

City of BUNKER HILL VILLAGE

Annual Drinking Water Quality Report 2019



Where Does Our Drinking Water Come From? (Sources of Drinking Water)

The City owns four water wells in which we pump water from underground. We are also mandated to purchase surface water from the City of Houston to supplement our water supply as an effort to address ground subsidence in the Houston area. Approximately 50% of our drinking water is purchased from the City of Houston. All sources of water are blended and chlorine based sterilization is added to

ensure that the water continues to be safe for consumption after the water leaves the production facilities. Information in this report represents the water we produce and water supplied by the City of Houston. It is intended to provide you with important information about your drinking water and the efforts made to keep your water safe. Information is for the calendar year 2019.

The following information is provided in terms mandated by the State of Texas.

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (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 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.

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.

As your water service provider, The City of Bunker Hill Village is pleased to provide this Annual Drinking Water Quality Report for Calendar Year 2019 in accordance with the requirements of the Texas Commission on Environmental Quality.

"The very purpose of the City's being was and is to provide and perpetuate a quiet, tranquil, safe, and orderly community of single-family homes, with abundant greenery and open spaces, clean air and water, a safe environment, and other amenities conducive to the development and enjoyment of family life."

This statement came from the zoning ordinance which was part of establishing the City of Bunker Hill Village. City leaders and staff continually strive to provide you with safe, clean water to drink and ensure our environment is a place you want to call home. The information provided in this document details water quality and efforts underway to ensure our natural assets are preserved.

Contaminants may be found in drinking water that 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's business office at 713-467-9762.

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; persons 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 providers. Additional guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline (800-426-4791).

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. We are responsible for providing high quality drinking water, but we 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>.

Source Water Name		Type of Water	Report Status	Aquifer/Source
1 - 11700 TAYLORCREST RD	11700 TAYLORCREST RD	GroundWater	ACTIVE	EVANGELINE
2 - 11977 MEMORIAL DR	11977 MEMORIAL DR	GroundWater	ACTIVE	EVANGELINE
3 - 11900 MEMORIAL DR	11900 MEMORIAL DR	GroundWater	ACTIVE	EVANGELINE
4 - 11977 MEMORIAL DR	11977 MEMORIAL DR	GroundWater	ACTIVE	EVANGELINE
SW FROM CITY OF HOUSTON	POD - TAYLORCREST RD AND MEMORIAL DR	SurfaceWater	ACTIVE	LAKE HOUSTON

The City of Bunker Hill Village purchases water from the City of Houston. The City of Houston provides purchase surface water from Lake Houston in Harris County.

CITY OF HOUSTON SURFACE WATER ANALYSIS

Year: 2019

Katy Addicks (EP055) EWPP 3

(EP101)

Monitored at Water Plants

CONTAMINANT	MCL	MCLG	EP055	EP101	MIN	AVG	MAX
ATRAZINE (UG/L)	3	3	ND	0.1	ND	0.05	0.1
BARIUM (MG/L)	2	2	N/A	0.0226	0.0226	0.0226	0.0226
CYANIDE (MG/L)	0.2	0.2	N/A	0.01	0.01	0.01	0.01
FLUORIDE (MG/L)	4	4	N/A	0.12	0.12	0.12	0.12
NITRATE (MG/L)	10	10	ND	0.22	ND	0.11	0.22

Secondary Standards

CONTAMINANT	SCL	EP055	EP101	MIN	AVG	MAX
ALUMINUM (MG/L)	0.2	N/A	0.0285	0.0285	0.0285	0.0285
CHLORIDE (MG/L)	250	N/A	16	16	16	16
FLUORIDE (MG/L)	2	N/A	0.12	0.12	0.12	0.12
PH (SU)	8.5	N/A	8.3	8.3	8.3	8.3
SULFATE (MG/L)	250	N/A	31	31	31	31
TDS (MG/L)	500	N/A	138	138	138	138

MCLG-Maximum Contaminant Level Goal

Regulated Contaminants – Contaminants detected at this entry point that have an enforceable MCL

