HARRIS COUNTY M.U.D. 551

2024 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.

OUR DRINKING WATER IS SAFE

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) 353-9809.

En Español

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono: (281) 353 -9809

Where do we get our drinking water?

Harris County MUD 551 drinking is obtained from ground water and surface water sources. The ground water comes from the Gulf Coast Aquifers some 500 to 2,000 feet below ground surface. HC MUD 551 purchases water from Heatherloch MUD who provides Surface water supplied by the North Harris County Regional Water Authority and is treated water from Lake Houston.

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 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) 353-9809.

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 551 Board of Directors meet at 11:30 A.M. on the second Monday of each month at 1330 Post Oak Blvd, Suite 2650, Houston, TX 77056. You may contact Natalia Espitia or Brenda Landin with H_2O Innovation at 281-353-9809 with any concerns or questions you may have.

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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 permissible 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.

Action Level (AL) - 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 (µg/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.

NTU— Nephelometric Turbidity Units

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. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Harris County M.U.D. 551 TX1013688
2024 Drinking Water Quality Report:

Inorganic Contaminants

Year	Constituent	Highest Detected Level at Any Sampling Point	Range of Detected Levels	MCL	MCLG	Units of Measure	Source of Constituent
2020	Nitrate (measured as Nitrogen)	0.58	0.58 - 0.58	10	10	ppm	Runoff from fertilizer use; Leading from septic tanks, sewage: Erosion of natural deposits.

Organic Contaminants

Year	Constituent	Highest Detected Level at Any Sampling Point	Range of Detected Levels	MCL	MCLG	Units of Measure	Source of Constituent
2024	Total Trihalomethanes (TTHM)	21.5	18.4 - 21.5	80	n/a	ppb	By-product of drinking water chlorination.
2024	Total Haloacetic Acids (HAA5)	20.8	10.8 - 20.8	60	n/a	ppb	By-product of drinking water chlorination.

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

Unregulated Contaminants**

Year	Constituent	Average of All Sampling Points	Range of Detected Levels	Units of Measure
2024	Dibromoacetic Acid	1.00	0.00 - 1.00	ppb
2024	Dichloroacetic Acid	1.00	0.00 - 1.00	ppb
2024	Trichloroacetic Acid	2.15	1.60 - 2.90	ppb
2024	Bromochloracetic Acid	1.95	1.70 - 2.30	ppb
2024	Chloroform	14.47	12.10 - 18.4	ppb
2020	Bromoform	1.60	1.60 - 1.60	ppb
2024	Dibromochloromethane	2.06	0.00 - 3.50	ppb
2024	Bromodichloromethane	4.27	3.10 - 5.70	ppb

**Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

Lead and Copper								
Year	Constituent	The 90th Percentile	Number of Sites Exceeding Action Levels	Action Level	MCLG	Units of Measure	Violation	Source of Constituent
2023	Copper	0.00393	0	1.3	1.3	ppm	N	Erosion of natural deposits; Leaching from wood preservatives.
2023	Lead	0.5	0	15	0	ppb	N	Corrosion if household plumbing systems; Erosion of natural deposits

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/safe water/lead.

Lead Service Line Inventory Statement -
HC MUD 551 completed a Lead Service Line Inventory - As part of the U.S. Environmental Protection Agency's (EPA) revised Lead and Copper Rule, **HC MUD 551** has completed a full inventory of service lines within our water distribution system, including both the public (utility-owned) and private (customer-owned) portions of each service connection.

Based on a thorough review of historical records, customer outreach, and material verification, no lead or galvanized service lines requiring replacement were identified on either the public or private side of our system. All service lines are confirmed to be made of non-lead materials such as copper, plastic, or other EPA-approved materials.

Although no lead service lines were found, we remain proactive in maintaining accurate records and ensuring ongoing compliance with all regulatory requirements. If you have questions about your service line material, would like to view our inventory, or are interested in voluntary water testing, please contact us at Cs.Compliance@h2oinnovation.com or by phone at 281-353-9809.

Disinfectant Residual							
Year	Constituent	Average Level	Range of Detected Levels	MRDL	MRDLG	Units of Measure	Source of Constituent
2024	Chlorine Disinfectant	2.48	0.71 - 3.64	4	4	ppm	Disinfectant used to control microbes.

During 2024, M.U.D. 551 received water from Heatherloch M.U.D. TX1010548
The following is water quality information was provided by Heatherloch M.U.D.

Inorganic Contaminants							
Year	Constituent	Highest Detected Level at Any Sampling Point	Range of Detected Levels	MCL	MCLG	Units of Measure	Source of Constituent
2024	Nitrate (measured as Nitrogen)	0.50	0.50 - 0.50	10	10	ppm	Runoff from fertilizer use; Leaching from septic tanks, sewage
2023	Barium	0.0705	0.0705 - 0.0705	2	2	ppm	Discharge from drilling wastes
2020	Fluoride	0.13	0.13 - 0.13	4	4	ppm	Erosion of natural deposits.
2020	Cyanide	50	50 - 50	200	200	ppb	Discharge from steel/metal factories.

