Harris County MUD 238
P.O. BOX 691008
Houston, TX 77269

2019

DRINKING WATER QUALITY REPORT

CONSUMER CONFIDENCE REPORT

PWS ID: TX1012361

HARRIS COUNTY MUNICIPAL UTILITY DISTRICT NO. 238

Our Drinking Water Meets All Federal (EPA) Drinking Water Requirements

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water. The U.S. Environmental Protection Agency (EPA) requires ongoing tests of all public water systems, and the results are provided on the following pages. We hope that by this information helps you to become more aware of what's in your drinking water in Harris County MUD 238.

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:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water 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 storm water 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 storm water runoff, and septic systems.

Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

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. In order to ensure that 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.

Special Notice for Infants, Elderly and those with Special Health Circumstances

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly, or Immunocompromised 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 at (800) 426-4791.

En Espanol

Este reporte incluye información importante sobre el agua potable. Para asistencia en español, favor de llamar por telefono a Corina al 281-355-1312.

Public Participation Opportunities

The Harris County MUD 238 Board of Directors meet at 1:00pm on the fourth Tuesday of each month at the Gulf Utility Service office 17332 Groeschke Rd., Houston, TX 77084

You may mail comments to:
Harris County MUD 238
Attn: Board of Directors
P.O. Box 691008
Houston, TX 77269
Or call (281) 355-1312

Where do we get our drinking water?

Our drinking water is ground water from the Evangeline and Chicot aquifers and purchased surface water from the West Harris County Regional Water Authority. A Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by the Texas Commission on Environmental Quality. This information describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information contained in the assessment allows us to focus source water protection strategies. For more information on source water assessments and protection efforts at our system, contact Michael Williams, at 281-355-1312

All Drinking Water May Contain Contaminants
When drinking water meets federal standards there may not be any health benefits to purchasing bottled water or point of use devices. Drinking water, including bottled water, may reasonably be expected to contain at least small amount 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 found by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

About this report
This report lists all of the federally regulated or monitored contaminants which have been found in your drinking water. The U.S. EPS requires water systems to test for up to 97 contaminants. Most sampling is conducted at each source water entry point into the system. The actual water received by a consumer may be a blend from different sources, depending on location.

Drinking Water Abbreviations and Definitions
Ave: Regulatory compliance with some MCLs are based on running annual average of monthly samples.
MFL: million fibers per liter (a measure of asbestos)
N/A: not applicable
NTU: nephelometric turbidity units (a measure of turbidity)
pCi/L: picocuries per liter (a measure of radioactivity)
ppm: parts per million, or milligrams per liter (mg/L), or one ounce in 7,350 gallons of water
ppb: parts per billion, or micrograms per liter, or one ounce in 7,350,000 gallons of water
ppt: parts per trillion, or nanograms per liter (ng/L)
ppq: parts per quadrillion, or pictograms per liter (pg/L)

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.

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 Contaminant Level Goal or MCLG:
The level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Contaminant Level or MCL:
The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology

Maximum residual disinfectant level goal or MRDLG:
There is a level of drinking water disinfectant below which there is no known or expected risk to health. MRDLs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Maximum residual disinfectant level or 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.

Mrem/year: millirems per year (a measure of radiation absorbed by the body)

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

REGULATED CONTAMINANTS (Regulated at the Water Plant)

YEAR	Contaminant Unit of measurement	Highest Level Detected	Range of detected level	MCLG	MCL	Violation	Likely Source of Contaminant
Collection Date	**Inorganic Contaminants**	**Highest Level Detected**	**Range of Levels Detected**	**MCLG**	**MCL**	**Violation**	**Likely Source of Contamination**
2019	Barium (ppm)	0.105	0.105 – 0.105	2	2	NO	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
2017	Fluoride (ppm)	0.47	0.47 - 0.47	4	4.0	NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
2019	Nitrate [measured as Nitrogen] (ppm)	1	0 – 0.73	10	10	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion from natural deposits.
2015	Nitrite [measured as Nitrogen] (ppm)	0.01	0 – 0.01	1	1	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion from natural deposits.

