

# Harris County MUD No. 502

## 2025 Drinking Water Quality Report

DEAR CUSTOMER:

We are pleased to present you the Annual Water Quality Report (Consumer Confidence Report) for the year, for the period of January 1 to December 31, 2025. 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.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien. Para asistencia en español, favor de llamar al tel. 832-467-1599.

The sources of drinking water (both tap water and bottled water) generally 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 the source water include:

- 1) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- 2) 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.
- 3) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- 4) 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.
- 5) Radioactive contaminants, which can be naturally- occurring or be the result of oil and gas production and mining 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.

Some people may be more vulnerable to contaminants in drinking water than the general population. 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 district's operator, Inframark.

Immuno-compromised persons such as persons undergoing chemotherapy for cancer; those who have undergone organ transplants, people with HIV / AIDS or other immune system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at (800-426-4791).

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. Harris Co. MUD 502 is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula.

Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact Inframark at 832-467-1599. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead>.

Harris Co. MUD 502 receives purchased water from Harris Co. MUD 500 which receives surface water from West Harris County Regional Water Authority through a surface water agreement with the City of Houston.

TCEQ completed a Source Water Susceptibility for all drinking water systems that own their sources. This report describes the susceptibility and types of constituents that may come into contact with the drinking water source based on human activities and natural conditions. The system(s) from which we purchase our water received the assessment report. For more information on source water assessments and protection efforts at our system contact the district's operator, Inframark, at (713) 579-4500.

Public input concerning the water system may be made at regularly scheduled meetings, generally held at 11:00 AM on the 1st Wednesday of the month at 9955 Barker Cypress Road, Suite 250, Cypress, TX 77433. You may also contact Amanda Benzman, Inframark, at 832-524-5597 with any concerns or questions you may have regarding this report.

A service line inventory has been prepared and can be accessed by emailing [LCRR@inframark.com](mailto:LCRR@inframark.com) or by phone at 1-800-874-6333.

Our water system submitted to the Texas Water Development Board a Water Loss Audit for the 2025 calendar year. The system lost an estimated -1,643,763 gallons of water. If you have any questions about water loss, please call Inframark at 832-467-1599.

In the tables below, you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms, we've provided the following definitions:

**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.

**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 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.

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

**Variances and Exemptions:** State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

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

**RAA:** Running Annual Average.

**LRAA:** Locational Running Annual Average.

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

**ppb:** micrograms per liter (ug/L) or parts per billion - or one ounce in 7,350,000 gallons of water.

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

**picocuries per liter (pCi/L):** picocuries per liter is a measure of the radioactivity in water.

**na:** not applicable.

**Regulated Contaminants**

In the tables below, we have shown the regulated contaminants that were detected. Chemical Sampling of our drinking water may not be required on an annual basis; therefore, information provided in this table refers back to the latest year of chemical sampling results.

Substance	Unit of Measure	Year	MCL	Average Level Detected	Min - Max Level Detected	MCLG	In Compliance	Typical Sources
<b>Inorganic Contaminants (Regulated at the Water Plant)</b>								
Nitrate	ppm	2025	10	0.67	0.34 - 0.95	10	Yes	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Nitrate - Nitrite	ppm	2025	10	0.95	0.95	10	Yes	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
<b>Disinfectant Byproducts</b>								
Haloacetic Acids (HAA5)	ppb	2025	60	9.0	9 - 9	N/A	Yes	By-product of drinking water disinfection.
Total Trihalomethanes	ppb	2025	80	11.5	11.5 - 11.5	N/A	Yes	By-product of drinking water disinfection.

Substance	Unit of Measure	Year	MRDL	Average Level Detected	Min - Max Level Detected	MRDLG	In Compliance	Typical Sources
<b>Maximum Residual Disinfectant Level</b>								
Chlorine Residual	ppm	2025	4.0	2.07	1.13 - 3.1	4.0	Yes	Disinfectants are water additive used to control microbes.

All public water systems in Texas are required to disinfect drinking water to ensure control of microbial contaminants.

Substance	Unit of Measure	Year	90th % Value: 90% of your water utility levels were less than	Min - Max Level Detected	EPA Action Level	Results above Action Level	MCLG	In Compliance	Typical Sources
<b>Lead and Copper (Regulated at Customers Tap)</b>									
Copper	ppm	2023	0.0089	0-0.0139	1.3	0	1.3	Yes	Corrosion of household plumbing systems, erosion of natural deposits; leaching from wood preservatives.
Lead	ppb	2023	0	0	15	0	N/A	Yes	Corrosion of household plumbing systems; erosion of natural deposits.

Our Water Supply System Received Water From  
City of Houston  
Water Quality Results are Listed Below

**Regulated Contaminants**

In the tables below, we have shown the regulated contaminants that were detected. Chemical Sampling of our drinking water may not be required on an annual basis; therefore, information provided in this table refers back to the latest year of chemical sampling results.

