

2019 Annual Drinking Water Quality Report

(Consumer Confidence Report)

**BRAZORIA COUNTY WATER CORPORATION
BAYOU SHADOWS WATER SYSTEM
P.O. BOX 130179, HOUSTON, TX 77219, (713)681-0070**

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's in your drinking water. **We believe that the most important information contained in the report is that the Utility's water supply was found to meet the requirements set by the state and federal governments for drinking water.** Please call Brazoria County Water Corp. at (713) 681-0070, ext. 102 if you have any questions regarding this report.

En Español

Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (713) 681-0070 ext. 102.

Public Participation Opportunities Date: None Scheduled

To learn about future public meetings (concerning your drinking water), or to request to schedule one, please call us at the above number.

Special Notice Required Language for ALL Community Public Water Supplies:

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 (800-426-4791).

Where Do We Get Our Drinking Water?

The source of drinking water used by BAYOU SHADOWS WATER SYSTEM is Ground Water from the Gulf Coast Aquifer. An aquifer is a porous underground formation (such as sand and gravel) that is saturated with water. The TCEQ completed an assessment of your source water and results indicate that 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 this Consumer Confidence Report. For more information about your source water assessments and protection efforts at our system, contact us at the number above. 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://dww2.tceq.texas.gov/DWW/>

Source of Drinking Water

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:

- 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, 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.

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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

Protecting the Water You Drink

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.

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

Required 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>.

Abbreviations & Definitions - The following tables contain scientific terms and measures, some of which may require explanation

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

Action Level Goal (ALG) - 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 MCLs are based on running annual average of monthly samples.

Level 1 Assessment - A Level 1 assessment is 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 Level 2 assessment is 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 (MCL) - The highest level of a contaminant in drinking water. MCL's are set as close to the MCLG's 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. MCLG's allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL) - The highest level of 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 (MRDLG) - The level of a 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.

MFL - million fibers per liter (a measure of radioactivity)

mrem - millirems per year (a measure of radiation absorbed by the body)

n/a - not applicable

NTU - Nephelometric Turbidity Units

pCi/l - picocuries per liter (a measure of radioactivity)

ppb - Micrograms per liter or parts per billion (Φ g/l) - or one ounce in 7,350,000 gallons of water.

ppm - Milligrams per liter or parts per million (mg/l) - or one ounce in 7,350 gallons of water.

ppq - Parts per quadrillion, or picograms per liter (pg/L)

ppt - Parts per trillion, or nanograms per liter (ng/L)

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

Constituent	Collection Date	Highest Level or Average Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Inorganic Contaminants								
Antimony	8/01/2019	1	1.3-1.3	6	6	ppb	No	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder; test addition
Arsenic	8/01/2019	2.4	2.4-2.4	0	10	ppb	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	8/1/2019	0.131	0.131-0.131	2	2	ppm	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride	8/1/2019	0.90	0.90-0.90	4	4	ppm	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate (Measured at Nitrogen)	8/01/2019	0.13	0.13-0.13	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Lead & Copper								
Constituent	Collection Date	MCLG	Action Level (AL)	90 th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	6/27/2019	1.3	1.3	0.059	0	ppm	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	6/27/2019	0	15	5	0	ppb	No	Erosion of natural deposits; Corrosion of household plumbing systems.
Maximum Disinfectant Residual Level								
Constituent	Collection Date	Average Level	Range of Levels Detected	MRDLG	MRDL	Units	Violation	Likely Source of Contamination
Chlorine Residual, Free	2019	0.28	0.20-0.46	<4	4	ppm	No	Disinfectant used to control microbes.

Violations

Chlorine			
Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.			
Violation Type	Violation Begin	Violation End	Violation Explanation
Disinfectant Level Quarterly Operating Report (DLQOR)	1/01/2019	03/31/2019	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated. We actually did test the water, but failed to turn in the report in a timely manner, resulting in a violation.
Disinfectant Level Quarterly Operating Report (DLQOR)	4/01/2019	6/30/2019	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated. We actually did test the water, but failed to turn in the report in a timely manner, resulting in a violation.
Disinfectant Level Quarterly Operating Report (DLQOR)	07/01/2019	09/30/2019	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated. We actually did test the water, but failed to turn in the report in a timely manner, resulting in a violation.
Disinfectant Level Quarterly Operating Report (DLQOR)	10/01/2019	12/31/2019	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated. We actually did test the water, but failed to turn in the report in a timely manner, resulting in a violation.

Lead and Copper Rule			
The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.			
Violation Type	Violation Begin	Violation End	Violation Explanation
FOLLOW-UP OR ROUTINE TAP M/R (LCR)	01/01/2019	07/19/2019	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
LEAD CONSUMER NOTICE (LCR)	9/29/2019	2019	We failed to provide the results of lead tap water monitoring to the consumers at the location water was tested. These were supposed to be provided no later than 30 days after learning the results.

Public Notification Rule			
The Public Notification Rule helps to ensure that consumers will always know if there is a problem with their drinking water. These notices immediately alert consumers if there is a serious problem with their drinking water (e.g. a boil water emergency)			
Violation Type	Violation Begin	Violation End	Violation Explanation
PUBLIC NOTICE RULE LINKED TO VIOLATION	4/10/2019	2019	We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations.
PUBLIC NOTICE RULE LINKED TO VIOLATION	10/04/2019	2019	We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations.

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	Likely Source of Contamination
0	1 positive monthly sample.	1	Fecal Coliform or E. Coli MCL: A routine sample and a repeat sample are total coliform positive, and one is also fecal coliform or E. coli positive.	1	N	Naturally present in the environment.