

# 2017 Annual Drinking Water Quality Report

published in 2018

## HARRIS COUNTY MUD 196



*Yes, your water is safe to drink*

### OUR WATER MEETS ALL FEDERAL (EPA) AND STATE REQUIREMENTS

This report is produced to provide information about your water system including the quality of your water, the source of the water, levels of detected contaminants, and compliance with drinking water rules.

The Texas Commission on Environmental Quality (TCEQ) assessed our system, Harris County Municipal Utility District No. 196 (HC MUD 196), and determined that our water is safe to drink. The analysis was made by using the data in the tables in this report which uses testing results from 2013 through 2018.

Because our water meets all state and federal drinking water health standards for the sampling period, there may not be any health based benefits to purchasing bottled water or point of use devices. HC MUD 196 system identification number is 1013002. Thank you for taking the time to read and learn about the water you drink. We look forward to another year of providing you with safe, reliable water.

En Español – Este reporte incluye informacion importante sobre el agua para tomar. Si tiene preguntas o discusiones sobre este reporte en espanol, favor de llamar al tel. 281.376.8802 par hablar con una persona bilingue en espanol.



No cost option for your convenience.

[www.eonlinebill.com/bapp/wdm/index1](http://www.eonlinebill.com/bapp/wdm/index1)

### PUBLIC PARTICIPATION

HC MUD 196 meets at 12 p.m. (noon) on the third Wednesday of each month at Smith Murdaugh, Little & Bonham, 2727 Allen Parkway, Suite 1100 Houston, TX 77019. Call 281.376.8802 for directions.

Meeting notices and any last minute cancellations will be posted on the bulletin board at Water Plant No. 1, 10503 Apache Way Dr., and Water Plant No. 2 at 17320 Riata Creek Dr.

HC MUD No. 196 services the Alder Trails, Barker Lake, Riata Ranch, & Riata West subdivisions.

### WHERE YOUR WATER COMES FROM

HC MUD 196 receives surface water from the West Harris County Regional Water Authority as our primary source of water.

The District also has an interconnect valve with neighboring Remington MUD 1. This District is governed by the same drinking water regulations as HC MUD 196.

### SPECIAL NOTICE FOR THE ELDERLY, INFANTS, CANCER PATIENTS, 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 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 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 at 800.426.4791.

## WHAT'S IN THE WATER

The EPA prescribes regulations that 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. 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 at EPA's **Safe Drinking Water Hotline, 1.800.426.4791** or [www.epa.gov/safewater](http://www.epa.gov/safewater). Bottled water information may be obtained at [www.nrdc.org/water/drinking/bw/bwinx.asp](http://www.nrdc.org/water/drinking/bw/bwinx.asp).



### TABLE INFORMATION

The tables contain chemical constituents which have been found in your drinking water. The TCEQ and the Environmental Protection Agency (EPA) require water systems to test up to 97 constituents. The constituents detected in HC MUD 196's water are listed below and all were below the maximum contaminant level allowed in drinking water. The agencies do not require some contaminants to be monitored annually because their concentrations are not expected to vary. This report, also referred to as a Consumer Confidence Report (CCR), states the results of the most current water testing from 2013 through 2018.

INORGANICS - REGULATED									
Year Tested	Contaminant Detected	Unit of Measure	Average Level	Minimum Level	Maximum Level	Allowed (EPA's MCL)	MCLG	Meets Standards	Possible source of Contaminant
2017-18	Barium	ppm	0.062	0.0462	0.101	2.0	2.0	yes	Erosion of natural deposits
2017	Cyanide	ppb	0.010	0.000	0.050	200.0	200.0	yes	Discharge from plastic & fertilizer factories
2017	Fluoride	ppm	0.274	0.000	0.450	4.0	4.0	yes	Erosion of natural deposits
2017	Nitrate	ppm	0.706	0.360	1.170	10.0	10.0	yes	Erosion of natural deposits
2013-15	Nitrite	ppm	0.014	0.000	0.020	1.0	1.0	yes	Erosion of natural deposits
2016-17	Uranium	ppb	0.320	0.000	1.600	30.0	0.0	yes	Erosion of natural deposits
2015-17	Gross alpha	pCi/L	0.400	0.000	2.000	15.0	0.0	yes	Erosion of natural deposits
2011-15	Combined Radium 226 & 228	pCi/L	0.830	0.000	1.500	5.0	0.0	yes	Decay of natural and man-made deposits
2016-17	Gross beta emitters	pCi/L	1.980	0.000	5.900	50.0	0.0	yes	Decay of natural and man-made deposits

ORGANICS - REGULATED									
Year Tested	Contaminant Detected	Unit of Measure	Avg Level	Minimum Level	Maximum Level	Allowed (EPA's MCL)	MCLG	Meets Standards	Possible source of Contaminant
2017	Atrazine	ppb	0.298	0.00	0.910	3.0	3.0	n/a	Runoff containing herbicides
2017	Di(2-ethylhexyl) phthalate (DEHP)	ppb	0.306	0.000	0.920	6.0	6.0	yes	Discharge from rubber and chemical factories
2017	Simazine	ppb	0.038	0.00	0.190	4.0	4.0	n/a	Runoff containing herbicides

