

2018

A background image showing a dynamic splash of water, with droplets and ripples in shades of blue and white, creating a sense of freshness and movement.

DRINKING
WATER
QUALITY
REPORT

City of Bryan

2018

Drinking Water Quality Report

For the period ending December 31, 2018 – City of Bryan, Public Water System ID Number: TX0210001

To ensure the safest tap water, the U.S. Environmental Protection Agency (EPA) prescribes set standards requiring utilities to monitor regularly for specific substances in the water they produce. An independent laboratory certified by the EPA and the State of Texas performs testing as required. These pages list all of the federally regulated or monitored contaminants which have been found in your drinking water. The EPA requires water systems to test for up to 97 contaminants.

Water Sources:

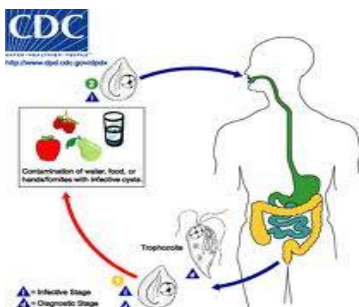
The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals, and in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water before treatment include: microbes, inorganic contaminants, pesticides, herbicides, radioactive contaminants, and organic chemical contaminants.

All drinking water may contain contaminants. 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 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.

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. Information about contaminants and potential health effects can be obtained by calling the EPA's Safe Water Hotline at 800-426-4791. Contaminants 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 City of Bryan Water Services at 979-209-5900.

Source Water Assessment:

Our drinking water is obtained from GROUND water sources. It comes from the following Lake/River/Reservoir/Aquifer: SIMSBORO AQUIFER located in Brazos County. The TCEQ completed an assessment of your source water and results indicate that some of our 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. Some of this source water assessment information is available on Texas Drinking Water Watch at <https://dww2.tceq.texas.gov/DWW/>. For more information on source water assessments and protection efforts at our system, contact Charles Rhodes at 979.209.5900.



Special Notice for Elderly, Infants, and Immuno Compromised People:

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; those 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 provider. Additional guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline at (800) 426-4791. More information on *Cryptosporidium* can be found by visiting the EPA website at <https://www.epa.gov/your-drinking-water/table-regulated-drinking-water-contaminants>.

PUBLIC PARTICIPATION OPPORTUNITIES

- Bryan City Council meetings are generally held on the 2nd and 4th Tuesdays of each month.
- You can access a link at <https://www.bryantx.gov/city-secretarys-office/> to subscribe to automatic updates from the City of Bryan.
- To learn more about future public meetings (concerning your drinking water) or to request to schedule one, please contact us at 979.209.5900.

Water Loss Audit Results

The Texas Legislature requires all retail public water suppliers to file a water loss report annually and notify their customers of the water loss audit results. In the most recent water loss audit submitted to the Texas Water Development Board for the time period of January – December 2018, the City of Bryan water system lost an estimated 373,279,066 gallons or 9.36% of the total (≤10% for loss is within industry standard). Losses of this nature are attributed to water line breaks, inaccurate meter registration, theft, and other causes. If you have any questions about the water loss audit, please contact Charles Rhodes at 979.209.5900.

Water Quality Test Results

Coliform Bacteria

Microbiological Contaminants – Screened in the Distribution System

Year	MCL Goal	Total Coliform MCL	Highest Number of Positive	Fecal Coli or E. Coli MCLG	Fecal Coli/E. Coli Samples	Violation? Y/N	Possible Source(s) of Contaminant
2018	Total Coliforms*	≥ 5% of samples/month	2	0 positive samples	0	N	Naturally present in the environment.

A total of 1,130 routine water samples were collected to be tested for Total Coliform bacteria. There were seven positive samples for coliform bacteria [June 5th, August 2nd (2), September 11th, September 26th, December 13th (2)]. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a pathway exists through which contamination may enter the drinking water distribution system.

