# HARRIS COUNTY M.U.D. No. 8

PWS ID # 1010712

# 2022 Annual Drinking Water Quality Report

Phone No: 281-350-0895

This is your water quality report from January 1, 2022 to December 31, 2022.

#### En Español

Este reporte incluye información importante sobre el agua para tomar. Para asistancia en espanol, por favor llame al telefono 281-350-0895.

#### **OUR DRINKING WATER IS SAFE**

This report is a summary of the quality of the water we provide to our customers. The analysis was made by using the data from the most recent U.S. Environmental Protection Agency (USEPA) required tests and is presented in the following tables. We hope this information helps you become more knowledgeable about your drinking water.

Where do we get your drinking water?

<u>Public Participation Opportunities</u> concerning your water system may be made at regularly scheduled meetings on the second Wednesday of each month at 10:30 a.m., Young & Brooks, 10000 Memorial Drive, Suite 260, Houston, Texas 77024-3430. You may contact Tarynn Fossati at TNG Utility Corp., phone # 281-350-0895, with any questions or concerns you may have.

Our drinking water is obtained from surface water sources. It is provided by the City of Houston.

The TCEQ has completed a Source Water Assessment for all drinking water systems that own their sources. The report describes the susceptibility and types of

constituents that may come into contact with your drinking water source based on human activities and natural conditions. The system from which we purchase our water received the assessment report. For more information on source water assessments and protection efforts of our system, feel free to call us at 281-350-0895.

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: (i) microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; (ii) 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; (iii) pesticides and herbicides, which might have a variety of sources such as agriculture, urban storm water runoff, and residential uses; (iv) organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum produc-

tion, and can also come from gas stations, urban stormwater runoff, and septic systems; and (v) radioactive contaminants, which can be naturally-occurring or the result of oil and gas production and mining activities.

A 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 the Safe Drinking Water Hotline (800-426-4791). Also, see EPA website: www.epa.gov/safewater and NRDC website: www.nrdc.org/water

### All Drinking Water may Contain Contaminants

When drinking water meets federal standards there may not be any health based benefits to purchasing bottled water or point of use devices.

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 at (800-426-4791).

In order to ensure that the 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.



THE NEXT GENERATION OF WATER AND WASTEWATER UTILITY SERVICES

PWS ID # 1010712

#### About the Following Table

The following table contains all of the federally regulated or monitored chemical constituents which have been found in your drinking water. USEPA requires water systems to test up to 97 constituents. The data presented in the report is from the most recent testing done in accordance with the regulations.

#### Abbreviations and Definitions

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

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

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.

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

Maximum Residual Disinfectant Level Goal (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 use of disinfectants to control microbial contamination.

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

Action Level (AL) 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.

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

 $\ensuremath{\mathbf{ppm}}$  - milligrams per liter or parts per million-or one ounce in 7,350 gallons of water.

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

pCi/l - pico curies per liter (a measure of radioactivity)

N/A - not applicable

mrem- millirems per year (a measure of radiation absorbed by the body)

NTU-nephelometric turbidity units ( a measure of turbidity)

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

ppq- parts per quadrillion, or picograms per liter (pg/L)

#### Harris County M.U.D. No. 8 - 2022 Drinking Water Quality Report Data

| Disinfectant<br>Residual | Year | Average Level | Range of Levels<br>Detected | MRDL | MRDLG | Unit of<br>Measure | Violation<br>(Y/N) | Source in Drinking Water                 |
|--------------------------|------|---------------|-----------------------------|------|-------|--------------------|--------------------|--|
| Chloramine               | 2022 | 3.07          | 1.7 - 4                     | 4    | 4     | ppm                | N                  | Water additive used to control microbes. |

| Disinfection By-<br>Products     | Collection<br>Date | Highest Level<br>Detected | Range of Individual<br>Samples | MCLG                  | MCL | Units | Violation | Likely Source of Contamination             |
|----------------------------------|--------------------|---------------------------|--------------------------------|-----------------------|-----|-------|-----------|--|
| *Haloacetic Acids (HAA5)         | 2022               | 29                        | 16.3 - 27.2                    | No goal for the total | 60  | ppb   | N         | By-product of drinking water disinfection. |
| *Total Trihalomethanes<br>(TTHM) | 2022               | 33                        | 19.1 - 39.3                    | No goal for the total | 80  | ppb   | N         | By-product of drinking water disinfection. |

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

| Inorganic Contaminants            | Collection<br>Date | Highest Level<br>Detected | Range of Individual<br>Samples | MCLG | MCL | Units | Violation | Likely Source of Contamination   |
|-----------------------------------|--------------------|---------------------------|--------------------------------|------|-----|-------|-----------|--|
| Nitrate<br>[measured as Nitrogen] | 2022               | 0.14                      | 0.14 - 0.14                    | 10   | 10  | ppm   | N         | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits. |

