# 2022 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 2018 through 2022.

#### 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.

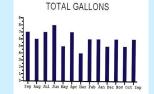
## **Source of Drinking Water**

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water trav-

# 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 8,499 gallons.

els 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 EPAs 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).

#### **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<br>Contaminants   | Date<br>Sampled | Average<br>Level | Minimum<br>Level   | Maximum<br>Level                        | MCLG        | MCL        | Unit of<br>Measure | Violation   | Likely Source of Contamination  |  |
|---|-----------------|------------------|--|---|-------------|------------|--------------------|-------------|---|--|
| Arsenic   | 2021 - 2022     | 1.63             | 0  | 3.8                                     | 0           | 10         | ppb                | No          | Erosion of natural deposits. Runoff from orchards; Runoff from glass and electronics production waste.    |  |
| Barium  | 2021 - 2022     | 0.101            | 0.045  | 0.227                                   | 2.0         | 2.0        | ppm                | No          | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.               |  |
| Cyanide   | 2020 - 2022     | 0.038            | 0  | 0.11                                    | 200         | 200        | ppb                | No          | Discharge from plastic and fertilizer factories.<br>Discharge rom steel/metal factories.                  |  |
| Fluoride  | 2021 - 2022     | 0.208            | 0  | 0.3                                     | 4           | 4          | ppm                | No          | Erosion of natural deposits. Discharge from fertilizer and aluminum factories.                            |  |
| Nitrate   | 2022            | 0.31             | 0.23   | 0.43                                    | 10.0        | 10.0       | ppm                | No          | Runoff from fertilizer use. Leaching from septic tanks. Erosion of natural deposits.                      |  |
| Selenium  | 2021            | 6.65             | 0  | 13.3                                    | 50          | 50         | ppb                | No          | Discharge from petroleum and metal refiner-<br>ies; Erosion of natural deposits; Discharge<br>from mines. |  |
| Radioactive<br>Contaminants   | Date<br>Sampled | Average<br>Level | Minimum<br>Level   | Maximum<br>Level                        | MCLG        | MCL        | Unit of<br>Measure | Violation   | Likely Source of Contamination  |  |
| Combined Radium<br>226/228  | 2020            | 1.5              | 1.5  | 1.5                                     | 0           | 5          | pCi/L              | No          | Erosion of natural deposits.  |  |
| Disinfection<br>By-Products   | Date<br>Sampled | Average<br>Level | Minimum<br>Level   | Maximum<br>Level                        | MCLG        | MCL        | Unit of<br>Measure | Violation   | Likely Source of Contamination  |  |
| Total Trihalomethanes<br>(TTHM)   | 2022            | 23.73            | 18.6   | 30.5                                    | na          | 80.0       | ppb                | No          | By-product of drinking water disinfection.  |  |
| Total Haloacetic Acids<br>(HAA5)  | 2022            | 17.44            | 10.2   | 21.9                                    | na          | 60.0       | ppb                | No          | By-product of drinking water disinfection.  |  |
| *The value in the highes  | t Level or Ave  | rage Detect      | ed column is   | the highest a                           | verage of a | II TTHM ar | nd HAA5 sa         | mple result | s collected at a location over a year.  |  |
| Synthetic Organic<br>Contaminants* (including<br>pesticides and herbicides) | Date<br>Sampled | Average<br>Level | Minimum<br>Level   | Maximum<br>Level                        | MCLG        | MCL        | Unit of<br>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<br>Residual  | Year            | Average<br>Level | Minimum<br>Level   | Maximum<br>Level                        | MRDL        | MRDLG      | Unit of<br>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.  |  |
|   |                 |                  | Turk   | oidity^ in Pur                          | chased Sur  | face Wate  | r for 2022         |             |   |  |
| Highest single measure  | of NTUs         | 0.51             | 0.51 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 |   |             |            |                    |             |   |  |
| Lowest monthly % samp   | les meeting N   | ITU limits       | 99.4%  | 99.4% equal to the limit of 0.300 NTUs. |             |            |                    |             |   |  |

# ^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 | Date<br>Sampled | MCLG | Action Level<br>(AL) | 90th<br>Percentile | # Sites Over<br>AL | Units | Violation | Likely Source of Contamination  |
|-----------------|-----------------|------|----------------------|--------------------|--------------------|-------|-----------|---|
| Copper          | 2022            | 1.3  | 1.3                  | 0.0641             | 0                  | ppm   | NI -      | 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.

#### **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!

Blackboard om connect

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



No cost option for your convenience.

https://wdm2.firstbilling.com/Account/Login.aspx?ReturnUrl=%2f?

| Definitions and Abbreviations Used In This Report  |  |  |  |  |
|--|--|--|--|--|
| 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.  |  |  |  |