

# 2023 Annual Drinking Water Quality Report

Harris County MUD 196

Public Water Supply ID 1013002

## Our Drinking Water is Regulated

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 contact the system's business office. This report, also referred to as a Consumer Confidence Report (CCR) is your water quality report for the results of the most current water testing from 2019 through 2023.

## Where Do We Get Our Drinking Water?

Harris County MUD 196 (HCMUD 196) provides groundwater from two wells located within Harris County. The wells draw ground water from the Gulf Coast Aquifers when water usage is in high demand. Harris County MUD 196 purchases surface water from West Harris County Regional water Authority. The District has an interconnecting valve with Remington MUD 1. Harris County MUD 196 services the Alder Trails, Barker Lake, Riata Ranch, & Riata West subdivisions.

## 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. 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.

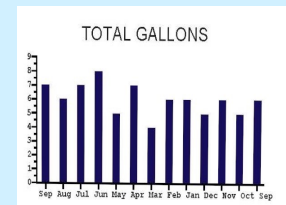
## Special Notice for the Elderly, Infants, Cancer Patients and People with Immune Problems

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

## Track Your Water Usage

Your water bill contains helpful information on a 12-month chart. You can also compare your water usage to other residents in the District. In the middle column at the top of your bill is the average of HCMUD 196's 2,235 homes water usage for the month.

Average monthly usage in HCMUD 196 for 2022 is 8,338 gallons.



En Este reporte incluye información importante sobre el agua para tomar.  
Para asistencia en español, favor de llamar al telefono (281) 376-8802.

## Water Sample Results

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 in our system contact Water District Management at (281) 376-8802.

### Table Information

The tables below and on the following pages contain chemical constituents which have been detected in your drinking water. The Texas Commission on Environmental Quality (TCEQ) and Environmental Protection Agency (EPA) require water systems to test for up to 97 constituents. Only eleven regulated constituents were detected in HCMUD 196's drinking water, none of which exceeded the MCL.

Inorganic Contaminants	Date Sampled	Average Level	Minimum Level	Maximum Level	MCLG	MCL	Unit of Measure	Violation	Likely Source of Contamination
Arsenic	2021 - 2023	0.95	0	3.8	0	10	ppb	No	Erosion of natural deposits. Runoff from orchards; Runoff from glass and electronics production waste.
Barium	2021 - 2023	0.092	0.042	0.227	2.0	2.0	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Cyanide	2023	0.155	0	0.18	200	200	ppb	No	Discharge from plastic and fertilizer factories. Discharge from steel/metal factories.
Fluoride	2021 - 2023	0.17	0	0.25	4	4	ppm	No	Erosion of natural deposits. Water additive which promotes strong teeth. Discharge from fertilizer and aluminum factories.
Nitrate	2023	0.508	0.27	0.66	10.0	10.0	ppm	No	Runoff from fertilizer use. Leaching from septic tanks, sewage. Erosion of natural deposits.
Selenium	2021	6.65	0	13.3	50	50	ppb	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Radioactive Contaminants	Date Sampled	Average Level	Minimum Level	Maximum Level	MCLG	MCL	Unit of Measure	Violation	Likely Source of Contamination
Combined Radium 226/228	2020	1.5	1.5	1.5	0	5	pCi/L	No	Erosion of natural deposits.
Disinfection By-Products	Date Sampled	Average Level	Minimum Level	Maximum Level	MCLG	MCL	Unit of Measure	Violation	Likely Source of Contamination
Total Trihalomethanes (TTHM)	2023	17.225	11.8	20.4	NA	80.0	ppb	No	By-product of drinking water disinfection.
Total Haloacetic Acids (HAA5)	2023	12.95	7.5	17.2	NA	60.0	ppb	No	By-product of drinking water disinfection.
*The value in the highest Level or Average Detected column is the highest average of all TTHM and HAA5 sample results collected at a location over a year.									
Synthetic Organic Contaminants* (including pesticides and herbicides)	Date Sampled	Average Level	Minimum Level	Maximum Level	MCLG	MCL	Unit of Measure	Violation	Likely Source of Contamination
Atrazine	2022	0.54	0.13	1.7	3.0	3.0	ppb	No	Runoff from herbicide used on row crops.
Simazine	2022	0.088	0.07	0.11	4	4	ppb	No	Herbicide runoff.
Disinfectant Residual	Year	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Violation	Source in Drinking Water
Total Chlorine	2022	2.86	2.2	3.7	4	4	mg/L	No	Water additive used to control microbes.
Turbidity^ in Purchased Surface Water for 2023									
Highest single measure of NTUs			0.52	Turbidity is a measure of how clear the water looks. This is measured at the surface water production plant in NTUs and is caused by soil runoff. 95% of samples tested each month must be less than or equal to the limit of 0.300 NTUs.					
Lowest monthly % samples meeting NTU limits			95.7%						

