



Post Office Box 1335  
8 Spencer Road, Suite 200  
Boerne, Texas 78006-1335  
830.537.5755  
PWS# 1300033

## 2016 Annual Drinking Water Quality Report

June 20, 2017

The following pages contain the information on the annual Water Quality Report from TCEQ for Kendall West Utility for the period of January 1, to December 31, 2016. The report in its entirety can be accessed at [www.kwutility.com/reports/](http://www.kwutility.com/reports/).

Kendall West Utility office hours are Monday - Friday, 8 a.m. - 5 p.m. The general manager is available during office hours for questions pertaining to this report, or to discuss decisions that may affect the quality of the drinking water.

---

### **SPECIAL NOTICE**

Immunocompromised 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 are available from the Safe Drinking Water Hotline (800) 426-4791 or <http://www.epa.gov/safewater>

Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre éste informe en español, favor de llamar al tel. (830) 537-5755 para hablar con una persona bilingüe en español.

## 2016 Regulated Contaminants

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 EPA's 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>.

## Where do we get our drinking water?

In 2016, about 78% of our water was purchased from the Western Canyon Regional Water Supply Project (WCRWSP) sponsored by the Guadalupe-Blanco River Authority. The source of water for the WCRWSP is Canyon Lake. The remaining 22% of our water came from groundwater wells in the Trinity group aquifers, known locally as the Cow Creek, Lower Glen Rose and Upper Glen Rose aquifers.

## Source Water Susceptibility Assessment:

The TCEQ completed an assessment of your source water and results indicate that some of your sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detections of these contaminants may be found in this Consumer Confident Report. For more information on source water assessments and protection efforts at our system, contact Stan Scott, Operations Manager.

---

## Water Quality Test Results

*Definitions:*

*The following tables contain scientific terms and measures, some of which may require explanation.*

### 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.

### Maximum Contaminant Level Goal (MCLG)

The level of a contaminant in drinking water below which there is no known or expected health risk. MCLGs allow for a margin of safety.

### Maximum Residual Disinfectant Level (MRDL)

The highest level of 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 (MRDLG)

The level of 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.

### mrem

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

**ppq** parts per quadrillion, or picograms per liter (p g/L)

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

### 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.

### Avg

Regulatory compliance with some MCLs are based on running annual average or monthly samples.

**NA** Not applicable

**NTU** Nephelometric Turbidity Units (a measure of turbidity)

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

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

**ppm**—parts per million, or milligrams per liter, or one ounce in 7,350 gallons of water

**ppb**—parts per billion, or micrograms per liter, or one ounce in 7,350,000 gallons of water

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

**ppq** parts per quadrillion, or picograms per liter (p g/L)

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

### Treatment Technique or TT

A required process intended to

### Regulated Contaminants

Disinfectants/ Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2016	44	43.5-43.5	No goal for the total	60	ppb	N	By product of drinking water disinfection
Total Trihalomethanes (TTHM)	2016	75	75.3-75.3	No goal for the total	80	ppb	N	By product of drinking water disinfection
Inorganic Contaminates	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2016	0.0211	0.0197-0.0211	2	2	ppm	N	Discharge of drilling wastes and/or metal refineries; Erosion of natural deposits
*Fluoride	05/11/2015	2.68	2.42-2.68	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (measured as Nitrogen)	2016	0.18	0.2-0.18	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

\*Fluoride compounds are salts that form when the element, fluorine, combines with the minerals in soil or rocks. Kendall West Utility does not add fluoride to its drinking water.

Radioactive contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/Photon emitters	5/11/2015	14.6	14.6-14.6	0	50	pCi/L*	N	Decay of natural and man-made deposits
Combined Radium 226/228	5/11/2015	0.67	0.67-0.67	0	5	pCi/L	N	Erosion of natural deposits
Gross alpha excluding radon and uranium	5/11/2015	4.2	4.2-4.2	0	15	pCi/L	N	Erosion of natural deposits
Synthetic organic contaminants including pesticides and herbicides	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
2,4-D	9/24/2014	0.1	0.1-0.1	70	70	ppb	N	Runoff from herbicide used on row crops
Dalapon	2016	1.2	1.2-1.2	200	200	ppb	N	Runoff from herbicide used on rights of way

\*EPA considers 50 pCi/L to be the level of concern for beta particles.

## Lead and Copper

### Definitions:

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected health 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 <sup>th</sup> Percentile	# sites over AL	Units	Violation	Likely Source of Contamination
Copper	2016	1.3	1.3	0.125	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead	2016	0	15	1.2	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits

\*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. BEU is responsible for providing drinking water that meets all federal and state standards, 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 until the water is noticeably colder before using the water, and using only cold 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 and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>. When replacing your bathroom or kitchen faucet, consider a "lead-free" faucet that meets NSF/ANSI Standard 61 Annex G, which is less than 0.25% lead by weight.

### Maximum Residual Disinfection Level

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	UNIT OF MEASURE	SOURCE OF CHEMICAL
2016	Chlorine (Free)	1.93	0.80	2.90	4.0	<4.0	ppm	Disinfectant used to control microbes

### Violations Table

Lead and Copper Rule			
The Lead and Copper Rule 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 Began	Violation End	Violation Explanation
FOLLOW-UP OR ROUTINE TAP M/R (LCR)	10/01/2014	9/22/16	*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 our drinking water during the period indicated.
FOLLOW-UP OR ROUTINE TAP M/R (LCR)	10/01/2015	9/22/16	*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 our drinking water during the period indicated.

\*Lead and Copper samples were collected and analyzed February 26, 2015, and October 21, 2015 All results were within normal limits. Testing was repeated summer 2016 which was recognized by TCEQ and the violation was removed. Those results are reflected above