

# **HARRIS COUNTY M.U.D. 389**

## *2022 Drinking Water Quality Report*

**This report is an annual summary of the quality of your drinking water. It is required by the Texas Commission on Environmental Quality and is based on the most recent U.S. Environmental Protection Agency required tests.**

### **Information about Source Water**

The Texas Commission on Environmental Quality (TCEQ), has 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 and protection efforts at our systems contact Natalia Espitia at: (281) 355-1312.

### **En Español**

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

### **Where do we get our drinking water?**

The source of drinking water used by Harris County MUD 389 is ground water purchased from Northwest Harris County MUD 10 on a year round basis as a permanent water supply. It comes from the Chicot aquifer, located in Harris County. For more information on source water assessments and protection efforts at our system contact HC MUD 389 at: (281) 355-1312.

### **Contaminants that may be Present in Source Water**

The sources of drinking water (both tap 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 (1-800-426-4791).

### **Contaminants that may be present in source water include:**

- **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic system, agricultural livestock operations, and wildlife;
- **Inorganic contaminants**, such as salts and metals, which can be naturally occurring or result from urban stormwater, 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 stormwater 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 stormwater runoff, and septic systems; and
- **Radioactive contaminants**, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limits the amount of certain contaminants in water provided by public water systems. Federal Food and Drug Administration Agency regulations establish limits for contaminants in bottled water that 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 h2o innovation at (281) 355-1312.

### **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 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 Safe Drinking Water Hotline (800-426-4791).

### **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 2500, Houston, Texas 77056. You may contact Natalia Espitia, with H<sub>2</sub>O Innovation at: (281) 355-1312 with any concerns or questions you may have.



## About the Following Table

The following table contains all of the chemical constituents which have been found in your drinking water for the most recent testing performed in accordance with applicable regulations. USEPA requires water systems to test up to 97 constituents. The constituents detected in your water are listed in the attached table.

### DEFINITIONS

**Maximum Contaminant Level (MCL)** - The highest level of a contaminant in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

**Maximum Contaminant Level Goal (MCLG)** - The level of a contaminant in drinking water below which there is no known or expected health risk. MCLG's allow for a margin of safety.

**Treatment Technique** - A required process intended to reduce the level of a contaminant in drinking water.

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

**ppm** = parts per million or milligrams per liter (mg/l), one part per million corresponds to one minute in two years or a single penny in \$10,000.

**ppb** = parts per billion or micrograms per liter (mg/l), one part per billion corresponds to one minute in 2,000 years or a single penny in \$10,000,000.

**pCi/l** = pico curies per liter: Measure of radioactivity.

**Maximum Residual Disinfectant Level (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 (MRDLG)** - The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contamination.

**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.

## Harris County M.U.D. 389 TX1013265 2022 Drinking Water Quality Report:

Inorganic Contaminants								
Year	Constituent	Highest Detected Level at Any Sampling Point	Range of Detected Levels	MCL	MCLG	Units of Measure	Violation	Source of Constituent
2021	Barium	0.172	0.172 - 0.172	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
2022	Fluoride	0.12	0.12 - 0.12	4	4	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
2022	Nitrate	0.18	0.00 - 0.18	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
2021	Arsenic*	2.30	2.30 - 2.30	10	0	ppb	N	Erosion of natural deposits.

\*\*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.

\*\*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.

Organic Contaminants								
Year	Constituent	Highest Detected Level at Any Sampling Point	Range of Detected Levels	MCLG	MCL	Units of Measure	Violation	Source of Constituent
2022	Total Trihalomethanes (TTHM)	4.9	4.9 - 4.9	N/A	80	ppb	N	By-product of drinking water disinfection.
2021	Haloacetic Acid (HAA5)	1.2	1.2 - 1.2	N/A	60	ppb	N	By-product of drinking water disinfection.

\*The value in the Highest Level or Average Detected column is the highest average of all HAA5/TTHM sample results collected at a location over a year

### Lead and Copper

Year	Constituent	MCLG	Action Level	The 90th Percentile	# of Sites Over AL	Units of Measure	Violation	Source of Constituent
2022	Copper	1.30	1.30	0.112	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
2022	Lead	0.00	15.00	1.75	1	ppb	N	Corrosion of household plumbing system.

The 90th percentile of the Lead/ Copper analysis means the top 10% (highest sample results) of all samples collected.

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>.

### Disinfectant Residual

Year	Constituent	Highest Average	Range of Detected Levels	MRDL	MRDLG	Violation	Source of Constituent
2022	Free Chlorine (ppm)	2.29	0.20 - 2.70	4	4	N	Disinfectant used to control microbes.

**During 2022, Harris County M.U.D. 389 received water from Northwest Harris County M.U.D. 10. The following water quality information was provided by Northwest Harris County M.U.D. TX1011649:**

Throughout 2022 HC M.U.D 389 received water from NW HC M.U.D 10. For additional information relating to NW HC M.U.D 10 source water please contact Inframark Co. att: Sharon Salinas (713) 395-3100

### Inorganic Contaminants

Year	Constituent	Highest Detected Level at Any Sampling Point	Range of Detected Levels	MCL	MCLG	Units of Measure	Violation	Source of Constituent
2020	Arsenic	5.30	0.00 - 5.30	10	0	ppb	N	Erosion of natural deposits.
2022	Barium	0.209	0.209 - 0.209	2	2	ppm	N	Discharge of drilling wastes.
2022	Fluoride	0.47	0.47 - 0.47	4	4	ppm	N	Erosion of natural deposits.
2022	Nitrate	0.12	0.00 - 0.12	10	10	ppm	N	Runoff from fertilizer.

\*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.

### Organic Contaminants

Year	Constituent	Highest Detected Level at Any Sampling Point	Range of Detected Levels	MCLG	MCL	Units of Measure	Violation	Source of Constituent
2022	Haloacetic Acid (HAA5)	16.00	15.50 - 16.00	n/a	60	ppb	N	By-product of drinking water disinfection.

\*The value in the Highest Level or Average Detected column is the highest average of all HAA5 sample results collected at a location over a year

### Lead and Copper

Year	Constituent	MCLG	Action Level	90th Percentile	# Sites Over AL	Units of Measure	Violation	Source of Constituent
2020	Copper	1.30	1.30	0.21	0	ppm	N	Erosion of natural deposits.
2020	Lead	0	15	1.60	0	ppb	N	Corrosion of household plumbing system.

The 90th percentile of the Lead/ Copper analysis means the top 10% (highest sample results) of all samples collected.

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>.

### Radioactive Contaminants

Year	Constituent	Highest Detected Level at Any Sampling Point	Range of Detected Levels	MCL	MCLG	Units of Measure	Violation	Source of Constituent
2022	Beta/phonton Emitters	6.70	6.70 - 6.70	50	0	pCi/L*	N	Decay of natural and man-made deposits.
2021	Gross Alpha	4.50	4.50 - 4.50	15	0	pCi/L*	N	Erosion of natural deposits.
2019	Combined Radium 226/228	1.02	1.02 - 1.02	5	0	pCi/L*	N	Erosion of natural deposits.

\*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 EPA's Hotline at 1-800-426-4791.

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