2018 Annual Drinking Water Quality Report

(Consumer Confidence Report)

CENTRAL BOWIE COUNTY WSC

Phone No: 903-628-5601

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

CENTRAL BOWIE COUNTY WSC provides surface water from Wright Patman Lake near Texarkana, Texas and Millwood Lake near Ashdown, Arkansas.

For more information regarding this report contact:

Name: Hal Harris **Phone:** 903-628-5601

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (903) 628-5601.

Information about your 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 immune-compromised 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

Central Bowie County WSC purchases water from Texarkana Water Utilities(TWU). TWU provides purchased, treated, surface water from Wright Patman Lake near Texarkana, Texas and Millwood Lake near Ashdown, Arkansas.
The TCEQ completed a Source Water Assessment for all drinking water systems that own their own sources. The 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 system from which we purchased our water received the assessment report. For more information on source water assessments and protection efforts at our system, contact Rick Barton at Texarkana Water Utilities, 903-798-3800.

Opportunities for public participation in decisions that may affect water quality:

Regularly scheduled board of directors meetings which are held the 1st Tuesday of each month, at 6pm when daylight savings time is not in effect, and at 7pm when daylight savings time is in effect. Meetings are held at the CBCWSC office, 2822 Hwy 82 W, New Boston, TX 75570

Definitions and Abbreviations

Definitions and Abbreviations:	The following tables contain scientific terms and measures, some of which may require explanation
MCLG – Maximum Contaminate Level Goal:	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.
MCL – Maximum Contaminate Level:	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.
MRDLG - Maximum Residual Disinfectant Level Goal:	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.
MRDL - Maximum Residual Disinfectant Level:	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.
Action Level:	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow
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.
Avg:	Regulatory compliance with some MCLs are based on running annual average of monthly samples.
ppb:	micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.
Na or N/A:	not applicable.
Avg:	Regulatory compliance with some MCLs are based on running annual average of monthly samples.
ppm:	milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.
pCi/L:	picocuries per liter (a measure of radioactivity)
ppt:	parts per trillion, or nanograms per liter (ng/L)
MFL:	million fibers per liter (a measure of asbestos)
ppq:	Parts per quadrillion, or picograms per liter (pg/L)
NTU:	nephelometric turbidity units (a measure of turbidity)
TCEQ:	Texas Commission on Environmental Quality
EPA:	Environmental Protection Agency
ADH:	Arkansas Department of Health
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
mrem:	millirems per year (a measure of radiation absorbed by the body)
Treatment Technique or TT:	A required process intended to reduce the level of a contaminate in drinking water

2018 Water Quality Test Results

Coliform Bacteria

Total coliform bacteria are used as indicators of microbial contamination of drinking water because testing for them is easy. While not disease-causing organisms themselves, they are often found in association with other microbes that are capable of causing disease. Coliform bacteria are more hardy than many disease-causing organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption.

Total Coliform MCLG	Total Coliform MCL	Highest No. of Positive Detected	Fecal Coliform or E. Coli MCL	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Source of Contamination
0	1 positive monthly sample.	2	0	0	N	Naturally present in the environment.

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	ALG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Source of Contamination
Copper	8/25/2016	1.3	1.3	<0.02	0	mg/l	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	8/25/2016	0	0.015	<0.001	0	mg/l	N	Corrosion of household plumbing systems; erosion of natural deposits.

Disinfection By-Products

Disinfection and Disinfection By-Products	Collection Date	Highest Level or Average Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Source of Contamination
Haloacetic Acids (HAA5)*	2018	38	12.0 - 54.5	No goal for the total	60	ppb	N	By-product of drinking water chlorination.
Total Trihalomethanes (TThm)*	2018	55	28.9 - 49.6	No goal for the total	80	ppb	N	By-product of drinking water chlorination.

* The value in the Highest Level or Average Detected column is the highest average of all TTHM sample results collected at a location over a year

Disinfectant Residual

Year	Disinfectant	Average Level	Range of Levels Detected	MRDL	MRDLG	Unit of Measure	Source of Contaminate
2018	Chlorine and Chloramine	2.5	0.51 - 3.9	4	<4.0	ppm	Disinfectant used to control microbes

Inorganic Contaminants

Year	Disinfectant	Highest Level Detected	Range of Levels Detected	MCL	MCLG	Unit of Measure	Violation	Source of Chemical
2018	Nitrate (measured as Nirogen)	0.242	0.225 - 0.242	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, seage; Erosion of natural

Violations:

Revised Total Coliform Rule (RTCR)

The Revised Total Rule (RTCR) seeks to prevent waterborne diseases caused by E. coli. E coli are bacteria whose presense indicates that the water may be contaminated with human or animal wastes. Human pathogens in these watses can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, or the elderly, and people with severly comprimised immune systems.

