2023 Consumer Confidence Report
Brushy Creek Municipal Utility District

This annual Drinking Water Quality Report provides information on Brushy Creek Municipal Utility District's drinking water. The United States Environmental Protection Agency (EPA) requires that all drinking water suppliers in the country provide a water quality report to their customers on an annual basis.

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

This report is intended to provide you with important information about your drinking water and the efforts made by the Brushy Creek Municipal Utility District (District) to provide safe drinking water. It is a summary of the quality of the water the District provides. The analysis was made by using the data from the most recent EPA required tests and is presented in the following pages. We hope this information helps you become more knowledgeable about what is in your drinking water. The District provides safe and reliable drinking water to meet the needs of the residents it serves. It is of utmost importance to ensure that water quality meets or exceeds all Safe Drinking Water Standards established by the U.S. Environmental Protection Agency (EPA) as well as regulations set by the State. The District utilizes a state-of-the-art microfiltration plant to accomplish this goal. The treatment process eliminates or reduces particulates, impurities and waterborne micro-organisms in the water supply.

Superior Public Water System

The District is proud to carry the designation of Superior Public Water System. This designation is determined by the Texas Commission on Environmental Quality after reviewing the District's water quality, water treatment, pumping, and storage capacity, and finding that Brushy Creek MUD has exceeded minimum requirements.

Public Participation Opportunities Notice

See www.bcmud.org for upcoming Board of Directors Meetings
Location: Brushy Creek Community Center
16318 Great Oaks Drive, Round Rock, Texas

Where Do We Get Our Drinking Water?

The District has two raw water sources. Surface water travels through an eleven-mile pipeline from Lake Georgetown. The District receives groundwater from three wells that pump out of the Edwards Aquifer. Both sources are blended at the District's raw water basin located at the water treatment facility.

Elderly, Infants, Cancer Patients, People with HIV/AIDs or other Immune Problems

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune compromised 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. Additional 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.

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (512) 255-7871.

<u>All</u> Drinking Water May Contain 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA Safe Drinking Water Hotline (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 stormwater 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 stormwater 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 stormwater 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 number of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

DEFINITIONS:

Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Action Level Goal: 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 MCL's are based on running annual average of monthly samples.
Level 1 Assessment: 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 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 or 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 or MCLG: the maximum level of a contaminant in drinking water at which no known or anticipated adverse effect on the health of persons would occur, and which allows an adequate margin of safety.
Maximum residual disinfectant level or 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 or 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.
MFL - million fibers per liter
Mrem - millirems per year
na - non applicable
NTU - nephelometric turbidity units
ppm - parts per million
ppb - parts per billion
ppt - parts per trillion
Treatment Technique – A required process intended to reduce the level of a contaminant in drinking water

2023 Consumer Confidence Report for Public Water System BRUSHY CREEK MUD

Information about your Drinking Water

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.

Water Quality Test Results

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2022	1.3	1.3	0.11	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2022	0	15	1.3	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2023	10	7.7 – 12.1	No goal for the total	60	ppb	N	By-product of drinking water disinfection.

* 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

Total Trihalomethanes (TTHM)	2023	44	33.6 – 50.4	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

* 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

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2023	0.0351	0.0351 – 0.0351	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Cyanide	2023	30	30 - 30	200	200	ppb	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
Fluoride	2023	0.23	0.23 – 0.23	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]	2023	0.1	0.1 – 0.1	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	2018	1.5	1.5 - 1.5	0	5	pCi/L	N	Erosion of natural deposits.

Disinfectant Residual	Year	Average Level	Range of Levels Detected	MRDL	MRDLG	Unit of Measure	Violation (Y/N)	Source in Drinking Water
Chloramines	2023	1.94	1.01 – 2.68	4	4	ppm	N	Water additive used to control microbes.

Turbidity	Level Detected	Limit (Treatment Technique)	Violation	Likely Source of Contamination
Highest single measurement	0.03 NTU	1.0 NTU	N	Soil runoff.
Lowest monthly % meeting limit	100%	0.3 NTU	N	Soil runoff.

Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

Coliform

Year	Constituent	Highest No. of Positive	MCL	Fecal/ E. Coli positive	MCL	Violation
2023	Total Coliform	0	Pos.	0	0	Y

Violation

Revised Total Coliform Rule (RTCR)

The revised Total Coliform Rule (RTCR) seeks to prevent waterborne diseases caused by E. coli. E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal waste. Human pathogens in these wastes can cause short- term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants and young kids.

Violation Type - Monitoring, Routine (RTCR) **Violation Begins -** 04/01/2023 **Violation Ends -** 04/30/2023

Violation Explanation - We failed to test our drinking water for the contamination and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated **(this is considered a resolved minor violation)**. For the reporting period, the District performed 19 of the 20 required samples and the quality of the Districts water was monitored continuously. Procedural improvements were implemented to ensure complete testing.

About the Tables

The tables list all of the federally regulated or monitored constituents which have been found in your drinking water. Many constituents (such as calcium, sodium, or iron) which can be found in drinking water can cause taste, color and odor problems. These types of issues are not necessarily cause for health concerns. Answers to Questions about discolored water, aesthetics, hardness, lead, fluoride and many others can be found on our website at www.bcmud.org.

Ongoing Water Projects in the District

The District continues its efforts to use the leak detection equipment and a meter program that includes annual calibration, meter checks and data logs to seek unaccounted-for water. The District's 12-month rolling average for unaccounted-for water percentage as of December 2023 was 7.15%.

The District is in the bidding phase of a winterization project that will include back-up emergency power and insulation of vulnerable outdoor infrastructure at the Lake Georgetown Intake, Well Site, and Water Treatment Facility to better be prepared for extreme weather conditions.