2015 Annual Drinking Water Quality Report (Consumer Confidence Report)

City of Killeen www.killeentexas.gov

Phone No: (254) 501-6500

Our Drinking Water Meets or Exceeds All Federal (EPA) Drinking Water Requirements

The City of Killeen is dedicated to providing an adequate supply of safe and reliable drinking water. Our employees take pride in delivering water to your tap that meets or exceeds all federal (EPA) drinking water standards. This report is a summary of the quality of water we provide our customers. The analysis was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. Even though our water met or exceeded all requirements, we are providing this information so that you become more knowledgeable about your drinking water.

Water Sources:

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, or falls through the air, it accumulates naturally occurring minerals and, in some cases, chemical or biological substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water before treatment include: microbes, inorganic contaminants, pesticides, herbicides, radioactive contaminants, and organic chemical contaminants. Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily cause for health concerns. For more information on taste, odor or color of drinking water, please contact the City of Killeen Water & Sewer Services Division at (254) 501-6500.

Where do we get our drinking water?

City of Killeen drinking water is obtained from a surface water source, Belton Lake, located in Belton, Texas. The Texas Commission on Environmental Quality (TCEQ) has completed a Source Water Assessment for all drinking water systems that own their 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 purchase our water, Bell County Water Control & Improvement District No. 1, received the assessment report. For more information on source water assessments and protection efforts in our system, contact City of Killeen Water & Sewer Services Division at (254) 501-6500. For more information about your sources of water, please refer to the Source Water Assessment Viewer available at http://www.tceq.texas.gov/gis/swaview. Further details about sources and source-water assessments are available in Drinking Water Watch at http://dww2.tceq.texas.gov/DWW/ .

Special notice for the elderly, infants, cancer patients, persons with HIV/AIDS or other immune problems:

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, persons with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly at risk of infections. These people should seek advice about drinking water from their health care providers. The EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800) 426-4791.

FOR MORE WATER QUALITY INFORMATION

Bell County Water Control & Improvement District No. 1, (254) 501-9243 or www.wcid1.org
Texas Commission on Environmental Quality (TCEQ), www.tceq.texas.gov
EPA Safe Drinking Water Hotline, (800) 426-4791 or water.epa.gov
Water Billing Questions – City of Killeen Utility Collections, (254) 501-7800 or www.killeentexas.gov/utilitycollections
Water or Sewer Problems/Emergencies – City of Killeen Water & Sewer Services, (254) 501-6500
City of Killeen Website www.killeentexas.gov/watersewer

En Español

Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (254) 501-6500.

Public Participation Opportunities

The City Council meets in regular session on the second and fourth Tuesday of each month in the Council Chambers located in the Killeen City Hall building at 101 North College Street. Council workshops are also scheduled each month on the first and third Tuesday. To find the next scheduled meeting, visit the City of Killeen website www.killeentexas.gov or call Killeen City Hall at (254) 501-7600. The Lake and River Cleanup Program is an effort between Keep Texas Beautiful, Texas Commission on Environmental Quality and the City of Killeen. If you would like to participate, contact the Water & Sewer Services Division at (254) 501-6500 for more information.

ALL drinking water may contain contaminants.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health. When drinking water meets federal standards, there may not be any health-based benefits to purchasing bottled water or point of use devices. Drinking water, including bottled water, may be reasonably 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 (800) 426-4791.

Secondary Constituents

Many constituents (such as calcium, sodium or iron), which are often found in drinking water, can cause taste, color and odor problems. The taste and odor constituents are called secondary constituents and are regulated by the State of Texas, not the EPA. These constituents are not causes for health concern; therefore, secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

Water Loss

In the water loss audit submitted to the Texas Water Development Board for the period of January through December 2015, our system had a total estimated loss of 1,079,271,655 gallons of water. If you have any questions about the water loss audit, please call (254) 501-6500.

Backflow Prevention and Cross Connection Control

Under Texas Administrative Code (30 TAC, §290.46(j)), a customer service inspection (CSI) is required for each service connection before continuous water service can be provided. A municipality is also required to have a backflow prevention program or a cross connection control program. No water connection from any public drinking water supply system shall be allowed to any residence or establishment where an actual or potential contamination hazard exists unless the public water facilities are protected from contamination. Under the Federal Safe Drinking Act of 1974, and the rules adopted by the Texas Commission on Environmental Quality under 30 TAC, Chapter 290, the water purveyor has the primary responsibility for preventing water from unapproved sources or any other substances from entering the public potable water system. For more information on Backflow Prevention and Cross Connection Control please call (254) 501-6500, option 4.

About the following pages

The pages that follow list the federally regulated or monitored contaminants which have been found in your drinking water. The U.S. EPA requires water systems to test for up to 97 contaminants.