Organic Contaminants							
Year	Constituent	Highest Detected Level at Any Sampling Point	Range of Detected Levels	MCL	MCLG	Units of Measure	Source of Constituent
2024	Total Trihalomethanes (TTHM)	22.3	21.2 - 22.3	80	n/a	ppb	By-product of drinking water chlorination.
2024	Haloacetic Acids (HAA5)	13.9	13.9 - 13.9	60	n/a	ppb	By-product of drinking water chlorination.
2024	Atrazine	0.25	0.25 - 0.25	3	3	ppb	Run off from herbicide used on row crops.
2024	Simazine	0.07	0.07 - 0.07	4	4	ppb	Herbicide runoff.
2023	Toluene	0.0009	0 - 0.0009	1	1	ppm	Discharge from petroleum factories.

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

Unregulated Contaminants*				
Year	Constituent	Average of All Sampling Points	Range of Detected Levels	Units of Measure
2024	Monochloroacetic Acid	2.5	2.2 - 2.8	ppb
2024	Dichloroacetic Acid	9.55	9.3 - 9.8	ppb
2024	Trichloroacetic Acid	1.75	1.7 - 1.8	ppb
2024	Bromochloracetic Acid	1.7	1.7 - 1.7	ppb
2024	Chloroform	13.08	0 - 17	ppb
2024	Bromodichloromethane	3.74	0 - 5.1	ppb
2024	Dibromochloromethane	2.46	0 - 2.9	ppb

*Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

During 2024, Harris County M.U.D. 551 received surface water from North Harris County Regional Water Authority. The Following is the water quality information provided by the North Harris County Regional Water Authority:

Inorganic Contaminants								
Year	Constituent	Highest Detected Level at Any Sampling Point	Range of Detected Levels	MCL	MCLG	Units of Measure	Violation	Source of Constituent
2023	Arsenic*	5.20	0.00 - 5.20	10	0	ppb	N	Erosion of natural deposits.
2024	Barium	0.052	0.052 - 0.052	2	2	ppm	N	Discharge of drilling wastes.
2023	Cyanide	120	0.00 - 120.00	200	200	ppb	N	Discharge from plastic and fertilizer factories.
2024	Fluoride	0.11	0.11 - 0.11	4	4	ppm	N	Erosion of natural deposits.
2024	Nitrate (Measured as Nitrogen)	0.86	0.86 - 0.86	10	10	ppm	N	Runoff from fertilizer use.
2023	Selenium	15.6	0.00 - 15.60	50	50	ppb	N	Discharge from petroleum and metal refineries.
2023	Thallium	0.28	0.00 - 0.28	2	0.5	ppb	N	Discharge from electronics, glass, and Leaching from ore-processing sites.

*While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard's 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	MCL	MCLG	Units of Measure	Violation	Source of Constituent
2024	Atrazine	2.3	2.3 - 2.3	3	3	ppb	N	Runoff from herbicides used on row crops.
2023	Picloram	0.20	0.00 - 0.20	500	500	ppb	N	Herbicide runoff.
2024	Simazine	0.1	0.1 - 0.1	4	4	ppb	N	Herbicide runoff.
2023	Xylenes	0.0006	0.00 - 0.0006	10	10	ppm	N	Discharge from petroleum factories.

Organic Contaminants								
Year	Constituent	Highest Detected Level at Any Sampling Point	Range of Detected Levels	MCL	MCLG	Units of Measure	Violation	Source of Constituent
2023	*Beta/photon emitters	10.10	0.00 - 10.10	50	0	pCi/L*	N	Decay of natural and man-made deposits.
2023	Combined Radium 226/228	2.80	0.00 - 2.80	5	0	pCi/L	N	Erosion of natural deposits.
2023	Gross alpha excluding radon and uranium	7.30	0.00 - 7.30	15	0	pCi/L	N	Erosion of natural deposits.
2023	Uranium	19.80	0.00 - 19.80	30	0	ug/l	N	Erosion of natural deposits.

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

Organic Contaminants

Year	Constituent	Highest Detected Level at Any Sampling Point	Range of Detected Levels	MCL	MCLG	Units of Measure	Violation	Source of Constituent
2024	Total Trihalomethanes (TTHM)	23.9	23.9 - 23.9	80	n/a	ppb	N	By-product from drinking water disinfection.
2024	Haloacetic Acids (HAA5)	15.3	15.3 - 15.3	60	n/a	ppb	N	By-product from drinking water disinfection.

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

Turbidity***

Year	Constituent	Highest Detected Level at Any Sampling Point	Range of Detected Levels	Monthly Limits	Units of Measure	Violation	Source of Constituent
2024	Turbidity	1.22	0.00 - 1.22	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.

*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 organism. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

Unregulated Contaminants

Year	Constituent	Average of All Sampling Points	Range of Detected Levels	Units of Measure	Violation
2024	Chloroform	11.0	11.0 - 11.0	ppb	N
2024	Bromochloroacetic Acid	2.3	2.3 - 2.3	ppb	N
2024	Dichloroacetic Acid	13.3	13.3 - 13.3	ppb	N
2023	Monochloroacetic Acid	3.70	0.00 - 13.2	ppb	N
2024	Trichloroacetic Acid	7.26	0.00 - 11.9	ppb	N
2024	Bromodichloromethane	6.03	0.00 - 15.4	ppb	N
2024	Dibromochloromethane	1.9	1.9 - 1.9	ppb	N

**Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

Unregulated Contaminants*

Year	Constituent	Average of All Levels Detected	Range of Detected Levels	Health Based Reference Concentration	Units of Measure	Violation
2024	Lithium	23.8	13.7 - 33.9	10	ug/L	N