Lead and Copper: - Definitions: Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known risk to health. ALGs allow for a margin of safety. Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

| Lead and Copper | Date Sampled | MCLG | Action Level<br>(AL) | 90th<br>Percentile | # Sites Over<br>AL | Units | Violation | Likely Source of Contamination  |
|-----------------|--------------|------|----------------------|--------------------|--------------------|-------|-----------|---|
| Copper          | 08/21/2020   | 1.3  | 1.3                  | 0.058              | 0                  | ppm   | N         | Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems. |
| Lead            | 08/21/2020   | 0    | 15                   | 2.39               | 0                  | ppb   | N         | Corrosion of household plumbing systems;<br>Erosion of natural deposits.                                |

#### Recommended Additional Health Information for Lead in Drinking Water:

"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 home 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 by an approved laboratory. 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."



<u>Unregulated Contaminants:</u> Unregulated contaminants are those for which the 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 regulations are warranted.

| Unregulated<br>Contaminants | Date Sampled | Average<br>Level | Range of Detected<br>Levels (low - high) | MCL | Units | Source of Disinfectant                     |
|-----------------------------|--------------|------------------|--|-----|-------|--|
| Bromodichloromethane        | 2021         | 8.5              | 0.0 - 12.8                               | N/A | ppb   | By-product of drinking water disinfection. |
| Chloroform                  | 2021         | 18.5             | 0.0 - 18.5                               | N/A | ppb   | By-product of drinking water disinfection. |

#### **Coliform Bacteria:**

| Maximum Contaminent<br>Level Goal | Total Coliform Maximum<br>Contaminant Level | Highest No. of Positive | Fecal Coliform or E. Coli<br>Maximum Contaminant<br>Level | Total No. of Positive E.<br>Coli or Fecal Coliform<br>Samples | Violation | Likely Source of<br>Contamination     |
|-----------------------------------|---|-------------------------|---|---|-----------|---------------------------------------|
| 0                                 | 1 Positive monthly sample.                  | 1                       | N/A   | 0   | No        | Naturally present in the environment. |

**Organics:** TESTING WAIVED, NOT REPORTED, OR NONE DETECTED

**Fecal Coliform:** MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA

**Turbidity:** NOT REQUIRED

Harris County M.U.D. 8 purchases surface water from City of Houston, mandated under Harris Galveston Subsidence District from Lake Houston, Trinity River Canal and Lynchburg Reservoir located in Harris County and below is the constituents levels for the water they supply. For more water quality information call the City of Houston Public Works and Engineering Department at 832-395-2500

#### **Coliform Bacteria**

| Maximum Con-<br>taminant Level<br>Goal | Total Coliform<br>Maximum Con-<br>taminant Level |     | Fecal Coliform or E.<br>Coli Maximum Con-<br>taminant Level |   | Violation | Likely Source of Contamination        |
|--|--|-----|---|---|-----------|---------------------------------------|
| 0                                      | 5% of monthly samples are positive.              | 0.9 |   | 0 | N         | Naturally present in the environment. |

| Lead and<br>Copper | Date<br>Sampled | MCLG | Action Level (AL) | 90th<br>Percentile | # Sites Over<br>AL | Units | Violation | Likely Source of Contamination  |
|--------------------|-----------------|------|-------------------|--------------------|--------------------|-------|-----------|---|
| Copper             | 2022            | 1.3  | 1.3               | 0.128              | 0                  | ppm   | N         | Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems. |
| Lead               | 2021            | 0    | 15                | 3.4                | 3                  | ppb   | N         | Corrosion of household plumbing systems;<br>Erosion of natural deposits.                                |

| Disinfection By-Products         | Collection<br>Date | Highest Level<br>Detected | Range of<br>Individual<br>Samples | MCLG                  | MCL | Units | Violation | Likely Source of Contamination             |
|----------------------------------|--------------------|---------------------------|-----------------------------------|-----------------------|-----|-------|-----------|--|
| *Haloacetic Acids (HAA5)         | 2022               | 28                        | 0 - 33.6                          | No goal for the total | 60  | ppb   | N         | By-product of drinking water disinfection. |
| *Total Trihalomethanes<br>(TTHM) | 2022               | 43                        | 0 - 38.3                          | No goal for the total | 80  | ppb   | N         | By-product of drinking water disinfection. |