Substance	Unit of Measure	Year	MCL	Average Level Detected	Min - Max Level Detected	MCLG	In Compliance	Typical Sources
<b>Radioactive Contaminants (Regulated at the Water Plant)</b>								
Combined Radium	pCi/L	2024	5	1.41	0 - 3.3	0	Yes	Erosion of natural deposits.
Gross Alpha	pCi/L	2024	15	4.87	0 - 8	0	Yes	Erosion of natural deposits.
Gross Beta	pCi/L	2024	50	1.33	0 - 4.9	0	Yes	Decay of natural and man-made deposits.
Uranium	ug/L	2024	30	1.75	0 - 8	0	Yes	Erosion of natural deposits.
<b>Synthetic Organic Contaminants Including Pesticides and Herbicides</b>								
2,4-D	ppb	2025	70	0.02	0 - 0.1	70	Yes	Runoff from herbicides used on row crops
Atrazine	ppb	2025	3	0.08	0 - 0.19	3	Yes	Runoff from herbicide used on row crops.
Di(2-ethylhexyl) adipate	ppb	2025	400	0.1	0 - 2.2	400	Yes	Discharge from chemical factories
Di(2-ethylhexyl)phthalate	ppb	2025	6*	0.03	0 - 0.6	0	Yes	Discharge from rubber and chemical factories.
Simazine	ppb	2025	4	0.01	0 - 0.09	4	Yes	Herbicide runoff.
<b>Unregulated Contaminants</b>								
Bromodichloromethane	ppb	2025	N/A	1.56	0 - 7.6	N/A	Yes	By-product of drinking water disinfection.
Chloroform	ppb	2025	N/A	4.4	0 - 27	N/A	Yes	By-product of drinking water disinfection.
Dibromochloromethane	ppb	2025	N/A	0.69	0 - 2.9	N/A	Yes	By-product of drinking water disinfection.
Manganese	ppm	2025	N/A	0.01	0 - 0.071	N/A	Yes	Abundant naturally occurring element.
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.								
<b>Inorganic Contaminants (Regulated at the Water Plant)</b>								
Arsenic	ppb	2025	10*	1.81	0 - 7	0	Yes	Erosion of natural deposits; runoff from orchards; runoff from glass, and electronics production wastes.

While your drinking water meets EPA's standard 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	ppm	2025	2	0.17	0.035 - 0.397	2	Yes	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Cyanide	ppb	2025	200	14.67	0 - 90	200	Yes	Discharge from plastic and fertilizer factories; discharge from steel/metal factories.
Fluoride	ppm	2025	4	0.12	0 - 0.71	4	Yes	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate	ppm	2025	10	0.13	0 - 0.79	10	Yes	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Selenium	ppb	2025	50	1.2	0 - 7	50	Yes	Erosion of natural deposits.
Thallium	ppb	2025	2*	0.04	0 - 1	.5	Yes	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories.

### Turbidity

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, 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.

Turbidity	Level Detected	Limit (Treatment Technique)	In Compliance	Typical Source
Highest Single Measurement	1.95 NTU	1 NTU	Yes	Soil runoff.
Lowest monthly % meeting limit	96%	0.3 NTU	Yes	Soil runoff.

Our Water Supply System Received Water From  
West Harris County Regional Water Authority  
Water Quality Results are Listed Below

**Regulated Contaminants**

In the tables below, we have shown the regulated contaminants that were detected. Chemical Sampling of our drinking water may not be required on an annual basis; therefore, information provided in this table refers back to the latest year of chemical sampling results.

Substance	Unit of Measure	Year	MCL	Average Level Detected	Min - Max Level Detected	MCLG	In Compliance	Typical Sources
-----------	-----------------	------	-----	------------------------	--------------------------	------	---------------	-----------------

**Inorganic Contaminants (Regulated at the Water Plant)**

Nitrate	ppm	2025	10	0.47	0.47 - 0.47	10	Yes	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
---------	-----	------	----	------	-------------	----	-----	--

Our Water Supply System Received Water From  
Harris County MUD No. 500  
Water Quality Results are Listed Below

**Regulated Contaminants**

In the tables below, we have shown the regulated contaminants that were detected. Chemical Sampling of our drinking water may not be required on an annual basis; therefore, information provided in this table refers back to the latest year of chemical sampling results.

Substance	Unit of Measure	Year	MCL	Average Level Detected	Min - Max Level Detected	MCLG	In Compliance	Typical Sources
-----------	-----------------	------	-----	------------------------	--------------------------	------	---------------	-----------------

**Inorganic Contaminants (Regulated at the Water Plant)**

Nitrate	ppm	2025	10	1.0	1 - 1	10	Yes	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
---------	-----	------	----	-----	-------	----	-----	--

\* All levels detected were below the MCLs.