cancer; persons who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders, can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care providers Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the 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. We are responsible for providing high quality drinking water, but we 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.

Information about Source Water

A Source Water Susceptibility Assessment for your drinking water source(s) has been completed by the Texas Commission on Environmental Quality. This report describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The systems from which we purchase our water received the assessment report. The information on source water assessment contained in the assessment allows us to focus source water protection strategies.

For more information about your sources of water and source water assessments and protection efforts at our system, please contact Travis Rhoads at 325-625-2133.

Water Quality Test Results Explanation of Acronyms Used in this Report: The following tables contain scientific terms and measures, some of which may require explanation.

Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.

Maximum Contaminant Level or 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.

Maximum Contaminant Level Goal or 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 Residual Disinfectant Level or MRDL: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal or MRDLG: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Level 1 Assessment: A level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

Treatment Technique or TT: A required process intended to reduce the level of a contaminant in drinking water.

MFL: million fibers per liter (a measure of asbestos)

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

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

na: not applicable

NTU: nephelometric turbidity units (a measure of turbidity)

ppb: micrograms per liter or parts per billion-or one ounce in 7,350,000

gallons of water.

 $\boldsymbol{ppm}\boldsymbol{:}$ milligrams per liter or parts per million-or one ounce in 7,350 gallons of water.

ppq: parts per quadrillion, or picograms per liter (pg/L)

ppt: parts per trillion, or nanograms per liter (ng/L)

Disinfectant (Chloramine) levels Testing Results in the Coleman County SUD Distribution System

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Disinfectant	Year of Range	Averag Level	Minimun Level	Maximum Level	MRI	MRDL	Unit of Measurement	Violatio	Source of Chemical
Chloramines	2018	2.89	0.5	4.00	4.0	4.0	ppm	N	Disinfectant used to control microbes

Microbiological (Coliforms) Testing Results in the Coleman County SUD System

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest Number of Positive Total Coliform Samples	E. coli Maximum Contaminant Level Goal	Total Number of Positive E. coli Samples	Violation	Likely Source of Contaminant
0	Two or more samples collected in a month which are total coliform positive	2	0	0	N	Naturally present in environment

2018 Water Loss Audit Information

Time Period Covered by Audit	Estimated Gallons of Water Lost During 2018	Comments and/or Explanations
January to December 2018	23.99 %	Most of the water lost during 2018 was the result of flushing to maintain water quality or leaks in the
		distribution system

2018 Regulated Contaminants Detected

Lead and Copper

Definitions:

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety. Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Lead and Copper	Date Sampled	MCLG	Action Level(AL)	90 th Percentile	#Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2017	1.3	1.3	0.36	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2017	0	15	6.9	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Regulated Contaminants in the Coleman County SUD Distribution System

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2018	28	20.2–36.4	No Goal for the Total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2018	67	45.3-71	No Goal for the Total	80	ppb	Y	By-product of drinking water disinfection.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Nitrate [measured as Nitrogen]	2018	0.39	0.09- 0.39	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Nitrite [measured as Nitrogen]	2018	1	0.01- 0.05	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Regulated Contaminants in the Source Water - City of Coleman

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2018	3.0	3.0 – 3.0	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2018	0.18	0.18 – 0.18	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2018	0.1	0.122 – 0.122	4	4	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (measured as N)	2018	0.139	0.769 – 0.139	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Nitrite (measured As N)	2018	0.205	0- 0.205	1	1	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Regulated Contaminants in the Source Water - Brookesmith SUD

Inorganic	Collection	Highest	Range of	MCLG	MCL	Units	Violation	Likely Source of Contamination
<u>Contaminants</u>	Date	Level	Levels					
		Detected	Detected					
Dalapon	2018	1.0	1.0 – 1.0	0	200	ppb	N	Runoff from herbicide used on rights of way.
Nitrate (measured as N)	2018	0.18	0.18 – 0.18	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Violations Tables

Chlorine

Some people who use water containing chlorine, well in excess of the MDRL, could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine, well in excess of the MDRL, could experience stomach discomfort.

Violation Type	Violation Begin	Violation End	Violation Explanation
Disinfectant Level Quarterly Operating Report (DLQOR)	04/01/2018	06/30/2018	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of drinking water during the period indicated.

Lead and Copper Rule

The Lead and Copper Rules protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.

Violation Type	Violation Begin	Violation End	Violation Explanation
FOLLOW-UP OR ROUTINE TAP M/R (LCR)	10/01/2018	2018	We failed to test our drinking water for the contaminant indicated. Because of this failure we cannot be sure of the quality of our drinking water during the period indicated.

Public Notification Rule

The Public Notification Rule helps to ensure that consumers will always know if there is a problem with their drinking water. These notices immediately alert consumers if there is a serious problem with their drinking water (e.g. boil water emergency)

Violation Tyme	Violetien	Violetian End	Violeties Evaluation
Violation Type	Violation Begin	Violation End	
PUBLIC NOTICE RULE LINKED TO VIOLATION	01/23/2017	04/26/2018	We failed adequately notify you, our drinking water consumers, about a violation of the drinking water regulations
PUBLIC NOTICE RULE LINKED TO VIOLATION	04/11/2017	04/26/2018	We failed adequately notify you, our drinking water consumers, about a violation of the drinking water regulations
PUBLIC NOTICE RULE LINKED TO VIOLATION	04/11/2017	03/14/2019	We failed adequately notify you, our drinking water consumers, about a violation of the drinking water regulations
PUBLIC NOTICE RULE LINKED TO VIOLATION	07/18/2017	03/14/2019	We failed adequately notify you, our drinking water consumers, about a violation of the drinking water regulations
PUBLIC NOTICE RULE LINKED TO VIOLATION	10/25/2018	03/12/2019	We failed adequately notify you, our drinking water consumers, about a violation of the drinking water regulations

Total Trihalomethanes (TTHM) Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer. Violation Type Violation Begin Violation End Violation Explanation FAILURE TO 02/19/2018 05/01/2018 We failed to submit our operational evaluation level (OEL) SUBMIT OEL report to our regulator. The report is needed to determine the REPORT FOR best treatment practices necessary to minimize possible future TTHM exceedances of TTHMs. MCL, LRAA 01/01/2018 03/31/2018 Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period MCL, LRAA 10/01/2018 12/31/2018 Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period

- Total Trihalomethanes (TTHM) We have been working diligently to lower the TTHMs in the far reaches of our distribution system. These improvements have included the installation of aeration equipment and frequent flushing of the main lines in the Rowden area. Given time to work we believe this treatment and flushing program will result in a reduction of the TTHM levels.
- 2. Operational Evaluation Report Form— The report was submitted, but we were unable to meet the reporting deadline. Policy and procedures have been reviewed and updated to assure that all TCEQ required reports are submitted in a timely manner,