Disinfectant Monitoring

Disinfectant Residual – Screened in the Distribution System

Year	Constituent	Highest Avg Detected	Range Detected	MDRL Goal	MDRLG	Violation? Y/N	Possible Source(s) of Contaminant
2018	Chlorine Disinfectant	2.16 ppm	0.90 – 3.80 ppm	4 ppm	2 ppm	N	Disinfectant used to control microbes.

Disinfection By-Products

Disinfectant By-Products – Screened in the Distribution System

Year	Constituent	Highest Avg Detected	Range Detected	MDRL Goal	MDRLG	Violation? Y/N	Possible Source(s) of Contaminant
2018	Total Trihalomethanes**	26.83 ppb	8.20 – 37.7 ppb	80 ppb	0 ppb	N	Byproduct of drinking water disinfection.
2018	Total Haloacetic Acids***	2.50 ppb	0.0 – 2.9 ppb	60 ppb	0 ppb	N	Byproduct of drinking water disinfection.

Total Trihalomethanes are regulated as a group that contains: Bromoform, Chloroform, Bromodichloromethane, and Dibromochloromethane. *Total Haloacetic Acids are regulated as a group that contains: Monochloroacetic acid, Dichloroacetic acid, Trichloroacetic acid, Monobromoacetic acid, and Dibromoacetic acid. Monitored compounds include Bromochloroacetic acid and Dalapon. The value in the Highest Avg Detected column is the highest average of all TTHM sample results collected over a location over a year.

Lead and Copper Monitoring

Lead and Copper Results – Screened in the Distribution System

Year	Constituent	90th Percentile	Sites Exceeding Action Level	MCL	MCLG	Possible Source(s) of Contaminant
2018	Lead	1.22 ppb	0	Action Level = 15 ppb	0	Corrosion of household plumbing systems; erosion of natural deposits.
2018	Copper	0.153 ppm	0	Action Level = 1.3 ppm	1.3 ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

Violations

None			
Description:			
Violation Type	Violation Begin	Violation End	Violation Explanation
None	N/A	N/A	None

Health Information about Lead in Drinking Water

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. The City of Bryan 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>.

Inorganic Monitoring

Inorganic Contaminants – Screened at the Production Facilities						
Year	Constituent	MCL	Detected Level	MCLG	Violation? Y/N	Possible Source(s) of Contaminant
2017	Barium	2 ppm	0.0917 ppm	2 ppm	N	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits.
2017	Chromium	100 ppb	< 10 ppb	100 ppb	N	Discharge from steel and pulp mills; erosion of natural deposits.
2017	Fluoride	4 ppm	0.45 ppm	4 ppm	N	Erosion of natural deposits; water additive which promotes strong teeth; discharge from factories.
2017	Mercury	2 ppb	< 0.4 ppb	2 ppb	N	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and cropland.
2018	Nitrate	10 ppm	0.05 ppm	10 ppm	N	Erosion of natural deposits; runoff from fertilizer use; leaching from septic tanks, sewage.
2017	Selenium	0.05 ppm	< 0.003 ppm	0.05 ppm	N	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills.
2017	Gross alpha	15 pCi/L	< 3 pCi/L	0 pCi/L	N	Erosion of natural deposits.

Secondary and Other Non-Regulated Constituents

Secondary Constituents – Screened at the Production Facilities							
Year	Constituent	MCL	Detected Levels	Year	Constituent	MCL	Detected Levels
2017	Aluminum	0.05 – 0.2 ppm	< 0.02 ppm	2018	Manganese	0.05 ppm	0.007 ppm
2017	Bicarbonate	Not Regulated	475 ppm	2018	pH	>7.0	8.4
2018	Calcium	Not Regulated	3.68 ppm	2018	Sodium	Not Regulated	263 ppm
2017	Carbonate	Not Regulated	12 ppm	2018	Sulfate	300 ppm	< 5 ppm
2017	Chloride	300 ppm	59 ppm	2018	Total Alkalinity	Not Regulated	437 ppm
2017	Copper	1 ppm	0.0049 ppm	2018	Dissolved Solids	1000 ppm	634 ppm
2018	Hardness as Ca/Mg	Not Regulated	8 ppm	2017	Zinc	5 ppm	< 0.005 ppm
2017	Magnesium	Not Regulated	< 1 ppm				

Many constituents (such as calcium, sodium, or iron) 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 concerns, but they may greatly affect the appearance and taste of your water.

