HARRIS COUNTY M.U.D. No. 43

PWS ID # 1010565

2023 Annual Drinking Water Quality Report

Phone No: 281-350-0895

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

HC MUD # 43 is recognized as a "Superior" Public Water System by the State of Texas

En Español

Este reporte incluye informacion importante sobre el agua para tomar. Para asistancia 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 Environmental Protection Agency (EPA) 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 Tuesday each month at 7:00 p.m. At 23803 Birnam Wood Blvd, Spring, Texas, 77373. For a complete schedule listing go to www.HCMUD43.org or 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.

The TCEQ completed an assessment of your source water and results indicate that some of your sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detections of these contaminants may be found in this Consumer Confident Report. For more information on source water assessments and protection efforts at our system, contact Tarynn Fossati at 281-350-0895

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.

All Drinking Water may Contain Contaminants

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 (800-426-4791). Also, see EPA website: www.epa.gov/safewater and NRDC website: www.nrdc.org/water

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 EPA's Safe Drinking Water Hotline at (800-426-4791).

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

§290.272(g)(9)(A) Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

TNG TNG UTILITY CORP.

THE NEXT GENERATION OF
WATER AND WASTEWATER UTILITY SERVICES

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. 43 - 2023 Drinking Water Quality Report Data

Lead and Copper: - Definitions: 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. Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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	0.12	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2023	0	15	2.05	0	ppb	N	Corrosion of 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 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.

Coliform Bacteria:

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample	2	NA	0	N	Naturally present in the environment.

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	1.52	1.47 - 1.55	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	05/23/2019	3.5	3.5 - 3.5	0	15	pCi/L	N	Erosion of natural deposits.

Harris County M.U.D. No. 43 - 2023 Drinking Water Quality Report Data Continuation

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
Calcium	2022	49.8	0 - 49.8	N/A	ppm	Abundant naturally occurring element.
Total Hardness (CACO3)	2023	32.95	31.7 - 34.3	N/A	ppm	Abundant naturally occurring calcium.
Magnesium	2022	4.3	0 - 4.3	N/A	ppm	Abundant naturally occurring element.
Sodium	2023	153.25	146 - 160	N/A	ppm	Erosion of natural deposits.
Zinc	2022	0.0251	0 - 0.0251	5 mg/l	ppm	Moderately abundant naturally occurring element; used in the metal industry.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
***Arsenic**	2022	2	2 - 2	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2022	0.252	0.252 - 0.252	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2023	0.11	0.11 - 0.11	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2023	0.27	0.27 - 0.27	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

*While your drinking water meets EPA standards for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenics 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.

Unregulated Contaminant Monitoring Rule (UCMR):

Our water system has sampled for a series of unregulated contaminants. Unregulated contaminants are those that don't yet have a drinking water standard set by EPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a standard. As our customers, you have a right to know that these data are available. If you are interested in examining the results, please contact Tarynn Fossati at 281-350-0895 or 2815 Spring Cypress Rd Ste 3.

Unregulated Contaminant	Collection Date	Average Level (µg/L)	Range of Levels Detected (µg/L)	Health-Based Reference Concentration (µg/L)	Health Information Summary
Lithium	2023	11.05	10.8 - 11.3	10	This data is part of UCMR5 results in relation to minimum reporting levels and available non-regulatory health-based reference concentrations.

Lead and Copper Rule -

The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.

The below violation was resolved on 12/27/2023. HCMUD 43 is no longer in violation.

Violation Type	Violation Begin	Violation End	Violation Explanation
Water Quality Parameter M/R (LCR)	01/01/2023	06/30/2023	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

§ **290.272(g)(9)(B)** During the past year we were required to conduct one Level 1 Assessment. One Level 1 Assessment was completed. In addition, we were required to take one corrective action and we completed that action. The Level 1 Assessment did not identify any sanitary defects in the public water system.