

2020 DRINKING WATER QUALITY REPORT



CONSUMER CONFIDENCE REPORT

PWS ID: 1013265

HARRIS COUNTY MUNICIPAL UTILITY DISTRICT NO. 389

Our Drinking Water Meets All Federal (EPA)

Drinking Water Requirements

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water. The U.S. Environmental Protection Agency (EPA) requires ongoing tests of all public water systems, and the results are provided on the following pages. We hope that by this information helps you to become more aware of what's in your drinking water in Harris County MUD 389.

Water Sources

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 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.

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. In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Special Notice for Infants, Elderly and those with Special Health Circumstances



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; 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.

En Espanol

Este reporte incluye información importante sobre su agua potable. Para asistencia en español, favor de llamar por telefono al (281) 355-1312.

Public Participation Opportunities

The Harris County MUD 389 Board of Directors meet at 11:00 A.M. on the fourth Thursday of each month at the offices of Schwartz Page & Harding, LLP, 1300 Post Oak Blvd, Suite 1400 Houston, Texas 77056.

You may mail comments to:

Harris County MUD 389
Attn: Board of Directors
P.O. Box 691008
Houston, TX 77269
Or call (281) 355-1312

Where do we get our drinking water?

The source of drinking water used by HC MUD 389 is ground water purchased from Northwest Harris County MUD 10. It comes from the Chicot aquifer. 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 contact HC MUD 389: 281-355-1312.

All Drinking Water May Contain Contaminants

When drinking water meets federal standards there may not be any health benefits to purchasing bottled water or point of use devices. Drinking water, including bottled water, may reasonably be expected to contain at least small amount 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 found by calling the EPA’s Safe Drinking Water Hotline (1-800-426-4791).

About this report

This report lists all the federally regulated or monitored contaminants which have been found in your drinking water. The U.S. EPA requires water systems to test for up to 97 contaminants. Most sampling is conducted at each source water entry point into the system. The actual water received by a consumer may be a blend from different sources, depending on location.

Drinking Water Abbreviations and Definitions

Ave: Regulatory compliance with some MCLs are based on running annual average of monthly samples.

MFL: million fibers per liter (a measure of asbestos)

N/A: not applicable

NTU: nephelometric turbidity units (a measure of turbidity)

pCi/L: picocuries per liter (a measure of radioactivity)

ppm: parts per million, or milligrams per liter (mg/L), or one ounce in 7,350 gallons of water

ppb: parts per billion, or micrograms per liter, or one ounce in 7,350,000 gallons of water

ppt: parts per trillion, or nanograms per liter (ng/L)

ppq: parts per quadrillion, or pictograms per liter (pg/L)

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 MCLG:

The level of 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:

There is a level of drinking water disinfectant below which there is no known or expected risk to health. MRDLs 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.

Mrem/year: millirems per year (a measure of radiation absorbed by the body)

Treatment Technique or TT:

A required process intended to reduce the level of a contaminant in drinking water.

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Total Trihalomethanes (TTHM)	2020	9	8.7 – 8.7	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2018	3	3 - 3	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2018	0.172	0.172 - 0.172	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2019	0.15	0.15 – 0.15	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]	2020	0.2	0.2 – 0.2	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Gross alpha excluding radon and uranium	09/29/2015	3	3 - 3	0	15	pCi/L	N	Erosion of natural deposits.
Uranium	09/29/2015	1	1 - 1	0	30	ug/l	N	Erosion of natural deposits.

Lead and Copper

Lead and Copper	Date Sampled	ALG	AL (Action Level)	90 th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2018	1.3	1.3	0.046	0	Ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

Disinfection Residuals

Contaminant Unit of measurement	Year Sampled	Average Level Detected	Minimum Level detected	Maximum Level detected	MRDL	MCLG	Violation	Source of Contaminant
Free Chlorine (ppm)	2020	1.71	1.13	2.43	4	4	No	Water additive used to control microbes

Additional Health Information for Lead

All water systems are required by EPA to report the following language: *“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. This water supply is responsible for providing high quality drinking water, but 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>.”*

- In 2020 Harris County MUD 389 submitted a Water Loss Audit and reported a water loss of 44.99 gallons per day per connection.

Northwest Harris County MUD 10 (PWS ID: TX1011649)

Harris County MUD 389 Purchased ground water from Northwest Harris County MUD No. 10 from January to December through an open inner-connect.

REGULATED INORGANIC CONTAMINANTS

Contaminant Unit of measurement	YEAR	Highest Level Detected	Range of detected level	Violation	MCL	MCLG	Likely Source of Contaminant
Barium (ppm)	2020	0.283	0.213 – 0.283	NO	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Flouride (ppm)	2020	0.74	0.4 – 0.74	NO	4	4.0	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Arsenic	2020	5.3	0 – 5.3	NO	10	0	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.

RADIOACTIVE CONTAMINANTS

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	2020	4.1	4.1 - 4.1	0	50	pCi/L*	N	Decay of natural and man-made deposits.
Combined Radium 226/228	2019	1.02	1.02 - 1.02	0	5	pCi/L	N	Erosion of natural deposits.
Gross alpha excluding radon and uranium	2020	3.4	3.4 - 3.4	0	15	pCi/L	N	Erosion of natural deposits.

