

HARRIS COUNTY M.U.D. No. 43

2018 Annual Drinking Water Quality Report

Phone No: 281-350-0895

PWS ID # 1010565

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

This is your water quality report from January 1, 2018 to December 31, 2018.

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 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 third Thursday of each month at 12:00 p.m., Andrews Kurth LLP, 600 Travis, Suite 4200, Houston, Texas, 77002. In addition, monthly meetings are held at 7:00 p.m., Birnamwood Clubhouse, 23803 Birnamwood Blvd., Spring, Texas, 77373. On the second Tuesday each month. For a complete schedule listing go to www.HCMUD43.org or you may contact Steve Reifel 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 Confidence Report. For more information on source water assessments and protection efforts at our system, contact Steve Reifel 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, min-

ing, 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.

PWS ID # 1010565



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)

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Inorganic Contaminants:

Collection Date	Constituent	Highest Detected Level at any Sampling Point	Range of Detected Levels	MCL	MCLG	Unit of Measure	Violation	Source of Contaminant
3/20/17	Fluoride	0.12	0.12 - 0.12	4	4	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
9/01/2016	Barium	0.242	0.242 - 0.242	2	2	ppm	No	Erosion of natural deposits. Discharge of drilling wastes, discharge from metal refineries
2018	Nitrate [measured on Nitrogen]	0.27	0.27 - 0.27	10	10	ppm	No	Erosion of natural deposits; runoff from fertilizer use; leaching from septic tanks, sewage.

Disinfectant Residuals:

Year	Constituent	Average Level	Range of Detected Levels (low - high)	MRDL	MRDLG	Unit of Measure	Violation	Source of Contaminant
2018	Chlorine Residual, Free	1.60	1.12 - 1.90	4	4	ppm	No	Disinfectant used to control microbes.

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

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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: - No associated adverse health effects with the following:

Year	Constituent	Average Level	Range of Detected Levels (low - high)	Limit	Unit of Measure	Source of Contaminant
2016	Calcium	49.6	49.6 - 49.6	N/A	ppm	Abundant naturally occurring element.
2016	Total Hardness (CACO3)	142	142 - 142	N/A	ppm	Natural occurring calcium.
2016	Magnesium	4.31	4.31 - 4.31	N/A	ppm	Abundant naturally occurring element.
2016	Sodium	31.1	31.1 - 31.1	N/A	ppm	Erosion of natural deposits; byproducts of oil field activity.
2016	Zinc	0.0193	0.0193 - 0.0193	5	ppm	Moderately abundant naturally occurring element; used in the metal industry.

Lead and Copper: - These samples are taken from the customer taps. 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.

Date Sampled	Constituent	The 90th Percentile	Number of Sites Exceeding Action Level	Action Level	Unit of Measure	MCLG	Violation	Source of Contaminant
2017	Lead	1.7	0	15	ppb	0	No	Corrosion of household plumbing systems; erosion of natural deposits.
2017	Copper	0.148	0	1.3	ppm	1.3	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

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

Radioactive Contaminants:

Collection Date	Constituent	Highest Detected Level	Range of Detected Levels	MCL	MCLG	Unit of Measure	Source of Contaminant
5/7/13 226 & 228	Combined Radium	2.5	2.5 - 2.5	5	0	pCi/L	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 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>.”

