

# 2023 Annual Drinking Water Quality Report

## (CONSUMER CONFIDENCE REPORT)

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### *HARRIS COUNTY MUNICIPAL UTILITY DISTRICT NO. 33*

*PWS ID No. TX1011162*

*Phone No: 281-895-8547*

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**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.

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

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which 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.

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.

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 infections by *Cryptosporidium* are available from the Safe Drinking Water Hotline (800-426-4791).

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>.

| <b>Public Participation Opportunities</b>  | <b>En Español</b>  |
|--|--|
| <p><b>Date:</b> 3rd Thursday of Each Month</p> <p><b>Time:</b> 2:00 PM</p> <p><b>Location:</b> 13563 Bammel N. Houston Rd.<br/>Houston, Texas 77066</p> <p><b>Phone No:</b> 281-895-8547</p> <p>To learn about future public meetings (concerning your drinking water), or to request to schedule one, please call us.</p> | <p>Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al teléfono, <b>281-895-8547</b>.</p> |

### **Information about Source Water Assessments**

Our drinking water is obtained from groundwater sources. It comes from the Gulf Coast Aquifer located in Harris County, Texas. 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 WWWMS, Inc. at 281-895-8547.

For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL: <http://www.tceq.texas.gov/gis/swaview>.

Further details about sources and source water assessments are available in Drinking Water Watch at the following URL: <http://dww.tceq.texas.gov/DWW/>.

### **Secondary Constituents**

Many constituents (such as calcium, sodium, or iron) which are often found in drinking water can cause taste, color, and odor problems. The taste and odor constituents are called secondary constituents and are regulated by the State of Texas, not the EPA. These constituents are not causes for health concern. Therefore, secondary constituents are not required to be reported in this document, but they may greatly affect the appearance and taste of your water.

### **About the Following Pages**

The pages that follow list all 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.

### **Water Quality Test Results**

|  |  |
|--|--|
| Definitions:                                       | The following tables contain scientific terms and measures, some of which may require explanation.   |
| 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 Contaminant Level or MCL:                  | The highest level of 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: | 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.   |
| 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.  |
| Action Level Goal (ALG):                           | The level of contaminant in drinking water below which there is no known or expected 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.  |
| Treatment Technique or TT:                         | A required process intended to reduce the level of a contaminant in drinking water.  |
| 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. |

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

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.

na: Not applicable.

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

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

NTU: Nephelometric turbidity units (a measure of turbidity)

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

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

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

**Lead and Copper**

| Lead and Copper | Date Sampled | MCLG | Action Level (AL) | 90 <sup>th</sup> Percentile | #Sites Over AL | Units | Violation | Likely Source of Contamination  |
|-----------------|--------------|------|-------------------|-----------------------------|----------------|-------|-----------|---|
| Copper          | 9/23/22      | 1.3  | 1.3               | 0.139                       | 0              | ppm   | N         | Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems. |
| Lead            | 9/14/19      | 0    | 15                | 2                           | 1              | ppb   | N         | Corrosion of household plumbing systems; Erosion of natural deposits.                                   |

**Regulated Contaminants**

| Disinfection By-Products     | Collection Date | Highest Level Detected | Range of Individual Samples | MCLG                  | MCL | Units | Violation | Likely Source of Contamination             |
|------------------------------|-----------------|------------------------|-----------------------------|-----------------------|-----|-------|-----------|--|
| Total Trihalomethanes (TTHM) | 2023            | 3                      | 2.5 – 2.5                   | No goal for the total | 80  | ppb   | N         | By-product of drinking water disinfection. |

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

| Inorganic Contaminants | Collection Date | Highest Level Detected | Range of Levels Detected | MCLG | MCL | Units | Violation | Likely Source of Contamination  |
|------------------------|-----------------|------------------------|--------------------------|------|-----|-------|-----------|---|
| Arsenic                | 5/18/22         | 8.4                    | 8.4 – 8.4                | 0    | 10  | ppb   | N         | 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.

|        |         |       |               |   |   |     |   |   |
|--------|---------|-------|---------------|---|---|-----|---|---|
| Barium | 5/18/22 | 0.373 | 0.373 – 0.373 | 2 | 2 | ppm | N | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits. |
|--------|---------|-------|---------------|---|---|-----|---|---|

|          |         |      |             |    |     |     |   |  |
|----------|---------|------|-------------|----|-----|-----|---|--|
| Fluoride | 2023    | 0.33 | 0.33 – 0.33 | 4  | 4.0 | ppm | N | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories. |
| Selenium | 5/18/22 | 4.3  | 4.3-4.3     | 50 | 50  | ppb | N | Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.                          |

| Radioactive Contaminants | Collection Date | Highest Level Detected | Range of Levels Detected | MCLG | MCL | Units  | Violation | Likely Source of Contamination          |
|--------------------------|-----------------|------------------------|--------------------------|------|-----|--------|-----------|---|
| Beta/ photon emitters    | 5/18/22         | 4.5                    | 4.5 – 4.5                | 0    | 50  | pCi/L* | N         | Decay of natural and man-made deposits. |

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

|   |         |     |           |   |    |       |   |                              |
|---|---------|-----|-----------|---|----|-------|---|------------------------------|
| Gross alpha excluding radon and uranium | 5/18/22 | 2.0 | 2 – 2     | 0 | 15 | pCi/L | N | Erosion of natural deposits. |
| Uranium                                 | 5/18/22 | 1.9 | 1.9 – 1.9 | 0 | 30 | ug/l  | N | Erosion of natural deposits. |

| Volatile Organic Compound | Collection Date | Highest Level Detected | Range of Levels Detected | MCLG | MCL | Units | Violation | Likely Source of Contamination   |
|---------------------------|-----------------|------------------------|--------------------------|------|-----|-------|-----------|--|
| Xylenes                   | 2021            | 0.0007                 | 0.0007-0.0007            | 10   | 10  | ppm   | N         | Discharge from petroleum factories; discharge from chemical factories. |

#### Disinfectant Residual

| Disinfectant Residual | Year | Average Level | Range of Levels Detected | MRDL | MRDLG | Unit of Measure | Violation (Y/N) | Source in Drinking Water                 |
|-----------------------|------|---------------|--------------------------|------|-------|-----------------|-----------------|--|
| Chlorine (Free)       | 2023 | 2.31          | 1.0-2.4                  | 4    | 4     | ppm             | N               | Water additive used to control microbes. |