DISINFECTANT RESIDUALS									
Year	Constituent	Unit	Average	Minimum	Maximum	MRDL	MRDLG	Possible Source of Contaminant	
2017	Chloramines	ppm	2.54	1.40	3.50	4.0	4.0	Disinfectant used to control microbes	

DISINFECTANT BYPRODUCTS - REGULATED									
Year	Constituent	Unit	Avg*	Min*	Max*	MCL	Disinfectant Byproducts (DBPs) are formed when disinfectants (such as Chlorine) reacts with natural organic material in water. The District monitors the water distribution system as required by Stage 2 of the federal Disinfectant Byproduct Rule		
2017	Total Haloacetic Acids	ppb	19.70	19.70	19.70	60.0			
2017	Total Trihalomethanes	ppb	21.10	21.10	21.10	80.0			

**Total Trihalomethanes represents four and Haloacetic Acids represent five different constituents. The maximum for each is the sum of either the four or the five constituents.**

\* When there is only one sample, the average, minimum, and maximum will be the same number.

SECONDARY CONSTITUENT - UNREGULATED									
2017-18	Sodium	ppm	23.24	16.80	25.90	No standards set	Erosion of natural deposits		

## UNREGULATED CONTAMINANTS

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

## SECONDARY CONSTITUENTS

Many contaminants (such as calcium, sodium, or iron) which are often found in drinking water can cause taste, color, and odor problems. These constituents are called secondary contaminants and are regulated by the State of Texas, not EPA. The secondary constituents are not 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.

### CONTAMINANTS - UNREGULATED

Tested	Contaminant	Unit	Average	Minimum	Maximum	Source of Contaminant
2017	Bromodichloromethane	ppb	6.60	2.40	8.80	The Unregulated contaminants listed are byproducts of the drinking water disinfection.
2017	Bromoform	ppb	0.22	0.00	1.10	
2017	Chloroform	ppb	21.00	13.00	47.00	
2017	Dibromochloromethane	ppb	1.66	0.00	3.20	

### TURBIDITY - CLARITY OF WATER - CONTINUOUSLY SAMPLED AT THE WATER PLANT - REGULATED

2017 Turbidity†	Highest single measure	0.31 NTUs	Turbidity is measured in NTUs and is caused by soil runoff. 95% of samples
Lowest monthly % of samples meeting limits	95%		tested each month must be less than or equal to the limit of 0.300 NTUs.

†Turbidity is a measure of how clear the water looks. Turbidity is a cloudiness or haziness of water caused by individual particles that are too small to be seen without magnification, this being much like smoke in air. Turbidity has no health effects but it is monitored because it is a good indicator of the effectiveness of the filtration system. 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.

## SOURCE WATER ASSESSMENT

The TCEQ completed an assessment of your source water and results indicate that our sources have a low susceptibility to contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detections of these contaminants will be found in this Consumer Confidence Report (CCR).

For more information on source water assessments and protection efforts at our system, contact Water District Management at 281.376.8802.

## ADDITIONAL TESTING

Additional testing is done daily at the water plant and throughout the community at various locations to ensure that a safe level of disinfectant is in the system. Water samples are sent to an independent state approved laboratory to verify the absence of harmful bacteria. No such bacteria has been detected in this water system.

## DEFINITIONS & ABBREVIATIONS

**Contaminant:** The technical term for anything else in water except pure water is "contaminant." Technically, pure, fresh orange juice can be considered water which has been "contaminated" by the oil, orange pulp and flavorings in the orange which make it taste so good. Obviously, some contaminants aren't good and can actually be hazardous to your health at specific levels. Those are the ones that are tested and measured.

**Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**MCL, Maximum Contaminant Level:** The highest level of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. MCLs are set at very stringent levels.

**MCLG, Max. Contaminant Level Goal:** The level of a contaminant in drinking water below which there is no known or expected health risk. MCLGs allow for a margin of safety.

**MRDL, Max. Residual Disinfectant Level:** 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.

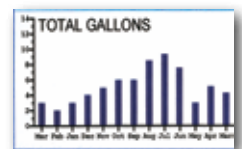
## SOURCES OF DRINKING WATER

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: microbes, inorganic contaminants, pesticides, herbicides, radioactive contaminants, and organic chemical contaminants.

## 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 HC MUD 196's 1,856 homes water usage for the month.



Avg. monthly usage in MUD 196 is 7,544 gals.

