

2016 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, 2016

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water. The source of drinking water used by CENTRAL BOWIE COUNTY WSC is Purchased Surface Water.

For more information regarding this report contact:

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

Source 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 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 Assessments

The TCEQ has 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. You may also refer to the Source Water Assessment Viewer available at the following URL:

<https://gisweb.tceq.texas.gov/swav/Controller/index.jsp?wtrsrc=>

Further details about sources and source water assessments are available in Drinking Water Watch at the following URL: <http://dww2.tceq.texas.gov/DWW/>

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

Water Quality Test Results

| | |
|--|---|
| Definitions: | 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. |
| 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: | A required process intended to reduce the level of a contaminate in drinking water |

2016 Regulated Contaminants Detected

Coliform Bacteria

| 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. | 0 | 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 Detected | Range of Levels Detected | MCLG | MCL | Units | Violation | Source of Contamination |
|---|-----------------|------------------------|--------------------------|-----------------------|-----|-------|-----------|--|
| Haloacetic Acids (HAA5)* | 2016 | 19 | 0 - 41.8 | No goal for the total | 60 | ppb | N | By-product of drinking water chlorination. |
| Total Trihalomethanes (TThm)* | 2016 | 57 | 5.53 - 61.9 | No goal for the total | 80 | ppb | N | By-product of drinking water chlorination. |

Disinfectants

| Year | Disinfectant | Average Level | Minimum Level | Maximum Level | MRDL | MRDLG | Unit of Measure | Source of Contaminate |
|------|-------------------------|---------------|---------------|---------------|------|-------|-----------------|---------------------------------------|
| 2016 | Chlorine and Chloramine | 2.2 | 0.5 | 3.4 | 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 |
|------|--------------------------------|------------------------|--------------------------|-----|------|-----------------|-----------|---|
| 2016 | Nitrate (measured as Nitrogen) | 0.203 | 0.104 - 0.203 | 10 | 10 | ppm | N | Runoff from fertilizer use; Leaching from septic tanks, seage; Erosion of natural |

Violations: None

Water Loss Data

In the water loss audit submitted to the Texas Water Development Board for the time period of Jan-Dec 2016, 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 |
|-------------|------------------|------------------------|-------------------------|-----|------|------------------|---|
| Atrazine | TCEQ | 0.44 | 0.0 - 0.44 | 3 | 3 | ppm | Runoff from herbicide used on row crops sewage; erosion of natural deposits |

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 | 0.04 | 0.04 - 0.04 | 10 | 10 | ppm | Runoff from fertilizer use; leaking from septic tanks sewage; erosion of natural deposits |
| Arsenic | TCEQ | 0.81 | 0.81 - 0.81 | 10 | 0 | ppb | Erosion of natural deposits; runoff from orchards, runoff from glass and electronics production wastes |
| Cyanide | TCEQ | 16.7 | 0.0 - 16.7 | 200 | 200 | ppb | Discharge from steel/metal factories; discharge from plastic and fertilizer factories |
| Chromium | TCEQ | 0.72 | 0.0 - 0.72 | 100 | 100 | ppb | Erosion of natural deposits; discharge from steel and pulp mills |

Radioactive Contaminants

| 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 |

Disinfection By-Products

| Contaminant | Location | Highest Quarterly Distribution Average | Range of Detected Levels | MCL | MCLG | Units | Source of Contamination |
|-------------|----------|--|--------------------------|------|------|-------|---|
| Clorite | Texas | 0.31 | 100% | 1000 | 800 | ppb | By-product of drinking water disinfection |
| | Arkansas | 0.31 | 100% | | | | |

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 | 0.31 | 100% | ≤0.3 in 95% of samples | NTU | Soil runoff. |
| | Millwood | 0.31 | 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.

| Contaminant | Reporting Agency | Range of Detected Level | Average Level | Units | MCLG | Likely Source of Contamination |
|----------------------|------------------|-------------------------|---------------|-------|------|---|
| Chloroform | TCEQ | 36.3-42.9 | 39.6 | ppb | 70 | By-products of drinking water disinfection |
| | ADH | 35.2-35.2 | 35.2 | | | |
| Bromodichloromethane | TCEQ | 10.5-10.9 | 10.7 | ppb | 0 | By-products of drinking water disinfection |
| | ADH | 12.5-12.5 | 12.5 | | | |
| Dibromochloromethane | TCEQ | 2.04-2.53 | 2.29 | ppb | 60 | By-products of drinking water disinfection |
| | ADH | 5.48-5.48 | 5.48 | | | |
| Acetone | TCEQ | 9.68 -13.7 | 11.69 | ppb | 6000 | Used in manufacture of plastics, fibers, cosmetics, photographic film, and many other kinds of consumer goods |