

2016 - Annual Drinking Water Quality Report - Consumer Confidence Report City of Bryan – 979.209.5900

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. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Water Hotline at 1-800-426-4791.

Source Water Assessment:

Our drinking water is obtained from GROUND water sources. It comes from the following Lake/River/Reservoir/Aquifer: SIMSBORO AQUIFER. 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 <http://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.

Public Participation Opportunities – To learn more about future public meetings (concerning your drinking water) or to request to schedule one, please contact us at 979.209.5900.

Violation Type	Health Effects	Duration	Explanation	Steps to Correct
Monitoring & Reporting Violation	None	06/01/2015 – 09/30/2015	Failed to provide monitoring results for lead to customers residing at sample locations.	Mailed results to customers and certified actions with TCEQ.

Inorganic Contaminants – Screened at the Production Facilities

Year	Constituent	MCL	Detected Level	MCLG	Violation? Y/N	Possible Source(s) of Contaminant
2016	Barium	2 ppm	0.097 ppm	2 ppm	N	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits.
2016	Chromium	100 ppb	< 10 ppb	100 ppb	N	Discharge from steel and pulp mills; erosion of natural deposits.
2014	Fluoride	4 ppm	0.48 ppm	4 ppm	N	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2016	Mercury (inorganic)	2 ppb	< 0.4 ppb	2 ppb	N	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland.
2016	Nitrate (as Nitrogen)	10 ppm	0.07 ppm	10 ppm	N	Erosion of natural deposits; runoff from fertilizer use; leaching from septic tanks, sewage.
2016	Selenium	0.05 ppm	0.003 ppm	0.05 ppm	N	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills.
2011	Gross alpha	15 pCi/L	2.4 pCi/L	0 pCi/L	N	Erosion of natural deposits.

Disinfectant Residual, Disinfectant By-Products – Screened in the Distribution System

Year	Constituent	Highest Avg Detected	Range Detected	MDRL	MDRLG	Violation? Y/N	Possible Source(s) of Contaminant
2016	Chlorine Disinfectant	1.99 ppm	1.20 – 3.00 ppm	4 ppm	2 ppm	N	Disinfectant used to control microbes.
2016	Total Trihalomethanes**	42.5 ppb	13.0 – 49.0 ppb	80 ppb	0 ppb	N	Byproduct of drinking water disinfection.
2016	Total Haloacetic Acids***	3.98 ppb	1.8 – 5.0 ppb	60 ppb	0 ppb	N	Byproduct of drinking water disinfection.

Lead and Copper Results – Screened in the Distribution System

Year	Constituent	90th Percentile	Sites Exceeding Action Level	MCL	MCLG	Possible Source(s) of Contaminant
2015	Lead	2.03 ppb	0	Action Level = 15 ppb	0	Corrosion of household plumbing systems; erosion of natural deposits.
2015	Copper	0.0933 ppm	0	Action Level = 1.3 ppm	1.3 ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

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>.

Microbiological Contaminants – Screened in the Distribution System

Year	Constituent	Total Coliform MCL	Total Coliform	Highest Monthly % of Positive Samples	Fecal Coli or E. Coli MCLG	Fecal Coli/E. Coli Samples	Violation? Y/N	Possible Source(s) of Contaminant
2016	Total Coliforms*	≥ 5% of samples/month	2	2.33%	0 positive samples	0	N	Naturally present in the environment.

Secondary Constituents			
Year	Constituent	MCL	Detected Levels
2016	Aluminum	0.05 – 0.2 ppm	< 0.02 ppm
2014	Bicarbonate	Not Regulated	455 ppm
2016	Calcium	Not Regulated	3.13 ppm
2014	Carbonate	Not Regulated	17 ppm
2014	Chloride	300 ppm	57 ppm
2016	Copper	1 ppm	0.0054 ppm
2016	Hardness as Ca/Mg	Not Regulated	7.82 ppm
2016	Magnesium	Not Regulated	< 1 ppm
2016	Manganese	0.05 ppm	0.0102 ppm
2015	pH	>7.0	8.65
2016	Sodium	Not Regulated	237 ppm
2014	Sulfate	300 ppm	6 ppm
2015	Total Alkalinity	Not Regulated	412 ppm
2014	Dissolved Solids	1000 ppm	548 ppm
2016	Zinc	5 ppm	< 0.005 ppm

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.

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.

The state allows monitoring for some constituents less than once a year because the amount of these constituents does not change frequently. The data presented in the report is from the most recent testing done in accordance with the regulations.

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

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 concerns. Therefore, secondaries are not required to be reported in the document but they may greatly affect the appearance and taste of your water.

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.

* A total of 1,023 routine water samples were collected to be tested for Total Coliform bacteria. There were 2 positive samples for coliform bacteria (August 3rd).

** Total Trihalomethanes are regulated as a group which contains: Bromoform, Chloroform, Bromodichloromethane, and Dibromochloromethane. *** Total Haloacetic Acids are regulated as a group which contains: Monochloroacetic acid, Dichloroacetic acid, Trichloroacetic acid, Monobromoacetic acid, and Dibromoacetic acid. Monitored compounds include Bromochloroacetic acid and Dalapon.

In the water loss audit submitted to the Texas Water Development Board for the time period of January-December 2015, our system lost an estimated 267,819,267 gallons or 6.56% of the total (≤10% for loss is within industry standard). If you have any questions about the water loss audit, please contact Charles Rhodes at 979.209.5900.

Unregulated Contaminant Monitoring Rule 3 (UCMR3)

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 warranted. 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.

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-Ethnylestrodiol	ND	ND
2015	Chlorate	ND	ND	2015	Testosterone	ND	ND
2015	Chlorodifluormethane	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				

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>.