

## Public Input Opportunity

Your water board meets at 10:00 am on the third Friday of every month at 2727 Allen Parkway Ste 1100 Houston, TX 77002

To learn about future public meetings (concerning your drinking water) or to request to schedule one, please call us at (281) 367-5511.

## En Español

*Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (281) 367-5511.*



# 2019 Annual Drinking Water Quality Report

(Consumer Confidence Report)



## HARRIS COUNTY MUNICIPAL UTILITY DISTRICT NO. 158

### **Our Drinking Water Meets or Exceeds All Federal and State Drinking Water Requirements**

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 testing. We hope this information helps you become more knowledgeable about what's in your drinking water.

### **Information about your 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.

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, 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**

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.

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 call (281) 367-5511.

### **Special Notice for the Elderly, Infants, Cancer Patients, People with HIV/AIDS or Other Immune Problems**

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly or immuno-compromised 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 for 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).

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>

## Where Do We Get Our Water?

Harris County MUD 158 purchases surface water from the City of Houston Main Public Water System (PWS) (ID#1010013). The City of Houston provides treated water from the Trinity River and Lake Houston. The Texas Commission on Environmental Quality (TCEQ) has completed a Source Water Assessment for all drinking water systems that own their sources. The report describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The system(s) from which we purchase our water received the assessment report. For more information on this report, as well as source water assessments and protection efforts at our system, contact John Montgomery of our Regulatory Compliance Department at (281) 367-5511.

## About the Tables

EPA requires water systems to test for more than 90 contaminants in drinking water. The data tables in this report contain all of the regulated contaminants detected in your water, which are below state and federal allowed levels. The state of Texas allows us to monitor for some contaminants less than once per year because the concentrations do not change frequently. Definitions and abbreviations are provided below and sources of detected contaminants in this report follow the tables.

### Definitions and Abbreviations

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.
Action Level (AL)	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
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 Goal or MCL	The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
Maximum Contaminant Level or 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 residual disinfectant level goal or 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 contaminants.
Maximum residual disinfectant level or 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.
MFL	million fibers per liter (a measure of asbestos)
mrem	millirems per year (a measure of radiation absorbed by the body)
na	not applicable.
ND	non-detect. This Indicates the contaminant was not detected in the sample. If any contaminant was present it was below the low-end detection limit for the laboratory test.
NTU	nephelometric turbidity units (a measure of turbidity)
pCi/L	picocuries per liter (a measure of radioactivity)
ppb	micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.
ppm	milligrams per liter or parts per million - 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.

Information from Harris County MUD 158 (PWS# 1012297)							
Inorganic Contaminants							
Year	Contaminant	Highest Level Detected	Range of Detected Levels	MCL	MCLG	Units	Violation
2019	Nitrate	0.6	0.6 – 0.6	10	10	ppm	No
Disinfection Byproducts							
Year	Contaminant	Highest Level Detected	Range of Detected Levels	MCL	MCLG	Units	Violation
2019	Haloacetic Acids (HAA5)	30.6	27.0 – 30.6	60	0	ppb	No
2019	Total Trihalomethanes (TTHM)	32.3	31.4 – 32.3	80	0	ppb	No
Disinfectant Residual							
Year	Contaminant	Avg. Level Detected	Range of Detected Levels	MCL	MCLG	Units	Violation
2019	Chlorine Residual (Total)	2.8	0.6 – 4.0	4	4	ppm	No
Lead & Copper							
Year	Contaminant	90 <sup>th</sup> Percentile	Number of Sites Exceeding AL	AL	ALG	Units	Violation
2017	Copper	0.62	1	1.3	1.3	ppm	No
2017	Lead	4.5	0	15	0	ppb	No

### Contaminant Sources

Contaminant	Source
Arsenic	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Atrazine	Runoff of herbicide used on row crops.
Barium	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chlorine Residual	Water additive used to control microbes.
Combined Radium 226/228	Erosion of natural deposits
Copper	Corrosion of household plumbing systems; erosion of natural deposits.
Cyanide	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories.
Fluoride	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Lead	Corrosion of household plumbing systems; erosion of natural deposits.
Nitrate	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Simazine	Herbicide runoff.
Total Haloacetic Acids (HAA5)	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	By-product of drinking water disinfection.
Turbidity	Soil Runoff.
Uranium	Erosion of natural deposits.

### 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 concern. Therefore, secondary constituents are not required to be reported in this document, but they may greatly affect the appearance and taste of your water.

From January to December 2018, Harris County MUD 158 received water through an open interconnect with the City of Houston. The following table contains information from the City of Houston's water supply.

**Information from City of Houston East Water Purification Plant (EP001) and Bellaire Braes Pump Station (EP006) (Interconnect) (PWS #1010013)**

**Inorganic Contaminants**

Year	Contaminant	Highest Level Detected	Range of Detected Levels	MCL	MCLG	Units	Violation
2019	Arsenic	2.1	ND – 2.1	10	0	ppb	No
2019	Barium	0.2	0.1 – 0.2	2	2	ppm	No
2019	Cyanide	80	ND - 80	200	200	ppb	No
2019	Fluoride	0.18	0.11 – 0.18	4	4	ppm	No
2019	Nitrate	0.22	0.15 – 0.22	10	10	ppm	No
2019	Selenium	3.8	ND – 3.8	50	50	ppb	No

*While your drinking water meets EPA's standard 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.*

**Radioactive Contaminants**

Year	Contaminant	Highest Level Detected	Range of Detected Levels	MCL	MCLG	Units	Violation
2017	Radium 228	1.1	0 - 1.1	5	0	pCi/L	No
2017	Uranium	1.2	0 - 1.2	30	0	ppb	No

**Synthetic Organic Contaminants including herbicides and pesticides**

Year	Contaminant	Highest Level Detected	Range of Detected Levels	MCL	MCLG	Units	Violation
2019	Atrazine	0.2	0.1 – 0.2	3	3	ppb	No
2019	Simazine	0.08	0.08 – 0.08	4	4	ppb	No

**Turbidity**

Year	Contaminant	Highest Single Measurement	Lowest Monthly Percentage < 0.3	MCL	MCLG	Units	Violation
2019	Turbidity	0.44	99%	TT	0	NTU	No

\*TT for turbidity requires at least 95% of monthly samples ≤ 0.3 NTU

*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.*

**Outdoor Water Conservation Tips:**

- To keep your lawn healthy during the summer months - it only takes 1" of water a week.
- During the hot summer months, try to water in the early morning or late evening.
- In hot summer months, set your lawn mower to a higher setting, because taller grass helps hold in moisture. Cutting your grass too short can cause you to water more and can cause the grass to burn easier.
- Set your sprinkler system to a timer and adjust during the different seasons.

**Indoor Water Conservation Tips:**

- To save on water and energy, always run your dishwasher with a full load.
- Take a shower instead of a bath.
- Check for leaks in your toilets and faucets. (A helpful hint is to schedule this for every six months when you are checking your smoke detectors.)
- When brushing your teeth, shaving, or washing your hands, only run the water when it is time to rinse.