*EPA considers 50 pCi/L to be the level of concern for beta particles

- If you would like to talk to a district representative about your Water Quality Report, please call (281) 355- 1312. For information from the U.S. Environmental Agency, you may call the EPA's Hotline at 1-800-426-4791.

Violations Table

1,1,1-Trichloroethane			
Some people who drink water containing 1,1,1-trichloroethane in excess of the MCL over many years could experience problems with their liver, nervous system, or circulatory system.			
Violation Type	Violation begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020	12/31/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

1,1,2-Trichloroethane			
Some people who drink water containing 1,1,2-trichloroethane well in excess of the MCL over many years could have problems with their liver, kidneys, or immune systems.			
Violation Type	Violation begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020	12/31/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

1,1-Dichloroethylene			
Some people who drink water containing 1,1-dichloroethylene in excess of the MCL over many years could experience problems with their liver.			
Violation Type	Violation begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020	12/31/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

1,2,4-Trichlorobenzene			
Some people who drink water containing 1,2,4-trichlorobenzene well in excess of the MCL over many years could experience changes in their adrenal glands.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020	12/31/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

1,2-Dichloroethane			
Some people who drink water containing 1,2-dichloroethane in excess of the MCL over many years may have an increased risk of getting cancer.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020	12/31/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Violations table continued

1,2-Dichloropropane			
Some people who drink water containing 1,2-dichloropropane in excess of the MCL over many years may have an increased risk of getting cancer.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020	12/31/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Benzene			
Some people who drink water containing benzene in excess of the MCL over many years could experience anemia or a decrease in blood platelets, and may have an increased risk of getting cancer.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020	12/31/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Carbon Tetrachloride			
Some people who drink water containing carbon tetrachloride in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020	12/31/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Chlorobenzene			
Some people who drink water containing chlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020	12/31/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Dichloromethane			
Some people who drink water containing dichloromethane in excess of the MCL over many years could have liver problems and may have an increased risk of getting cancer.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020	12/31/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Violations table continued

Ethylbenzene			
Some people who drink water containing ethylbenzene well in excess of the MCL over many years could experience problems with their liver or kidneys.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020	12/31/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Nitrate [measured as Nitrogen]			
Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020	12/31/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Styrene			
Some people who drink water containing styrene well in excess of the MCL over many years could have problems with their liver, kidneys, or circulatory system.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020	12/31/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Tetrachloroethylene			
Some people who drink water containing tetrachloroethylene in excess of the MCL over many years could have problems with their liver, and may have an increased risk of getting cancer.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020	12/31/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Toluene			
Some people who drink water containing toluene well in excess of the MCL over many years could have problems with their nervous system, kidneys, or liver.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020	12/31/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Violations table continued

Trichloroethylene			
Some people who drink water containing trichloroethylene in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020	12/31/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Vinyl Chloride			
Some people who drink water containing vinyl chloride in excess of the MCL over many years may have an increased risk of getting cancer.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020	12/31/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Xylenes			
Some people who drink water containing xylenes in excess of the MCL over many years could experience damage to their nervous system.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020	12/31/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

cis-1,2-Dichloroethylene			
Some people who drink water containing cis-1,2-dichloroethylene in excess of the MCL over many years could experience problems with their liver.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020	12/31/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

o-Dichlorobenzene			
Some people who drink water containing o-dichlorobenzene well in excess of the MCL over many years could experience problems with their liver, kidneys, or circulatory systems.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020	12/31/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Violations table continued

p-Dichlorobenzene			
Some people who drink water containing p-dichlorobenzene in excess of the MCL over many years could experience anemia, damage to their liver, kidneys, or spleen, or changes in their blood.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020	12/31/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

trans-1,2-Dichloroethylene			
Some people who drink water containing trans-1,2-dichloroethylene well in excess of the MCL over many years could experience problems with their liver.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020	12/31/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Monitoring and Reporting Violation Chemical Sampling:

The Harris County MUD 389 water system PWS ID TX 1013265 has violated the monitoring reporting requirements set by Texas Commission on Environmental Quality (TCEQ) in Chapter 30 Section 290, Subchapter F. Public water systems are required to collect and submit to the TCEQ on a regular basis. We failed to report the constituents mentioned in the above Violation Tables. These violations occurred in the monitoring period(s) of 01/01/2020 through 12/31/2020. Results of regular monitoring are an indicator of whether or not your water is safe from chemical contaminations. We did not complete all the reporting for chemical constituents, and therefore TCEQ cannot be sure of the safety of your drinking water during this time.

The District sampled for all the above constituents during the correct monitoring period. All the results were within state regulations. The reason for the violation was due to a payment oversight during the stay-at-home order issued in the state of Texas during the beginning state of Covid-19. The district has updated the billing address and paid the past due invoice allowing the results to be confirmed.

We apologize for the inconvenience and understand your concerns. If you have any questions, please let us know.

Cameron King
Compliance Officer
281.355.1312