### ^Turbidity of Surface Water from Continuous Sampling at the Surface Water Plant

Turbidity has no health effects but it is monitored because it is a good indicator of the effectiveness of the surface water plant filtration system. Turbidity can interfere with disinfection and provide a place for microbial growth. High turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites. Your water is also tested monthly for disease-causing bacteriological microbes.

Lead and Copper								
Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2022	1.3	1.3	0.0641	0	ppm	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2022	0	15	0	0	ppb	No	Corrosion of household plumbing systems; Erosion of natural deposits.

**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. 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>.

**Unregulated Contaminant Monitoring Rule 5 (UCMR5)**

Sampling conducted through an EPA study for emerging contaminants of concern, including 29 per- and polyfluoroalkyl substances (PFAS) and lithium. Listed below are sample results that were detected. None of the detected PFAS substances exceeded the MCL or Hazard Index.

Unregulated Contaminants	Date Sampled	Average Level	Minimum Level	Maximum Level	MCLG	MCL	Unit of Measure	Likely Source of Contamination
Lithium	2023	6.68	0	12.8	NA	NA	ppb	Naturally occurring metal that may concentrate in brine waters; lithium salts are used as pharmaceuticals, used in electrochemical cells, batteries, and in organic syntheses.
PFBS	2023	0.9 (HI = 0.09)	0	3.7	1 Hazard Index (HI)	1 Hazard Index (HI)	HI	PFAS are a group of synthetic chemicals used in a wide range of consumer products and industrial applications including: non-stick cookware, water-repellent clothing, stain resistant fabrics and carpets, cosmetics, firefighting foams, electroplating, and products that resist grease, water, and oil. PFAS are found in the blood of people and animals and in water, air, fish, and soil at locations across the United States and the world.
PFHxA	2023	1.6	0	6.5	NA	NA	ppt	
PFHxS	2023	0.8125 (HI = 0.09)	0	3.4	1 Hazard Index (HI)	1 Hazard Index (HI)	HI	
PFPeA	2023	1.8	0	7.3	NA	NA	ppt	
PFBA	2023	1.825	0	8.3	NA	NA	ppt	

**Public Participation Opportunities**

Harris County MUD 196 meets at 12 noon on the third Wednesday of each month at Smith Murdaugh, Little & Bonham, 2727 Allen Parkway, Suite 1100 Houston, Texas 77019. Please call Water District Management at (281) 376-8802 for directions. Meeting notices and any last minute cancellations will be posted on the bulleting board at Water Plant No. 1 located at 10503 Apache Way Dr., and Water Plant No. 2 located at 17320 Riata Creek Dr.

**Stay Informed!**

Receive important messages from Harris County MUD 196 by signing up at <https://hcmud196.bbcportal.com/>



[https://wdmtexas.starnik.net/RP\\_default.aspx](https://wdmtexas.starnik.net/RP_default.aspx)

<b>Definitions and Abbreviations Used In This Report</b>	
Action Level:	The concentration of a contaminant which, if 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 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 Contaminant Level Goal or MCLG:	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 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.
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.
MFL	million fibers per liter (a measure of asbestos)
mrem:	millirems per year (a measure of radiation absorbed by the body)
na:	not applicable.
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.