# 2022 Annual Drinking Water Quality Report

Harris County Municipal Utility District No. 405
Public Water Supply ID 1013362

#### **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 Municipal Utility District No. 405 (HCMUD No. 405) provides groundwater from two wells located in Harris County. The well draws groundwater from the Gulf Coast Aquifers.

#### **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 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 naturallyoccurring 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.

## SUPERIOR PUBLIC WATER SYSTEM

THE STATE OF TEXAS

HCMUD No. 405, maintains recognitions as a "Superior Public Water System" with the TCEQ. This recognition demonstrates that the District's water quality meets or exceeds all requirements set forth in the Rules and Regulations for Public Water Systems.

### 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).

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 six regulated constituents were detected in HCMUD No. 405's drinking water, none of which exceeded the MCL.

Inorganic Contaminants*	Collection Date	Average Level	Minimum Level	Maximum Level	MCLG	MCL	Unit of Measure	Violation	Likely Source of Contamination
Arsenic**	2022	6.7	6.7	6.7	0	10	ppb	No	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. EPAs standard balances the current under- stating of arsenics possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects									

\*\*While your drinking water meets EPA standards for arsenic, it does contain low levels of arsenic. EPAs standard balances the current understating of arsenics 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.

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Barium	2022	0.209	0.209	0.209	2.0	2.0	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2022	0.31	0.31	0.31	4.0	4.0	ppm	No	Erosion of natural deposits.
Nitrate	2022	0.07	0.07	0.07	10.0	10.0	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	2022	3.5	3.5	3.5	50	50	ppb	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Radioactive Contaminants	Collection Date	Average Level	Minimum Level	Maximum Level	MCLG	MCL	Unit of Measure	Violation	Likely Source of Contamination
Uranium	2019	1.2	1.2	1.2	0.0	30.0	ppb	No	Erosion of natural deposits.
Disinfectant Residual	Year	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Violation	Source in Drinking Water
Free Chlorine	2022	1.71	1.4	2.1	4	4	mg/L	Nο	Water additive used to control microbes.
*\^/									

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

#### **Additional Testing**

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. Monthly samples are taken and analyzed by a third party laboratory.



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 Harris County MUD No. 405's 213 homes water usage for the month.

Average monthly usage is 5,847 gallons.

Lead and Copper								
Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2020	1.3	1.3	0	0	ppm	NO	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2020	0	15	0	0	ppb	NΩ	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**

The Board of Directors of HCMUD No. 405 meets at 2929 Allen Parkway, Suite 3450, Houston, Texas 77019. Meeting agendas are posted at the Wastewater Treatment Plant, 26830 1/2 Mallard Crossing, at least 72 hours prior to each meeting. Please call the District operator, Water District Management, at (281) 376-8802 for more information.

	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.					
ррq	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.					