

2015 Annual Drinking Water Quality Report

Consumer Confidence Report (CCR)

Information Specific to your Community Public Water System



(512) 312-0084

PWS ID#: TX1050012

www.ci.buda.tx.us

The Texas Commission on Environmental Quality (TCEQ) requires that all drinking water suppliers provide a water quality report to their customers on an annual basis to provide you with important information about your drinking water. This report is for the period of January 1 to December 31, 2015.

Public Participation Opportunities

The City of Buda is dedicated to providing high quality drinking water to our citizens. The public is welcome to attend the Buda City Council meetings held the 1st and 3rd Tuesday of the month at 6:30 p.m. The meetings are located in the council chambers at City Hall located at 121 Main Street in Buda.

En Español

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (512) 312-0084.

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

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 is in your drinking water.

All drinking water may contain contaminants.

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 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 and 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

Sources of Drinking Water

The sources of drinking water (both tap and bottled) 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.

City of Buda's Water Supply

Our drinking water is obtained from both groundwater and surface water sources. Our groundwater comes from the Edwards Aquifer which currently supplies 40% of our water supply. This water is treated at each individual well site in the City of Buda. The remaining 60% of our water comes from Canyon Lake via the Guadalupe River. This water is treated at the San Marcos Surface Water Treatment Plant. The plant is owned by the City of San Marcos and operated by the Guadalupe Blanco River Authority (GBRA). For information regarding GBRA's water treatment processes, please call (512) 353-3888.

For more information regarding this report contact:

Name: Brian Lillibridge, Water Specialist
Phone: (512) 312-2876

Special Notice

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).

Health Information about 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. 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>.

Secondary Contaminants

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 cause for health concern. Therefore, secondary contaminants are not required to be reported in this document but they may greatly affect the appearance and taste of your water. For more information on taste, odor, or color of drinking water, please contact the system's business office at (512) 312-2876.

Source Water Assessments

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 the Consumer Confidence Report. For more information on source water assessments and protection efforts at our system, contact Brian Lillibridge, Water Specialist at (512) 312-0084. 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://dww.tceq.texas.gov/DWW>

Water Quality Test Results

Definitions – the following tables contain scientific terms and measures, some of which may require explanation:

Average: Regulatory compliance with some MCLs are based on running annual average of monthly samples.

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALG's allow for a margin of safety.

Action Level (AL): The concentration of a contaminant which, if exceeded triggers treatment or other requirements which a water system must follow.

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 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 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.

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.

ppb: micrograms per liter or parts per billion – or one ounce in 7,350,000 gallons of water.

ppm: milligrams per liter or parts per million – or one ounce in 7,350 gallons of water.

na: not applicable

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

2015 Regulated Contaminants Detected

Lead and Copper (Note: Lead and copper sampling is required every 3 years. These are the most recent results.)

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90 th Percentile	No. of Sites over AL	Units	Violation	Likely Source of Contaminant
Copper	9/13/2013	1.3	1.3	0.168	0	ppm	NO	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	9/13/2013	0	15	2.54	0	ppb	NO	Corrosion of household plumbing systems; Erosion of natural deposits.

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contaminant
Haloacetic Acids (HAA5)	2015	16	4.6 – 25.4	No goal for the total	60	ppb	NO	By-product of drinking water disinfection
Total Trihalomethanes (TTHM)	2015	50	11.5 - 82	No goal for the total	80	ppb	NO	By-product of drinking water disinfection

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2015	0.159	0.0885 - 0.1540	2	2	ppm	NO	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2015	0.69	0.650 - 2.47	4	4.0	ppm	NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (measured as Nitrogen)	2015	2	0.01 - 1.69	10	10	ppm	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	2015	3.1	0-3.1	50	50	ppb	NO	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination.
Combined Radium 226/228	2015	3.4	1.5 – 3.4	0	5	pCi/L	NO	Erosion of natural deposits.

Gross Alpha (excluding radon and uranium)	2015	3.4	0 – 3.4	0	15	pCi/L	NO	Erosion of natural deposits.
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<i>Volatile Organic Contaminants</i>	Collection Date	Highest Level Detected	Range of levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination.
Ethylbenzene	2015	1.9	0 – 1.9	700	700	ppb	NO	Discharge from petroleum refineries.
Xylenes	2015	0.013	0 – 0.013	10	10	ppb	NO	Discharge from petroleum refineries; Discharge from chemical factories.

Disinfectant Residuals

Type of Disinfection	Average Quarterly Level	Lowest Single Sample	Highest Single Sample	MRDL	MRDLG	Units	Violation	Source
Free Chlorine	0.93 mg/L	0.30 mg/L	1.8 mg/L	4 ppm	4 ppm	mg/L	NO	Chlorine Gas; water additive used to control microbes

Coliform Bacteria

MCLG	Total Coliform MCL	Highest No. of Positive	E. Coli or Fecal Coliform MCL	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation (Y/N)	Likely Source of Contamination
0	0 positive monthly samples	0	0	0	NO	Naturally present in the environment.

2015 Water Loss

Total gallons lost: 17,997,123

Dates of Loss: January – December 2015

In the water loss audit submitted to the Texas Water Development Board for the time period of January through December 2015, our system lost an estimated 17,997,123 gallons of water through main breaks, leaks, inaccurate metering, and other causes. If you have any questions about the water loss audit, please call 512-312-2876.

