

Tap vs. Bottled, Rethinking What You Are Drinking

When choosing the water you want to drink, it is often easy to be convinced that bottled water is healthier for you than tap water, but in truth is it? The answer, thanks to a study by the Natural Resources Defense Council (NRDC) is not always. First, approximately 25 percent of bottled water is – in reality – bottled tap water. Additionally, the Food and Drug Administration (FDA) regulates bottled water; however, their testing standards are not as rigorous as the ones required by the US Environmental Protection Agency (EPA) for tap water. Moreover, FDA oversight does not apply to water that is packaged and sold within the same state. According to the NRDC's report, this leaves approximately 60-70 percent of bottled water, including the contents of watercooler jugs, free of FDA regulation.

It is estimated that people spend almost 5,000 times more per gallon of bottled water than they would for tap water. For those who get their recommended eight glasses of water a day, you could be saving over \$1,000 annually if you switched to tap water!

Water Conservation

You can play a role in conserving water and save yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water-using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

City of Cuero
212 E. Main Street
Cuero, TX 77954

Public Participation Opportunities

You can attend regular public meetings on the second Monday of every month, at 5:15 p.m., at the City Hall Council Chambers at 212 E. Main.

Questions?

For more information about this report, or for any questions relating to your drinking water, please call Wayne Berger, Water Department Superintendent, at (361) 275-6114.

City of Cuero

PWS ID# TX0620001



2018 Annual Drinking Water Quality Report

Our Drinking Water Is Regulated

This report is a summary of the quality of the 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. We hope this information helps you become more knowledgeable about what's in your drinking water.

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.

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.

Where Do We Get Our Drinking Water?

Our water source is ground water from the Jasper Aquifer.

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 Confidence Report. For more information on source water assessments and protection efforts at our system, contact Wayne Berger, Water Department Superintendent, at (361) 275-6114.

For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL: <http://www.tceq.texas.gov/gis/swaview>

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

Source Water Name		Type of Water
10-Plant 2/E Alexander St	Plant 2	GW
11-Prison	Prison	GW
12-Bridge St	Bridge St	GW
5-Plant 1/Morgan Ave	Plant 1	GW

All Drinking Water May Contain Contaminants

When drinking water meets federal standards there may not be any health benefits to purchasing bottled water or point of use devices. 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 (1-800-426-4791).

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.

Required Additional Health Information for Lead

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 or at <http://www.epa.gov/safewater/lead>.

En Español

Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (361) 275-3476.

We routinely monitor for constituents in your drinking water according to federal and state laws. The test results table shows the results of our monitoring for the period of January 1st to December 31st, 2018. 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).

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.

Inorganic Contaminants

Contaminant (Units)	Violation	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Likely Source of Contamination
Arsenic (ppb)*	No	2017	4.8	4.8 - 4.8	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	No	2017	0.119	0.119 - 0.119	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	No	2017	0.94	0.71 - 0.94	4	4.0	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (measured as Nitrogen) (ppm)	No	2018	0.06	0.01-0.06	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)	No	2017	9.2	9.2 - 9.2	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines

* While your drinking water meets EPA standards for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Disinfectants and Disinfection By-Products

Contaminant (Units)	Violation	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG [MRDLG]	MCL [MRDL]	Likely Source of Contamination
Haloacetic Acids (HAA5) (ppb)	No	2018	4*	4.4-4.4	N/A	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	No	2018	13**	12.5-12.5	N/A	80	By-product of drinking water disinfection
Chlorine Residual (ppm)	No	2018	1.93	0.87-3.00	[4.0]	[4.0]	Disinfectant used to control microbes

* The value in the Highest Level or Average Detected column is the highest average of all HAA5 sample results collected at a location over a year.

** 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.

Radioactive Contaminants

Contaminant (Units)	Violation	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Likely Source of Contamination
Beta/photon emitters (pCi/L)	No	2018	6.9	0-6.9	0	50	Decay of natural and man-made deposits
Combined Radium 226/228(pCi/L)	No	2018	5	4.33-5.38	0	5	Erosion of natural deposits
Gross alpha excluding radon and uranium(pCi/L)	No	2018	13.2	10.1-13.2	0	15	Erosion of natural deposits

Lead and Copper

Contaminant (Units)	Violation	Date Sampled	MCLG	Action Level	90th Percentile	# Sites Over AL	Likely Source of Contamination
Copper (ppm)	No	2016	1.3	1.3	0.11	0	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems
Lead (ppb)	No	2016	0	15	1.7	0	Corrosion of household plumbing systems; erosion of natural deposits

Coliform Bacteria

Contaminant (Units)	Violation	Collection Date	Highest No. of Positive	Total No. of Positive E. Coli or Fecal Coliform Samples	MCLG	Total Coliform Maximum Contaminant Level	Likely Source of Contamination
Coliform Bacteria	No	2018	1	0	0	1 positive monthly sample	Naturally present in the environment

Secondary and Other Constituents (No associated adverse health effects)

Year	Contaminant (Unit)	Highest Level Detected	Range
2017	Alkalinity (ppm)	361	305-361
2017	Chloride (ppm)	186	147-186
2017	Iron (ppm)	0.141	0.141
2017	Manganese (ppm)	0.0036	0.0036
2018	pH (units)	8.3	7.6-8.3
2017	Sulfate (ppm)	46	40-46
2017	Total Dissolved Solids (ppm)	777	647-777
2017	Total Hardness (ppm)	62.8	62.8
2017	Zinc (ppm)	<0.005	<0.005

Definitions

In the table you might find terms and abbreviations you are not familiar with. To help you better understand these terms we've provided the following definitions:

Action Level (AL) – 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 is based on running annual average of monthly samples.

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.

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 risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (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 (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.

NA – not applicable.

NTU – Nephelometric Turbidity Units.

Parts per billion (ppb) – micrograms per liter (µg/l) or one ounce in 7,350,000 gallons of water.

Parts per million (ppm) – milligrams per liter (mg/l) or one ounce in 7,350 gallons of water.

Picocuries per liter (pCi/L) – a measure of radioactivity.

