

Brushy Creek
Municipal Utility District
16318 Great Oaks Drive
Round Rock, TX 78681

For more information regarding this report contact:
Mike Petter, General Manager (512) 255-7871

BRUSHY CREEK MUNICIPAL UTILITY DISTRICT



2017 Consumer Confidence Report Brushy Creek Municipal Utility District January 2017 to December 2017

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 assure 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 microorganisms in the water supply.

Superior Public Water System

The District is proud to carry the designation of **Superior 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

Date: July 26, 2018 Time: 6pm
Location: Brushy Creek Community Center PH: (512) 255-7871
16318 Great Oaks Drive, Round Rock, Texas

SPECIAL NOTICES

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. EPA/Centers for Disease Control and Prevention (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.

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 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.

The Texas Commission on Environmental Quality (TCEQ) completed a source water assessment for our drinking water and results indicate that some sources are susceptible to certain contaminants. The sampling requirements for our water system are based on this susceptibility and previous sample data. Any detection of these contaminants will be found in this Consumer Confidence Report. To obtain more information on source water assessments and protection efforts in our system call Mike Petter, the District's General Manager at 512-255-7871.

Ongoing Water Projects in the District

The District's annual water loss as of 05/31/18 was 7.8%. Water loss has dropped significantly since Feb 2016 with repairs related to the Brushy Creek North Waterline Replacement Project. Staff is continually working to reduce this percentage using state of the art leak detection equipment and by testing and replacing meters throughout the District.

The Brushy Creek Life

The District maintains a Superior Water System designation by the Texas Commission on Environmental Quality. The District's water is treated at a state of the art membrane filter Water Facility and staff is committed to maintaining the quality of the drinking water and providing superior service to our customers. This includes regular flushing of water lines and testing of the water throughout the distribution system. The flushing process involves opening fire hydrants on dead end streets to ensure water contains an acceptable chlorine residual. Staff makes sure hydrant valves are operating properly, there are no leaks, and that water flow is sufficient. Find more information about hydrant flushing on the Utilities Page of the District's website at www.bcmud.org including why hydrants are painted certain colors.

About the Tables: The tables list all of the federally regulated or monitored constituents which have been found in your drinking water. The EPA requires water systems to test up to 97 constituents.

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 are called secondary constituents and are regulated by the State of Texas, not EPA. These constituents are not causes for health concerns and therefore, are not required to be reported in this document but they may affect the appearance and taste of your water.

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.

Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.

Maximum Residual Disinfectant Level (MRDL): The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of 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. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contamination.

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

ABBREVIATIONS:

NTU: Nephelometric Turbidity Units

MFL: million fibers per liter

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 (ug/l)

ppt: parts per trillion, or nanograms per liter

ND: Not Detected

Where Do We Get Our Drinking Water?

The District blends surface water from Lake Georgetown and ground water from wells located within the Edwards Aquifer. The blended water is treated at the District's state of the art membrane filtration system and distributed to over 5,400 residential and commercial customers.

Answers to Questions about discolored water, aesthetics, hardness, lead, fluoride and many others can be found on our website at ww.bcmud.org

Brushy Creek Municipal Utility District P.W.S. ID#2460061

Inorganic

Contaminants	Collection Year	Highest Level Detected	Range of Detected Levels	MCLG	MCL	Unit	Violation	Source of Contamination
Barium	2017	0.0405	0.0405	2	2	ppm	N	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride	2017	0.83	0.19 - 0.83	0.7	4	ppm	N	Erosion of natural deposits; water additive, which promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate	2017	0.31	0.31	5	10	ppm	N	Runoff from fertilizer use; leaking 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 6 months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for a short period of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

Unregulated Contaminants

Unregulated contaminant monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants. Bromoform, chloroform, bromodichloromethane, and dibromodichloromethanes are disinfection byproducts. There is no maximum contaminant level for these chemicals at the entry point to distribution.

Year	Constituent	Average Level	Range of Detected Levels	Unit of Measure	MCL/MCLG
2017	Dibromochloromethane	10.1	6.8 - 13.0	ppb	100 ppm
2017	Chloroform	6.4	4.5 - 7.7	ppb	100 ppm
2017	Bromoform	4.9	2.7 - 7.1	ppb	100 ppm
2017	Bromodichloromethane	9.1	7.8 – 10.4	ppb	100 ppm

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.

Year	Constituent	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limit	Unit of Measure	Source of Constituent
2017	Turbidity	0.08	100.00	0.3	NTU	Soil runoff.

Residual Disinfectant Level

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Disinfectant
2017	Chloramines	1.87	1.47	2.17	0.5 – 4.0	0.5 - 4.0	ppm	Liquid Ammonium Sulfate and Sodium Hypochlorite

Disinfection By-Products

Disinfectants and Disinfection By Products	Collection Year	Highest Level Detected	Range of Levels Detected	MCGL	MCL	Unit of Measure	Violation	Source of Constituent
Haloacetic Acids	2017	15.1	8.9 - 15.1	No Goal for the Total	60	ppb	N	Byproduct of drinking water chlorination
Total Trihalomethanes	2017	42.7	28.5 - 42.7	No Goal for the Total	80	ppb	N	Byproduct of drinking water chlorination

Not all sample results may have been used for calculating the Highest Level Detection because some results may be part of an evaluation to determine where compliance sampling should occur in the future.

Unregulated Initial Distribution System Evaluation for Disinfection Byproducts: Waived

Lead and Copper Rule

Year	Constituent	The 90 th percentile	The 95 th percentile	Number of Sites Exceeding the Action Level	Action Level	Unit of Measure	Source of Constituent
2015	Lead	2.2	3.5	0	15	ppb	Corrosion of household plumbing systems; Erosion of natural deposits.
2015	Copper	0.19	0.25	0	1.3	ppm	Corrosion of household plumbing systems; Erosion of natural deposits.

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>.

Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Source of Constituent
0	1 Positive Monthly Sample	There were 0 TCR detections for this system, in this CCR period	0	0	N	Naturally present in the environment.

Secondary and Other Contaminants (No associated adverse health effects)

Year	Constituent	Detected Levels	Secondary Limit	Units	Violation	Source of Constituent
2017	Bicarbonate	224	N/A	ppm	N	Corrosion of carbonate rocks such as limestone.
2017	Calcium	58.2	N/A	ppm	N	Abundant naturally occurring element
2017	Chloride	25	300	ppm	N	Abundant naturally occurring element; used in water purification; byproduct of oil field activity.
2017	Magnesium	15.3	N/A	ppm	N	Abundant naturally occurring element.
2017	Manganese	Less than Detection Limit	0.05	ppm	N	Abundant naturally occurring element.
2017	Nickel	0.0014	N/A	ppm	N	Erosion of natural deposits.
2017	Sodium	13.1	N/A	ppm	N	Erosion of natural deposits; by product of oil field activity
2017	Sulfate	22	300	ppm	N	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
2017	Total Alkalinity as CaCO ₃	184	N/A	ppm	N	Naturally occurring soluble mineral salts.
2017	Total Dissolved Solids	251	1000	ppm	N	Total dissolved mineral constituents in water.
2017	Total Hardness as CaCO ₃	159 – 240	N/A	ppm	N	Naturally occurring calcium.
2017	pH	7.9	>7.0	Unit	N	
2017	Conductivity	480	N/A	UMH/CM	N	