

HARRIS COUNTY M.U.D. No. 449

PWS ID # 1013372

2023 Annual Drinking Water Quality Report

Phone No: 281-350-0895

This is your water quality report for January 1, 2023 to December 31, 2023

En Español

Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia 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.

Public Participation Opportunities concerning your water system may be made at regularly scheduled meetings on the second Thursday of each month at 8:00 a.m., Allen Boone Humphries Robinson LLP; 3200 Southwest Freeway, Suite 2600, Neches Conference Room, Houston, Texas 77027. You may contact Tarynn Fossati at TNG Utility Corp., phone # 281-350-0895, with any questions or concerns you may have.

Where do we get your drinking water?

Our drinking water is obtained from groundwater sources. It comes from water-bearing sands known as the Evangeline Aquifer.

No Source Water Assessment for your drinking water sources has been conducted by the Texas Commission on Environmental Quality for your water system. The report describes the susceptibility and the types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information in this assessment allows us to focus our source water protection strategies.

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 production, 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 (1-800-426-4791). 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 USEPA's Safe Drinking Water Hotline at (1-800-426-4791).

In order to ensure that the tap water is safe to drink, the USEPA 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.

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 TNG Utility.



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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)

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. 449 - 2023 Drinking Water Quality Report Data

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	*90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	07/31/2021	1.3	1.3	0.00531	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

*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 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>.

Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Total Trihalomethanes (TTHM)	07/13/2021	2.3	2.3 - 2.3	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
*Arsenic	2023	5.5	5.5 - 5.5	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2023	0.159	0.159 - 0.159	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	04/05/2021	0.55	0.55 - 0.55	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.

**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.*

Harris County M.U.D. No. 449 - 2023 Drinking Water Quality Report Data Continuation

Disinfectant Residual	Year	Average Level	Range of Levels Detected	MRDL	MRDLG	Unit of Measure	Violation (Y/N)	Source in Drinking Water
Chlorine Residual, Free	2023	1.88	1.79 - 1.92	4	4	ppm	N	Water additive used to control microbes.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Gross alpha excluding radon and uranium	04/05/2021	4.1	4.1 - 4.1	0	15	pCi/L	N	Erosion of natural deposits.

Secondary Constituents

Contaminants may be found in drinking water, that may cause taste, color, and odor problems. The taste and odor constituents are called secondary constituents and are regulated by the State of Texas, not USEPA. These types of problems are not necessarily causes for health concerns, but may greatly affect the appearance and taste of your water. For more information on taste, odor or color of drinking water please contact the system's business office at 281-350-0895.

Secondary and Other Non-Regulated Constituents	Year	Average Level	Range of Detected Levels (low - high)	Limit	Units	Likely Source of Contamination
Chloride	2022	88.4	77.3 - 95.4	N/A	ppm	Abundant naturally occurring element.
Iron	2023	0.151	0.151 - 0.151	200 mg/l	ppm	Abundant naturally occurring element.
Sulfate	2022	21.3	0 - 31	300 mg/l	ppm	Abundant naturally occurring element.
Total Dissolved Solids	2022	487	0 - 618	N/A	ppm	Erosion of natural deposits.

Unregulated Contaminants

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

Unregulated Contaminants	Collection Date	Average of All Sampling Points	Range of Detected Levels	Units	Likely Source of Contamination
Bromodichloromethane	2022	1.3	1.3 - 1.3	ppb	By-product of drinking water disinfection.
Dibromochloromethane	2022	1.7	1.7 - 1.7	ppb	By-product of drinking water disinfection.

Harris County M.U.D. 449 has an interconnect with Harris County M.U.D. 495. Harris County M.U.D. 495 provides water to Harris County M.U.D. 449. The following is a compilation of the water quality information provided by Harris County M.U.D. 495:

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2023	1.3	1.3	0.008	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

The 90th percentile of the Lead/ Copper analysis means the top 10% (highest sample results) of all samples collected

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.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
*Arsenic	2022	7.3	7.3 - 7.3	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2022	0.141	0.141 - 0.141	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2022	0.34	0.34 - 0.34	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.

*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

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	2022	4.6	4.6 - 4.6	0	50	pCi/L*	N	Decay of natural and man-made deposits.
Gross alpha excluding radon and uranium	2022	3.2	3.2 - 3.2	0	15	pCi/L	N	Erosion of natural deposits.

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