

HARRIS COUNTY M.U.D. 238

2023 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 Howard Wilhite 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?

The source of drinking water used by Harris County MUD 238 is ground water from the Evangeline and Chicot Aquifer and purchased surface water from the West Harris County Regional Water Authority.

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 238 Board of Directors meet at 1:00 P.M on the fourth Tuesday of each month at the offices of h2o innovation located at: 17332 Groeschke Rd., Houston, Tx 77084. You may contact Howard Wilhite, with h2o innovation at (281) 353-9809 with any concerns or questions you may have.



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 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.

Avg - Regulatory compliance with some MCLs are based

Na = Not applicable

NTU = Nephelometric turbidity units (measure of asbestos)

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 (ug/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.

Action Level (AL) - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique = A required process intended to reduce the level of a contaminant in drinking water.

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 238 TX1012361 2023 - 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
2023	Arsenic	3.20	3.20 - 3.20	10	0	ppb	Erosion of natural deposits; Runoff from orchards
2023	Barium	0.165	0.165 - 0.165	2	2	ppm	Discharge of drilling wastes.
2020	Cyanide	110	60 - 110	200	200	ppb	Discharge from plastic and fertilizer factories.
2023	Fluoride	0.27	0.20 - 0.27	4	4	ppm	Discharge from fertilizer and aluminum factories.
2023	Nitrate [measured as Nitrogen]	0.22	0 - 0.22	10	10	ppm	Runoff from fertilizer use; Erosion of natural deposits.

Lead and Copper							
Year	Contaminant	90th Percentile	Number of Sites Exceeding Action Level	Action Level	MCLG	Violation	Source of Contaminant
2023	Copper (ppm)	0.0947	0	1.3	1.3	N	Erosion of natural deposits; Leaching from wood preservative; Corrosion of household plumbing systems.
2023	Lead (ppb)	0.534	0	15	0	N	Corrosion of household plumbing systems; Erosion of natural deposits.

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/safewater/lead>

Synthetic organic contaminants including pesticides and herbicides

Year	Constituent	Highest Detected Level at Any Sampling Point	Range of Detected Levels	MCL	MCLG	Units of Measure	Source of Constituent
2023	Atrazine	0.27	0.27 - 0.27	3	3	ppb	Runoff from herbicide used on row crops.
2023	Simazine	0.18	0.18 - 0.18	4	4	ppb	Herbicide runoff.

Organic Contaminants

Year	Constituent	Highest Detected Level at Any Sampling Point	Range of Detected Levels	MCLG	MCL	Units of Measure	Source of Constituent
2022	Total Trihalomethanes (TTHM)*	25.5	15.7 - 25.5	n/a	80	ppb	By-product of drinking water chlorination.
2022	Haloacetic Acids (HAA5)	20.2	14.8 - 20.2	n/a	60	ppb	By-product of drinking water disinfection.

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

Radioactive Contaminants

Year	Constituent	Highest Detected Level at Any Sampling Point	Range of Detected Levels	MCLG	MCL	Units of Measure	Source of Constituent
2023	Beta/Photon emitters *	5.20	0.00 - 5.20	0	50	pCi/L*	Decay of natural and man-made deposits.
2023	Combined Radium 226/228	5.08	3.37 - 5.08	0	5	pCi/L	Erosion of natural deposits.
2023	Gross Alpha excluding radon and uranium	16.10	11.50 - 16.10	0	15	pCi/L	Erosion of natural deposits.

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

Disinfectant Residuals

Year	Contaminant Unit of measure	Highest Level Detected	Range of Detected Levels	MRDL	MRDLG	Violation	Source of Constituent
2023	Chloramine (ppm)	3.06	1.20 - 4.20	4	4	N	Water additive used to control microbes.

Volatile Organic Contaminants

Year	Constituent	Highest Detected Level at Any Sampling Point	Range of Detected Levels	MCL	MCLG	Units of Measure	Source of Constituent
2023	Xylenes	0.0008	0.00 - 0.0008	10	10	ppm	Discharge from petroleum factories; Discharge from chemical factories.

During 2023, Harris County M.U.D 238 purchased water from West Harris County Regional Water Authority TX1013303. To obtain a copy of West Harris County regional Water Authority Drinking Water Quality Report, please call (832) 209-5084.

Turbidity												
EWPP3												
Collection Date		Lowest Monthly Percentage of Samples $\leq$ 0.3 NTU:						Yearly Maximum [NTU]:				
January 2023		95.70%						0.52				
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
# of Monthly Turbidity Samples	186	167	185	179	186	180	186	186	180	186	180	186
# of samples above 0.3 NTU	8	0	0	0	0	0	0	0	0	0	0	0
Average Turbidity [NTU]	0.16	0.13	0.12	0.12	0.12	0.15	0.16	0.15	0.17	0.13	0.11	0.12
Max Turbidity Reading [NTU]	0.52	0.26	0.29	0.28	0.25	0.24	0.28	0.25	0.32	0.26	0.19	0.26
% $\leq$ 0.3 NTU	96%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
NEWPP												
Collection Date		Lowest Monthly Percentage of Samples $\leq$ 0.3 NTU:						Yearly Maximum [NTU]				
March 2019		100						0.21				
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
# of Monthly Turbidity Samples	186	174	186	180	186	180	186	186	180	186	180	186
# of samples above 0.3 NTU	0	0	0	0	0	0	0	0	0	0	0	0
Average Turbidity [NTU]	0.05	0.05	0.06	0.07	0.08	0.06	0.06	0.08	0.08	0.07	0.08	0.07
Max Turbidity Reading [NTU]	0.06	0.06	0.13	0.14	0.21	0.09	0.08	0.13	0.11	0.11	0.11	0.10
% $\leq$ 0.3 NTU	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Inorganic Contaminant							
Year	Contaminant	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Source of Contaminant
2023	Nitrate [measured as Nitrogen]	0.18	0.18 - 0.18	10	10	ppm	Runoff from fertilizer use; Leaching from septic tanks, sewage.

Disinfectant Residual							
Year	Constituent	Highest Detected Average	Range of Detected Levels	MCLG	MCL	Units of Measure	Source of Constituent
2023	Haloacetic Acids (HAA5)	19.60	19.60 - 19.60	n/a	60	ppb	By-product of drinking water chlorination.
2023	Total Trihalomethanes (TTHM)	25.30	25.30 - 25.30	n/a	80	ppb	By-product of drinking water chlorination.

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