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

| Inorganic<br>Contaminants         | Collection Date | Highest Level<br>Detected | Range of Indi-<br>vidual Samples | MCLG | MCL | Units | Violation | Likely Source of Contamination   |
|-----------------------------------|-----------------|---------------------------|----------------------------------|------|-----|-------|-----------|--|
| Arsenic                           | 2022            | 3                         | 0 - 7.6                          | 0    | 10  | ppb   | Ν         | Erosion of natural deposits; Runoff from or-<br>chards; Runoff from glass and electronics<br>production wastes.            |
| Barium                            | 2022            | 0.41                      | 0.0438 - 0.41                    | 2    | 2   | ppm   | Ν         | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.                                |
| Cyanide                           | 2022            | 120                       | 0 - 120                          | 200  | 200 | ppb   | N         | Discharge from plastic and fertilizer factories;<br>Discharge from steel/metal factories.                                  |
| Fluoride                          | 2022            | 0.4                       | 0.1 - 0.76                       | 4    | 4.0 | ppm   | N         | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories. |
| Nitrate [measured as<br>Nitrogen] | 2022            | 0.43                      | 0 - 0.43                         | 10   | 10  | ppm   | N         | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.                               |
| Selenium                          | 2022            | 9.5                       | 0 - 9.5                          | 50   | 50  | ppb   | N         | Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.                          |

| Radioactive<br>Contaminants             | Collection<br>Date | Highest Level<br>Detected | Range of Individual<br>Samples | MCLG | MCL | Units  | Violation | Likely Source of Contamination          |
|---|--------------------|---------------------------|--------------------------------|------|-----|--------|-----------|---|
| Combined Radium 226/228                 | 2022               | 2                         | 2.18 - 2.75                    | 0    | 5   | pCi/L  | N         | Erosion of natural deposits.            |
| Gross alpha excluding radon and uranium | 2022               | 11.5                      | 10.8 - 11.5                    | 0    | 15  | pCi/L  | N         | Erosion of natural deposits.            |
| Beta/photon emitters                    | 2021               | 6.6                       | 0 - 6.6                        | 0    | 50  | pCi/L* | N         | Decay of natural and man-made deposits. |
| Uranium                                 | 2021               | 11.4                      | 0 - 11.4                       | 0    | 30  | ug/l   | N         | Erosion of natural deposits.            |

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



## Harris County M.U.D. No. 8 - 2022 Drinking Water Quality Report Data Continuation

Harris County M.U.D. 8 purchases surface water from City of Houston, mandated under Harris Galveston Subsidence District from Lake Houston, Trinity River Canal and Lynchburg Reservoir located in Harris County and below is the constituents levels for the water they supply. For more water quality information call the City of Houston Public Works and Engineering Department at 832-395-2500

| Synthetic organic contaminants including pesticides and herbicides | Collection<br>Date | Highest Level<br>Detected | Range of Indi-<br>vidual Samples | MCLG | MCL | Units | Violation | Likely Source of Contamination                |
|--|--------------------|---------------------------|----------------------------------|------|-----|-------|-----------|---|
| Atrazine   | 2022               | 2                         | 0 - 1.7                          | 3    | 3   | ppb   | N         | Runoff from herbicide used on row crops.      |
| Di (2-ethylhexyl)<br>phthalate                                     | 2022               | 2                         | 0 - 2.3                          | 0    | 6   | ppb   | N         | Discharge from rubber and chemical factories. |
| Simazine   | 2022               | 0.11                      | 0 - 0.11                         | 4    | 4   | ppb   | N         | Herbicide runoff.                             |

| Volatile Organic<br>Contaminants | Collection Date |        | Range of Indi-<br>vidual Samples | MCLG | MCL | Units | Violation | Likely Source of Contamination  |
|----------------------------------|-----------------|--------|----------------------------------|------|-----|-------|-----------|---|
| Ethylbenzene                     | 2021            | 1      | 0 - 1                            | 700  | 700 | ppb   | N         | Discharge from petroleum refineries.                                      |
| Toluene                          | 2021            | 0.001  | 0 - 0.001                        | 1    | 1   | ppm   | N         | Discharge from petroleum factories.                                       |
| Xylenes                          | 2021            | 0.0054 | 0 - 0.0054                       | 10   | 10  | ppm   | N         | Discharge from petroleum factories;<br>Discharge from chemical factories. |

#### **Turbidity**

|                                | Level Detected | Limit<br>(Treatment<br>Technique) | Violation | Likely Source of Contamination |
|--------------------------------|----------------|-----------------------------------|-----------|--------------------------------|
| Highest single measurement     | 0.51 NTU       | 1 NTU                             | N         | Soil runoff.                   |
| Lowest monthly % meeting limit | 100%           | 0.3 NTU                           | N         | Soil runoff.                   |

Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