San Marcos Water Treatment Plant Turbidity

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Min	0.01	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Max	0.03	0.03	0.03	0.02	0.06	0.19	0.05	0.13	0.03	0.05	0.02	0.04

Average Turbidity for 2015: 0.03 NTU

2014 Nitrate level: 1.32 mg/l

Violations

The City of Buda water system (PWS ID TX1050012) has violated the monitoring and reporting requirements set by Texas Commission on Environmental Quality (TCEQ) in Chapter 30, Section 290, Subchapter F. Public water systems are required to collect and submit chemical samples of water provided to their customers, and report the results of those samples to the TCEQ on a regular basis.

This violation occurred in the monitoring period(s): **3rd quarter of 2015 (07/01/2015 – 09/30/2015)**.

Results of regular monitoring are an indicator of whether or not your drinking water is safe from chemical contamination. We did not complete all monitoring and/or reporting for chemical constituents, and therefore TCEQ cannot be sure of the safety of your drinking water during that time.

How Did this Violation Occur?

The TCEQ requires that samples are collected for these constituents on a quarterly basis. Samples collected during the 1st and 2nd quarters were collected as required and found to meet all water quality requirements established by TCEQ. However, during the 3rd quarter, the water storage tank at this sample site was taken out of service for routine maintenance. Prior to taking the tank out of service, the City failed to notify the state assigned sampler to reschedule a sampling date. The samples were not able to be collected for the 3rd quarter resulting in a violation of TCEQ sampling requirements. After the tank maintenance was completed, samples were taken in the 4th quarter as required and were found to satisfy all water quality requirements established by TCEQ.

We are taking the following actions to address this issue:

- Review sample scheduling protocol.
- Ensure coordination with state assigned sampling personnel when planned facility maintenance may affect sample collection dates.

Please share this information with all people who drink this water, especially those who may not have received this notice directly (i.e., 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.

If you have questions regarding this matter, you may contact Brian Lillibridge at 512-312-2876

We failed to monitor and/or report the following constituents:

Constituent	Possible Health Affects
1,1,1-Trichloroethane	Some people who drink water containing 1,1,1-trichloroethane in excess of the MCL over many years could experience problems with their liver, nervous system, or circulatory system.
1,1,2-Trichloroethane	Some people who drink water containing 1,1,2-trichloroethane well in excess of the MCL over many years could have problems with their liver, kidneys, or immune systems.
1,1-Dichloroethylene	Some people who drink water containing 1,1-dichloroethylene in excess of the MCL over many years could experience problems with their liver.
1,2,4-Trichlorobenzene	Some people who drink water containing 1,2,4-trichlorobenzene well in excess of the MCL over many years could experience changes in their adrenal glands.
1,2-Dichloroethane	Some people who drink water containing 1,2-dichloroethane in excess of the MCL over many years may have an increased risk of getting cancer.
1,2-Dichloropropane	Some people who drink water containing 1,2-dichloropropane in excess of the MCL over many years may have an increased risk of getting cancer.
Benzene	Some people who drink water containing benzene in excess of the MCL over many years could experience anemia or a decrease in blood platelets, and may have an increased risk of getting cancer.
Carbon Tetrachloride	Some people who drink water containing carbon tetrachloride in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.
Chlorobenzene	Some people who drink water containing chlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys.

Dichloromethane	Some people who drink water containing dichloromethane in excess of the MCL over many years could have liver problems and may have an increased risk of getting cancer.
Ethylbenzene	Some people who drink water containing ethylbenzene well in excess of the MCL over many years could experience problems with their liver or kidneys.
Styrene	Some people who drink water containing styrene well in excess of the MCL over many years could have problems with their liver, kidneys, or circulatory system.
Tetrachloroethylene	Some people who drink water containing tetrachloroethylene in excess of the MCL over many years could have problems with their liver, and may have an increased risk of getting cancer.
Toluene	Some people who drink water containing toluene well in excess of the MCL over many years could have problems with their nervous system, kidneys, or liver.
Trichloroethylene	Some people who drink water containing trichloroethylene in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.
Vinyl Chloride	Some people who drink water containing vinyl chloride in excess of the MCL over many years may have an increased risk of getting cancer.
Xylenes	Some people who drink water containing xylenes in excess of the MCL over many years could experience damage to their nervous system.
cis-1,2-Dichloroethylene	Some people who drink water containing cis-1,2-dichloroethylene in excess of the MCL over many years could experience problems with their liver.
o-Dichlorobenzene	Some people who drink water containing o-dichlorobenzene well in excess of the MCL over many years could experience problems with their liver, kidneys, or circulatory systems.
p-Dichlorobenzene	Some people who drink water containing p-dichlorobenzene in excess of the MCL over many years could experience anemia, damage to their liver, kidneys, or spleen, or changes in their blood.
trans-1,2-Dichloroethylene	Some people who drink water containing trans-1,2-dichloroethylene well in excess of the MCL over many years could experience problems with their liver.

If you have any questions regarding this annual water quality report, please contact the City of Buda Public Works Department at 512-312-2876.