ND – Non Detect, contaminant not detected

N/A Not analyzed this calendar year (on reduced sampling due to low historical results)

MCL – Maximum Contaminant Level

MCLG – Maximum Contaminant Level Goal

SMCL – Secondary Maximum Contaminant Level

NA – Not analyzed this calendar year (on reduced sampling due to historical results)

ND – “non-detect” contaminant not detected

EP – Entry Point

“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 is based on this susceptibility and previous sample data. Any detections of these contaminants will be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system the City of Bunker Hill Village at 713-467-9762.

2019 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	2019	1.3	1.3	0.453	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAAS)	2019	27	8.1 - 27.9	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 HAAS sample results collected at a location over a year'

Total Trihalomethanes (TTHM)	2019	54	14 - 97.9	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
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* 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
Arsenic	2019	7.5	7.5 - 7.5	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.

While your drinking water meets EPA standards for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Barium	2019	0.15	0.15 - 0.15	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	01/05/2017	0.49	0.42 - 0.49	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]	2019	0.48	0.11 - 0.48	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Synthetic organic contaminants including pesticides and herbicides	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Atrazine	2019	0.17	0 - 0.17	3	3	ppb	N	Runoff from herbicide used on row crops.

Disinfectant Residual

' A blank disinfectant residual table has been added to the CCR template, you will need to add data to the fields. Your data can be taken off the Disinfectant Level Quarterly Operating Reports (DLQOR).'

Disinfectant Residual	Year	Average Level	Range of Levels Detected	MRDL	MRDLG	Unit of Measure	Violation (Y/N)	Source in Drinking Water
Chloramines	2019	1.56	0.7 – 3.2	4	4	Mg/l	NO	Water additive 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).	04/01/2019	06/30/2019	The required chlorine monitoring report was not submitted by the quarterly due date. The TCEQ submission portal was not functioning at the time. No data in the submitted report was a violation of TCEQ requirements nor did it represent a water quality issue.
Disinfectant Level Quarterly Operating Report (DLQOR).	07/01/2019	09/30/2019	The required chlorine monitoring report was not submitted by the quarterly due date. The TCEQ submission portal was not functioning at the time. No data in the submitted report was a violation of TCEQ requirements nor did it represent a water quality issue.

Qtr of 2019	Chemical	Average Level of Quarterly Data	Disinfectant		Maximum Residual Disinfectant Level (MRDL)	Maximum Residual Disinfectant Level Goal (MRDLG)	Unit of Measurement	Source of the Chemical
			Lowest Result of a Single Sample	Highest Result of a Single Sample				
1	Chloramines	1.6	0.7	3.1	4.00	4.00	mg/l	Disinfectant to control microbes
2	Chloramines	1.4	0.8	2.8	4.00	4.00	mg/l	Disinfectant to control microbes
3	Chloramines	1.6	0.7	3.1	4.00	4.00	mg/l	Disinfectant to control microbes
4	Chloramines	1.63	0.7	3.2	4.00	4.00	mg/l	Disinfectant to control microbes

Water Accountability

The City of Bunker Hill Village produced a total of 357,759,000 gallons of water for the year 2019. The city billed 341,732,000 gallons of water to the utility customers of the city. That represents a 89.6% water accountability ratio. The State of Texas considers any amount above 85% to be acceptable.

For more information or questions regarding this report or if you want a printed copy, please contact Steve Smith, Director of Public Works at 713-467-9762 or email at ssmith@bunkerhilltx.gov
Web Site: www.bunkerhilltx.gov

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono 713-467-9762

The City Council meetings for the City of Bunker Hill Village are normally scheduled for the third Tuesday of each month at 5:30 p.m. at 11977 Memorial Drive, Houston, Texas 77024. Please confirm meeting schedule at www.bunkerhilltx.gov



The water system for the City of Bunker Hill Village has been rated as a superior water system by the Texas Commission for Environmental Quality.