**MRDLG, Max. Residual Disinfectant Level Goal:** 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 contamination.

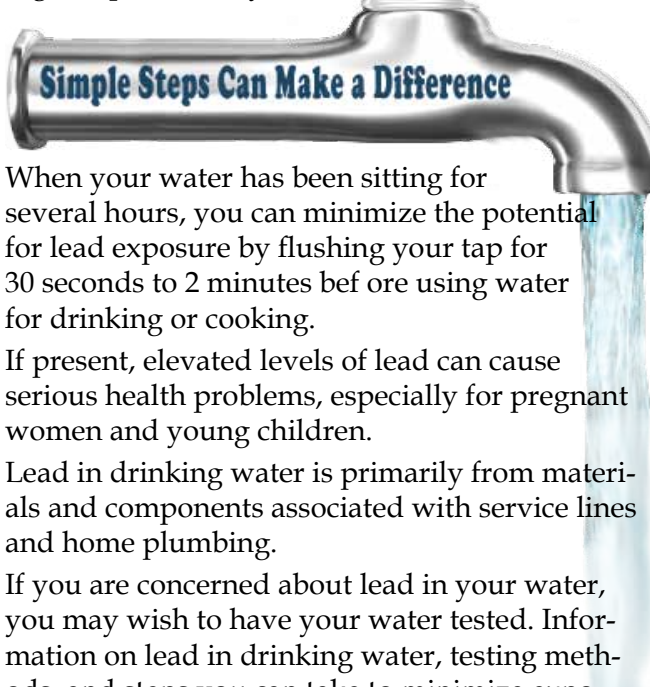
**n/a:** not established at this time

**pCi/L: PicoCuries per liter**  
**ppm - Part per million:** One part per million equals 1 teaspoon in 1,302 gallons, which is enough water to fill a typical bathtub over 40 times.

**ppb - Part per billion:** One part per billion equals 1 teaspoon in 1,302,000 gallons, which is enough water to fill a typical bathtub over 40,000 times.

## INFORMATION ON WATER

HC MUD 196 is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components in your home or business



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 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.

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 [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

### LEAD AND COPPER – TESTED AT THE CUSTOMER’S TAP (samples collected from 20 homes)

Year Tested	Substance	Unit of Measure	90th Percentile	No. of Homes Exceeding Action Level	Action Level	Possible Sources of Lead and Copper
2016	Lead	ppb	0.890	0 of 20	15.0	Corrosion of household plumbing systems and erosion of natural deposits
2016	Copper	ppm	0.254	0 of 20	1.3	

## HOW TO FIND A LEAK WITH YOUR WATER METER

Your water meter is usually located between the sidewalk and curb under a cover. Remove the cover then lift the meter lid.

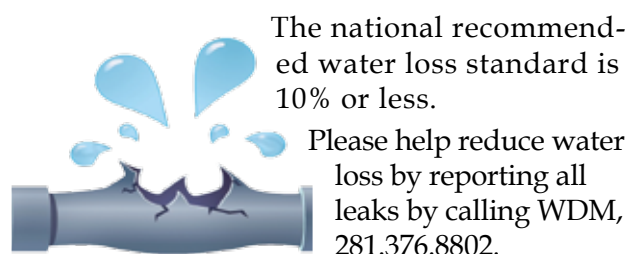
To determine if you have a leak, turn off all the water in your home, both indoor and outdoor faucets, and then check the dial for any movement of the low-flow indicator (the triangle). Movement indicates a leak.



- 1 Low-Flow Indicator (triangle)** – The low flow indicator will spin if any water is flowing through the meter.
- 2 Sweep Hand** – Each full revolution of the sweep hand indicates that 7.48 gallons has passed through the meter. The markings at the outer edge of the dial indicate tenths and hundredths of gallons.
- 3 Meter Register** – The meter register is a lot like the odometer on your car and reads straight across. The white numbers (0000) show the number of thousand of gallons that has passed through the meter. The numbers to the right in the black boxes indicate water usage that is less than 1,000 gallons. Customers are charged for only 1,000s of gallons of water used.

## FIGHTING FIRES, WATER LINE BREAKS, AND DISTRICT MAINTENANCE ALL ADD TO LOSS WATER

The District’s water distribution system lost an estimated 6.68% of its water in 2017.



The national recommended water loss standard is 10% or less.

Please help reduce water loss by reporting all leaks by calling WDM, 281.376.8802.

## HAVE QUESTIONS

More information about particular health risks or contaminants may be available at:

- EPA [www.epa.gov/safewater/ccr/frequentquestions](http://www.epa.gov/safewater/ccr/frequentquestions)  
1.800.426.4791
- Harris County Health Department  
713.439.6000
- Water District Management (WDM), the Operator  
281.376.8802

This Report is also available online at [www.wdmtexas.com](http://www.wdmtexas.com).

## The DOs & DON'Ts of Water Conservation

### BATHROOM

- ✓ Do take shorter showers and/or fill the tub halfway.
- ✗ Don't run water while washing your hands or brushing your teeth.

### KITCHEN & LAUNDRY

- ✓ Do run the dishwasher & washing machine only when full.
- ✗ Don't let the water run while washing dishes. Kitchen faucets use 2 - 3 gallons a minute.

### EVERYWHERE

- ✓ Do install water-saving fixtures.
- ✗ Don't ignore water leaks. Turn taps off tightly.

### OUTDOORS

- ✓ Do use a self-closing nozzle on your hose. Put sprinklers on a timer to shut off automatically.
- ✗ Don't water sidewalks, drives or the street.