DEFINITIONS

Maximum Contaminant Level (MCL) - The highest permissible level of a contaminant 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 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 contamination.
Treatment Technique (TT) - A required process intended to reduce the level of a contaminant in drinking water.
Action Level (AL) - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

ABBREVIATIONS

NTU - nephelometric turbidity units (a measure of turbidity)
MFL - million fibers per liter (a measure of asbestos)
mrem/yr - millirems per year (a measure of radiation absorbed by the body)
pCi/L - picocuries per liter (a measure of radioactivity)
ppm - parts per million, or milligrams per liter (mg/L)
ppb - parts per billion, or micrograms per liter (µg/L)
ppt - parts per trillion, or nanograms per liter (ng/L)
ppq - parts per quadrillion, or picograms per liter (pg/L)

WATER QUALITY DATA TABLE

The table below lists all the contaminants that were detected in your drinking water during calendar year 2015. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

Inorganic Contaminants

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCLG	MCL	Unit of Measure	Violation	Source of Contaminant
2015	Barium	0.051	0.0497	0.0523	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
2015	Cyanide	150	140	160	200	200	ppb	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
2015	Fluoride	0.235	0.23	0.24	4	4	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
2015	*Nitrate	0.15	0.14	0.16	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

***Nitrate Advisory – Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for periods of time because of rainfall or agriculture activity. If you are caring for an infant you should ask for advice from your health care provider.**

Radioactive Contaminants								
Collection Date	**Contaminant**	**Maximum Level**	**Range of Levels**	**MCLG**	**MCL**	**Units**	**Violation**	**Likely Source of Contaminant**
4/28/2015	Beta/photon emitters	5.2	4.4 – 5.2	0	50	pCi/L*	N	Decay of natural and man-made deposits
***EPA considers 50 pCi/L to be the level of concern for beta particles.**								

Synthetic Organic Contaminants Including Pesticides									
Year or Range	**Contaminant**	**Average Level**	**Minimum Level**	**Maximum Level**	**MCLG**	**MCL**	**Unit of Measure**	**Violation**	**Source of Contaminant**
2015	Atrazine	0.14	0.13	0.15	3	3	ppb	N	Runoff from herbicide use on row crops.
2015	Di (2-ethlhexyl) phthalate	<0.60	<0.60	<0.60	0	6	ppb	N	Discharge from rubber and chemical factories.

Maximum Residual Disinfectant Level								
Year	**Disinfectant**	**Average Level**	**Minimum Level**	**Maximum Level**	**MRDLG**	**MRDL**	**Unit of Measure**	**Source of Disinfectant**
2015	Chloramine Residual	1.93	0.50	4.10	<4.0	4	ppm	Disinfectant used to control microbes.

Disinfection Byproducts							
Year	**Contaminant**	**Average Level**	**Minimum Level**	**Maximum Level**	**MCL**	**Unit of Measure**	**Source of Contaminant**
2015	Total Haloacetic Acids	14.6	4.0	29.8	60	ppb	Byproduct of drinking water disinfection.
2015	Total Trihalomethanes	28.8	16.3	41.3	80	ppb	Byproduct of drinking water disinfection.

Unregulated Contaminants						
Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.						
Year or Range	**Contaminant**	**Average Level**	**Minimum Level**	**Maximum Level**	**Unit of Measure**	**Source of Contaminant**
2015	Chloroform	12.1	3.0	21.3	ppb	Byproduct of drinking water disinfection.
2015	Bromoform	2.6	1.5	4.1	ppb	Byproduct of drinking water disinfection.
2015	Bromodichloromethane	9.8	5.4	15.1	ppb	Byproduct of drinking water disinfection.
2015	Dibromochloromethane	5.6	3.2	10.9	ppb	Byproduct of drinking water disinfection.

Turbidity				
Turbidity has no health effects; however, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.				
	Limit (Treatment Technique)	**Level Detected**	**Violation**	**Likely Source of Contaminant**
Highest Single Measurement	1 NTU	0.33 NTU	N	Soil runoff.
Lowest Monthly % of Samples Meeting Limits	0.3 NTU	100%	N	Soil runoff.

Total 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 hardier than many disease-causing organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption.						
Maximum Contaminant Level Goal	**Total Coliform Maximum Contaminant Level**	**Highest No. of Positive Samples**	**Fecal Coliform or E. Coli Maximum Contaminant Level**	**Total No. of Positive E. Coli or Fecal Coliform Samples**	**Violation**	**Source of Contaminant**
0	5% of monthly samples are positive	0.8		0	N	Naturally present in the environment.

Lead and Copper

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. This water supply 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 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 (800) 426-4791 or at www.epa.gov/safewater/lead.

Collection Date	Contaminant	The 90th Percentile	Number of Sites Exceeding Action	Action Level	Unit of Measure	Violation	Source of Contaminant
9/5/2012	Lead	2.12	0	15	ppb	N	Corrosion of household plumbing systems; erosion of natural deposits.
9/5/2012	Copper	0.129	0	1.3	ppm	N	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

Total Organic Carbon

Total organic carbon (TOC) has no health effects. Disinfectant can combine with TOC to form disinfection byproducts. Disinfection is necessary to ensure that water does not have unacceptable levels of pathogens. Byproducts of disinfection include trihalomethanes (THMs) and haloacetic acids (HAA) which are reported elsewhere in this report.

Year	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2015	Source Water	7.37	4.76	10.0	ppm	Naturally present in the environment.
2015	Drinking Water	2.58	0	5.68	ppm	Naturally present in the environment.

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. Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor. Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

Violation Type	Violation Begin	Violation End	Violation Explanation
Follow-Up or Routine Tap M/R (LCR)	10/01/2015	2015	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.

As required by the TCEQ, the City of Killeen will monitor and report the results of their lead and copper sampling for the June 1 through September 30, 2016, sampling period. If you have any questions regarding this violation, please contact Robert White, Director of Water and Sewer Services, at 254-501-6305.