Violation Type	Violation Began	Violation End	Violation Explanation
			One bacterological sample, and one repeat sample collected in September were positive for Total Coliform. No E. coli or fecal coliform was detected.

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct an assessment to identify problems and to correct any problems that were found during these assessments. During the past year we were required to conduct one Level 1 assessment. One Level 1 assessment was completed. TCEQ identified the following sanitary defect: Inadequate disinfectant residual. This sanitary defect subsequently led to a Boil Water Notice in October. In addition, we were required to take one corrective action and we completed one action.

Corrective Action: All of the tanks were drained, and all of the water lines were flushed to restore the disinfectant residual levels. Additional bacteriological samples were taken to confirm the absence of coliform bacteria.

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., a boil water emergency).

Violation Type	Violation Began	Violation End	Violation Explanation
Public Notice Rule Linked to Violation	09/01/2018	9/25/2018	We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations.(RTCR). Event occurred in August of 2017. Public notice of the violation was mailed to members in March of 2018.
Public Notice Rule Linked to Violation	04/01/2011	7/1/2019	We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations.(DLQOR) See page 7.

Water Loss Data

In the water loss audit submitted to the Texas Water Development Board for the time period of Jan-Dec 2018, our system lost an estimated 38,324,818 gallons of water. If you have any questions about the water loss audit, please call **903 628-5601**.

Additional Data Supplied by Texarkana Water Utilities

Organic Contaminants

Contaminant	Reporting Agency	Average Level Detected	Range of Detected Level	MCL	MCLG	Units of Measure	Likely Source of Contamination
2,4,D	ADH	0.29	0.29-0.29	70	70	ppb	Runoff from herbacide used on row crops

Inorganic Contaminants

Contaminant	Reporting Agency	Average Level Detected	Range of Detected Level	MCL	MCLG	Units of Measure	Likely Source of Contamination
Nitrate (as Nitrogen)	TCEQ	0.167	0.0336-0.3	10	10	ppm	Runoff from fertilizer use; leaking from septic tanks sewage; erosion of natural deposits
	ADH	0.1	0.1-0.1				
Barium	TCEQ	0.034	0.014-0.054	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
	ADH	0.162	0.0142-0.0182				
Flouride	TCEQ	0.0379	0.0218-0.0539	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.

Radioactive Contaminants *(2016 Sample Results)*

Contaminant	Reporting Agency	Average Level Detected	Range of Detected Level	MCL	MCLG	Units of Measure	Likely Source of Contamination
Combined Radium (226 + 228)	ADH	1.5	1.5 - 1.5	5	0	pCi/L	Erosion of natural deposits

Cryptosporidium

Cryptosporidium is a tiny intestinal parasite found naturally in the environment. It is spread by human and animal waste. If ingested, cryptosporidium may cause cryptosporidiosis, an abdominal infection (symptoms include nausea, diarrhea, and abdominal cramps). Some ways cryptosporidium can be spread include drinking contaminated water, eating contaminated food that is raw or undercooked, exposure to the feces of animals or infected individuals (i.e. changing diapers without washing hands afterward), or exposure to contaminated surfaces. Not everyone exposed to the organism becomes ill. During 2018, Texarkana tested for cryptosporidium in both untreated and treated water. In has only been found in the untreated water supply. Cryptosporidium has not been found in Texarkana's drinking water. Texarkana works to protect the watershed from contamination and optimizes the treatment process. Although Texarkana's water treatment process removes cryptosporidium, immune-compromised persons should consult their physician regarding appropriate precautions to avoid infection

Contaminant	Location	Average Level Detected	Range of Detected Levels	Units	Source of Contamination
Crytosporidium	Wright Patman untreated	0.1	0.1	oocysts/L	Human and animal fecal waste

Turbidity

Turbidity is a measure of the cloudiness of water. It is used to indicate water quality and filtration effectiveness (e.g., whether disease-causing organisms are present). Higher turbidity levels are often associated with higher levels of disease-causing microorganisms such as viruses, parasites, and some bacteria. These organisms can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Contaminant	Location	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits	Units	Likely Source of Contamination
Turbidity	Wright Patman	0.32	100%	≤0.3 in 95% of samples	NTU	Soil runoff.
	Millwood	0.29	100%			

Unregulated Contaminants

Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether further regulation is warranted. MCLs (Maximum Contaminant Levels) and MCLGs (Maximum Contaminant Level Goals) have not been established for all unregulated contaminants.

