

HARRIS COUNTY M.U.D. No. 23

PWS ID # 1010649

2022 Annual Drinking Water Quality Report

Phone No: 281-350-0895

This is your water quality report from January 1, 2022 to December 31, 2022.

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 US 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 Thursday of each month at 6:30 p.m., 7314 Shady Mill Drive, Houston, Texas, 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 both groundwater and surface water sources. The groundwater comes from water-bearing sands known as the Evangeline Aquifer. The surface water portion is obtained from the City of Houston.

The Texas Commission on Environmental Quality (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: Other sources of drinking water (both tap water and bottled water) can 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 produc-

tion, 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).

EPA website: www.epa.gov/safewater

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 EPA's Safe Drinking Water Hotline at (1-800-426-4791).

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.

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 system's business office.



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. 23 - 2022 Drinking Water Quality Report Data

Lead and Copper: These samples are taken from the customer taps. 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	2022	1.3	1.3	0.086	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2022	0	15	1.2	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>.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	03/11/2020	3.4	0 - 3.4	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	03/11/2020	0.211	0.127 - 0.211	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Cyanide	03/11/2020	20	0 - 20	200	200	ppb	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
Fluoride	03/11/2020	0.23	0.22 - 0.23	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]	2022	0.16	0.09 - 0.16	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	03/11/2020	4.1	0 - 4.1	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.

Disinfectant type and unit of measure	Year Sampled	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Units	Violation	Likely Source of Contamination
Chloramine (Total)	2022	1.91	1.00	3.1	4.00	4.00	ppm	No	Water additive used to control microbes.



Harris County M.U.D. No. 23 - 2022 Drinking Water Quality Report Data Continuation

Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
*Haloacetic Acids (HAA5)	2022	14	8.3 - 18.1	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
*Total Trihalomethanes (TTHM)	2022	17	13.5 - 22.9	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

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

Synthetic organic contaminants including pesticides and herbicides	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Atrazine	2021	0.14	0 - 0.14	3	3	ppb	N	Runoff from herbicide used on row crops.

Unregulated Contaminants	Collection Date	Average of All Sampling Points	Range of Detected Levels	Units	Likely Source of Contamination
Bromodichloromethane	2022	5.5	3.4 - 9.1	ppb	By-product of drinking water disinfection.
Chloroform	2022	8.8	6.8 - 12.2	ppb	By-product of drinking water disinfection.
Dibromochloromethane	2022	1.9	0 - 2.6	ppb	By-product of drinking water disinfection.

Unregulated contaminants are those for which the 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 regulations are warranted.

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

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	01/13/2021	6.2	6.2 - 6.2	0	50	pCi/L	N	Decay of natural and man-made deposits.
Combined Radium 226/228	01/13/2021	1.33	1.33 - 1.33	0	5	pCi/L	N	Erosion of natural deposits.
Gross Alpha excluding Radon and Uranium	01/13/2021	4	4 - 4	0	15	pCi/L	N	Erosion of natural deposits.
Uranium	01/13/2021	2.4	2.4 - 2.4	0	30	ug/l	N	Erosion of natural deposits.

Secondary Constituents

Many constituents (such as calcium, sodium, or iron) which are often found in drinking water, can 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 constituents are not causes for health concerns, but may greatly affect the appearance and taste of your water. For more information call TNG at 281-350-0895.

Total Coliform: MONTHLY TESTS FOUND NO COLIFORM BACTERIA

Organics: TESTING WAIVED, NOT REPORTED, OR NONE DETECTED

Fecal Coliform: MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA

Turbidity: TESTING WAIVED, NOT REPORTED, OR NONE DETECTED

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER - Notice of Permanent Termination of Fluoridation

Our public water system **Harris County MUD 23, TX1010649** is permanently terminating fluoridation of drinking water. As stated in Title 30 Texas Administrative Code, Subchapter F, Section 290.122(j), public water systems that furnish water containing added fluoride may not permanently terminate fluoridation unless it provides written notice to persons served by the public water system at least 60 days prior to permanently terminating fluoridation in its water supply. Fluoride addition was permanently terminated in 2018. If you have questions regarding this matter, please contact TNG Utility at 281-350-0895.



Harris County M.U.D. 23 purchases surface water from City of Houston, mandated under Harris Galveston Subsidence District from Lake Houston, Trinity River Canal and Lynchburg Reservoir located in Harris County and below is the constituents levels for the water they supply. For more water quality information call the City of Houston Public Works and Engineering Department at 832-395-2500

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	5% of monthly samples are positive.	0.9		0	N	Naturally present in the environment.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2022	1.3	1.3	0.128	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2021	0	15	3.4	3	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
*Haloacetic Acids (HAA5)	2022	28	0 - 33.6	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
*Total Trihalomethanes (TTHM)	2022	43	0 - 38.3	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

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

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2022	3	0 - 7.6	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2022	0.41	0.0438 - 0.41	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Cyanide	2022	120	0 - 120	200	200	ppb	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
Fluoride	2022	0.4	0.1 - 0.76	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]	2022	0.43	0 - 0.43	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	2022	9.5	0 - 9.5	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	2022	2	2.18 - 2.75	0	5	pCi/L	N	Erosion of natural deposits.
Gross alpha excluding radon and uranium	2022	11.5	10.8 - 11.5	0	15	pCi/L	N	Erosion of natural deposits.



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City of Houston - 2022 Drinking Water Quality Report Data Continued

Synthetic organic contaminants including pesticides and herbicides	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Atrazine	2022	2	0 - 1.7	3	3	ppb	N	Runoff from herbicide used on row crops.
Di (2-ethylhexyl) phthalate	2022	2	0 - 2.3	0	6	ppb	N	Discharge from rubber and chemical factories.
Simazine	2022	0.11	0 - 0.11	4	4	ppb	N	Herbicide runoff.

Volatile Organic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Ethylbenzene	2021	1	0 - 1	700	700	ppb	N	Discharge from petroleum refineries.
Toluene	2021	0.001	0 - 0.001	1	1	ppm	N	Discharge from petroleum factories.
Xylenes	2021	0.0054	0 - 0.0054	10	10	ppm	N	Discharge from petroleum factories; Discharge from chemical factories.

Turbidity

	Level Detected	Limit (Treatment Technique)	Violation	Likely Source of Contamination
Highest single measurement	0.51 NTU	1 NTU	N	Soil runoff.
Lowest monthly % meeting limit	100%	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.