RADIOACTIVE CONTAMINANTS (Regulated at the Water Plant)

YEAR	Contaminant Unit of measurement	Highest level Detected	Range of levels detected	Violation	MCLG	MCL	Likely Source of Contaminant
2019	Beta/proton emitters (pCi/L*)	4.3	0 – 4.3	NO	0	50	Decay of natural and man-made deposits
2019	Combined Radium 226/228 (pCi/L)	4	3.29 – 5.02	NO	0	5	Erosion of natural deposits.
2019	Gross Alpha excluding radon and uranium (pCi/L)**	18	0 - 18	YES	0	15	Erosion of natural deposits.

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

Synthetic organic contaminants including pesticides and herbicides	**Collection Date**	**Highest Level Detected**	**Range of Individual Samples**	**MCLG**	**MCL**	**Units**	**Violation**	**Likely Source of Contamination**
Simazine	2019	0.08	0.08 - 0.08	4	4	ppb	N	Herbicide runoff.

LEAD AND COPPER (Regulated at Customer's Tap)

YEAR	Contaminant Unit of measurement	90th Percentile Value	Action Level (AL)	In Compliance	Violation	MCLG	Likely Source of Contaminant
2017	Copper (ppm)	0.174	1.3	YES	NO	1.3	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

DISINFECTANT RESIDUALS

YEAR	Contaminant Unit of measurement	Highest Level Detected	Range of detected level	Violation	MRDL	MRDLG	Likely Source of Contaminant
2019	Chloramine (ppm)	3.9	1.59 – 3.90	NO	4	4	Water additive used to control microbes.

Violations

Gross alpha excluding radon and uranium

Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

Violation Type	Violation Begin	Violation End	Violation Explanation
MCL, AVERAGE	01/01/2019	03/31/2019	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.
MCL, AVERAGE	10/01/2019	12/31/2019	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.

Public Notification Rule

The Public Notification Rule helps to ensure that consumers will always know if there is a problem with their drinking water. These notices immediately alert consumers if there is a serious problem with their drinking water (e.g., a boil water emergency).

Violation Type	Violation Begin	Violation End	Violation Explanation
PUBLIC NOTICE RULE LINKED TO VIOLATION	10/24/2019	12/05/2019	We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations.

TCEQ 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 assessments and protection efforts at our system contact: 281-355-1312.

Additional Health Information for Lead

All water systems are required by EPA to report the following language*: "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."*

If you would like to talk to a district representative about your Water Quality Report, please call 832-257-0063. For information from the U.S. Environmental Agency, you may call the EPA's Hotline at 1-800-426-4791.

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West Harris County Regional Water Authority (PWS ID: TX1013303)

Harris County MUD 238 Purchased water from West Harris County Regional Water Authority from January to December to meet an increased demand. To obtain a copy of West Harris County regional Water Authority Drinking Water Quality Report, please call 832-209-5084.

DISINFECTION BY-PRODUCTS

YEAR	Contaminant Unit of measurement	Highest Level Detected	Range of Levels Detected	Violation	MCL	MCLG	Likely Source of Contaminant
2018	Total Trihalomethanes (TTHM) (ppb)	27.3	27.3 – 27.3	NO	80	0	Byproduct of drinking water disinfection.
2018	Haloacetic Acids (HAAS) (ppb)*	17.5	17.5- 17.5	NO	60	0	Byproduct of drinking water disinfection.

INORGANIC CONTAMINANTS

YEAR	Contaminant Unit of measurement	Highest Level Detected	Range of Levels Detected	Violation	MCL	MCLG	Likely Source of Contaminant
2019	Nitrate [measured as Nitrogen] (ppm)	0.27	0.27 – 0.27	NO	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
2015	Nitrite [measured as Nitrogen] (ppm	0.03	0.03 – 0.03	NO	1	1	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Additional Health Information for Lead

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