Contaminant	Reporting Agency	Range of Detected Level	Average Level	Units	MCLG	Likely Source of Contamination
Chloroform	TCEQ	26.2-33.5	39.6	ppb	70	By-products of drinking water disinfection
	ADH	28.6-28.6	35.2			
Bromodichloromethane	TCEQ	9.45-12.1	10.7	ppb	0	By-products of drinking water disinfection
	ADH	10.8-10.8	12.5			
Dibromochloromethane	TCEQ	2.87-3.69	2.29	ppb	60	By-products of drinking water disinfection
	ADH	2.47	5.48			
Acetone	TCEQ	6.16-6.88	11.69	ppb	6000	Used in manufacture of plastics, fibers, cosmetics, photograhic film, and many other kinds of consumer goods
Methyl ethyl ketone	TCEQ	0.89-1.02	1	ppb	None	A solvent used in the synthetic rubber industry, in the production of paraffin wax and in household products such as lacquers, varnishes, paint remover and glues.

Important Information About Your Drinking Water

Public water systems must routinely monitor for drinking water contaminants. CENTRAL BOWIE COUNTY WSC, TX0190024 failed to monitor for or meet drinking water standards. The table below lists each violation, the time period(s), potential health effects, and associated analytical results (if applicable).

Originating Violation	Violation Number	Time Period(s) of Violation(s)		Potential Health Effects	Analytical Results
A Disinfectant Level Quarterly Operating Report (DLQOR) violation for CHLORINE	2017 417	04/01/2011	06/30/2011	Required Disinfection Quarterly Operating Report showing disinfectant residuals was not provided to TCEQ on-time or not provided for the specified quarterly monitoring period.	No Analytical Result(s) Associated

You do not need to boil your water or obtain alternative water supply (e.g. bottle water) at this time. However, if you have specific health concerns, consult your doctor

If you have a severely compromised immune system, have an infant, are pregnant, or are elderly, you may be at increased risk and should seek advice from your health care providers about drinking this water. General guidelines on ways to lessen the risk of drinking water contaminants are available from EPA's Safe Drinking Water Hotline at 1-800-426-4791.

Corrective Action:

CENTRAL BOWIE COUNTY WSC has taken the following action(s) to return the system to compliance:

We collected disinfectant samples and continue to do so. The report for time period is attached. MB Reports are due to TCEQ by the 10th. Note that report is dated 6/11/19 because it is auto generated. Report was generated on 7/5/11. We do not know if TCEQ got it, or got it late. Has not been a problem since.

For more information, or to learn more about protecting your drinking water, please contact CENTRAL BOWIE COUNTY WSC representative Hal Harris at (903) 628-5601.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

PWS / 0190024 / MOR

DISINFECTANT LEVEL QUARTERLY OPERATING REPORT (DLQOR)

FOR GROUNDWATER OR PURCHASED-WATER PUBLIC WATER SYSTEMS-ANY SIZE

Select Quarter: 2nd - Apr/May/Jun Select Year: 2011

PWS Name: Central Bowie County WSC	PWS ID: 0190024

Type of Disinfectant Used in Distribution System*: Both

* If you used chloramines and free chlorine at any time during this quarter, select both.

First Month of Quarter: Monthly Summary

Month: April Was the PWS active this month? (•) YES ( ) NO

Average of all disinfectant residuals for this month	Number of residuals collected this month	Number below MIN for this month	Number with NO residual for this month
2.00 mg/L	30 readings	0 readings 0.0 %	0 readings 0.0 %

Second Month of Quarter: Monthly Summary

Month: May Was the PWS active this month? (•) YES ( ) NO

Average of all disinfectant residuals for this month	Number of residuals collected this month	Number below MIN for this month	Number with NO residual for this month
1.90 mg/L	31 readings	0 readings 0.0 %	0 readings 0.0 %

Third Month of Quarter: Monthly Summary

Month: June Was the PWS active this month? (•) YES ( ) NO

Average of all disinfectant residuals for this month	Number of residuals collected this month	Number below MIN for this month	Number with NO residual for this month
1.90 mg/L	30 readings	0 readings 0.0 %	0 readings 0.0 %

Quarterly Summary and Certification

Average of all disinfectant residuals for this quarter	Lowest residual for this quarter	Highest residual for this quarter
1.93 mg/L	1.00 mg/L	2.30 mg/L

☒ I certify that I am familiar with the information contained in this report and that, to the best of my knowledge, the information is true, complete, and accurate.

Name: Hal W Harris (Enter Name) _____ (Signature) Today's Date: 6/1/19

Title: General Manager Phone Number: (903) 628-5601

License #: WD0005374 Email address: cbcwsc@aol.com

NO

Complete this form for the previous quarter at the beginning of April, July, October, and January; and submit in time for it to be **received** by the TCEQ by the 10th of the month. Always print and sign form, and keep a copy with your records for TCEQ review.

Step 1: Print Copy (For your own records)

Step 2: Print to Mail

Sign and Mail to:
TCEQ / PDW MC-155
Attn: DLQOR
PO Box 13087
Austin, TX 78711-3087

Click the button below to start over or to reset to enter data for a different system.

Clear Form