Unregulated Contaminant Monitoring Rule 3 (UCMR3)

UCMR3 – Screened at the Production Facilities							
Year	Constituent	Average	Range of Detects (low-high)	Year	Constituent	Average	Range of Detects (low-high)
2015	1,4 Dioxane	ND	ND	2015	1,2,3-Trichloropropane	ND	ND
2015	Perfluorobutanesulfonic Acid	ND	ND	2015	Chromium Total	ND	ND
2015	Perfluorohexanesulfonic Acid	ND	ND	2015	Cobalt Total	ND	ND
2015	Perfluoroheptanoic Acid	ND	ND	2015	Molybdenum Total	ND	ND
2015	Perfluorononanoic Acid	ND	ND	2015	Strontium Total	**	< 0.300 ppb to 0.338 ppb
2015	Perfluorooctanoic Acid	ND	ND	2015	Vanadium Total	ND	ND
2015	Perfluorooctanesulfonic Acid	ND	ND	2015	17a-Ethynylestradiol	ND	ND

2015	Chlorate	ND	ND	2015	Testosterone	ND	ND
2015	Chlorodifluoromethane	ND	ND	2015	17b-Estradiol	ND	ND
2015	Chloromethane	ND	ND	2015	4-Androstene-3, 17-dione	ND	ND
2015	1,3-Butadiene	ND	ND	2015	Equilin	ND	ND
2015	Bromomethane	ND	ND	2015	Estrone	ND	ND
2015	1,1-Dichloroethane	ND	ND	2015	Hexavalent Chromium	0.0386	0.0357 ppb to 0.0415 ppb
2015	Bromochloromethane	ND	ND				

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 necessary. Any unregulated contaminants are reported in the following tables. For additional information and data visit <http://www.epa.gov/dwucmr/third-unregulated-contaminant-monitoring-rule>, or call the Safe Drinking Water Hotline at (800) 426-4791.

DEFINITIONS

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 health risk. MCLGs allow for a margin of safety.

Maximum Residual Disinfection 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 Disinfection 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.

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 a water system (see below).

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 a water system on multiple occasions (see below).

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.

Practical Quantitation Limit (PQL) – Considered the lowest concentration of a contaminant that can be accurately measured.

ABBREVIATIONS

NTU – nephelometric turbidity units (a measure of turbidity)

MFL – million fibers per liter (a measure of asbestos)

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 (ng/L)

ppq – parts per quadrillion, or picograms per liter (pg/L)

ND – non detect

Level 1 Assessment

The Level 1 assessment is an evaluation to identify the possible presence of Sanitary Defects, defects in distribution system coliform monitoring practices, and (when possible) the likely reason that the PWS triggered the assessment. As defined in Title 30 Texas Administrative Code (TAC) §290.103(35), a Sanitary Defect is: "A defect that could provide a pathway of entry for microbial contamination into the distribution system or that is indicative of a failure or imminent failure in a barrier that is already in place."

Level 2 Assessment

The Level 2 Assessment is an evaluation to identify the possible presence of sanitary defects, defects in distribution system coliform monitoring practices, and (when possible) the likely reason that the public water system triggered the assessment...Minimum elements include review and identification of atypical events that could affect distributed water quality or indicate that distributed water quality was impaired; changes in distribution system maintenance and operation that could affect distributed water quality (including, but not limited to, water storage); source and treatment considerations that bear on distributed water quality, where appropriate; existing water quality monitoring data; and inadequacies in sample sites, sampling protocol, and sample processing.

En Español

Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre este informe, favor de llamar al tel. (979) 209-500 para hablar con una persona en español.