

2018 Annual Drinking Water Quality Report (Consumer Confidence Report)

HARRIS COUNTY MUNICIPAL UTILITY DISTRICT No. 18 PWSID #1010512

OUR DRINKING WATER IS REGULATED

This report is a summary of the quality of the water we provide our customers. The analysis was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

Source of Drinking Water

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 before treatment 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.

SPECIAL NOTICE

Required language for ALL community Public water supplies:

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.

Harris County Municipal Utility District #18 Board of Directors Message

The Board of Directors of Harris County Municipal Utility District #18 is pleased to give you this report about our drinking water based on 2018 test results. The District is required by the Federal Safe Drinking Water Act to send the report each year. The content of the report is specified by the State of Texas. If you have any difficulties in reading or understanding the report, please call our operator at the number below. **The Board believes that the most important information contained in the Report is that the District's water supply was found to meet the requirements set by the State and Federal government for drinking water.**

Please call the District's operator, Eagle Water Management, Inc. at 281-374-8989 if you have any questions regarding this report.

En Español

Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre este informe en español, favor de llamar al tel. (281)374-8989- para hablar con una persona bilingüe en español.

Where do we get our drinking water?

Our drinking water is obtained from GROUND WATER (Evangeline Aquifer) AND PURCHASED SURFACE WATER from the North Harris County Regional Water Authority which purchases water from the City of Houston Northeast Water Purification Plant which treats water from Lake Houston. In addition, the District maintains interconnects with adjacent Districts for use in an emergency. For additional information on these water sources contact the Districts operator at 281-374-8989. The Texas Commission on Environmental Quality 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, please contact the Districts operator, Eagle Water Management, Inc. at 281-374-8989. For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following <http://www.tceq.texas.gov/gis/swaview>. Further details about sources and source-water assessments are available in Drinking Water Watch at <http://dww2.tceq.texas.gov/DWW/>.

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 (1-800-426-4791).

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 the EPA. These constituents are not causes for health concern. Therefore, secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

2018 Water Loss Audit

In the water loss audit submitted to the Texas Water Development Board for the time period of Jan – Dec 2018, our system lost an estimated 1,434,835 gallons of water. If you have any questions about the water loss audit, please call 281-374-8989.

About The Following Pages

The pages that follow list all of the federally regulated or monitored contaminants which have been found in your drinking water. The U.S. EPA requires water systems to test for up to 97 contaminants.

Public Meetings

The Board meets on the second Monday of each month at 6:00 P.M. The meetings are held at the offices of AEI Engineering LLC, 11450 Compaq Center Drive, Suite 660, Houston, Texas 77070. For additional information regarding the meeting call 281-374-8989. You may mail comments to:

Harris County Municipal Utility District No. 18
Attn: Board of Directors
P.O. Box 11750
Spring, Texas 77391-1750

Inorganic Contaminants

Year or Range	Contaminant	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Unit of Measure	Violation	Source of Contaminant
2017	Arsenic	4.2	0 – 4.2	0	10	ppb	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
2017-2018	Barium*	0.404	0.0551* - 0.404	2	2	ppm	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
2017	Cyanide	40	20 - 40	200	200	ppb	No	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
2017-2018	Fluoride*	0.27	0 – 0.27*	4	4	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2017-2018	Nitrate (measured as Nitrogen)	0.78*	0.01 – 0.78*	10	10	ppm	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
2015	Nitrite (measured as Nitrogen)	0.06	0.0 - 0.06	1	1	ppm	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.

*Includes results from surface water received from the NHCRWA

Disinfectants and Disinfection Byproducts

Year	Contaminant	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Violation	Unit of Measure	Source of contaminant
2018	Haloacetic Acids (HAA5)	21	0 – 24.6	No Goal	60	No	ppb	Byproduct of drinking water disinfection
2018	Total Trihalomethanes	12	0 – 11.7	No Goal	80	No	ppb	Byproduct of drinking water disinfection

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

Maximum Residual Disinfectant Level

Year or Range	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Disinfectant
2018	Chlorine Residual, Total	2.57	1.5	3.5	4	<4	ppm	Water additive used to control microbes.

Synthetic Organic Contaminants including pesticides and herbicides

Year	Contaminant	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Unit of Measure	Violation	Source of Contaminant
2018	Atrazine*	2.3	0.0 – 2.3*	3	3	ppb	No	Runoff herbicide used on row crops
2018	Simazine*	0.14*	0.14* – 0.14*	4	4	ppb	No	Herbicide runoff.

*Includes results from surface water received from the NHCRWA

Radioactive contaminants

Year	Contaminant	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Unit of Measure	Violation	Source of Contaminant
2016	Combined Radium 226 & 228	1.5	1.5 – 1.5	0	5	pCi/L	No	Erosion of natural deposits.
2016	Gross alpha excluding radon and uranium	3	1 - 3	0	15	pCi/L	No	Erosion of natural deposits.
2016	Uranium	2.9	2.9 – 2.9	0	30	ug/l	No	Erosion of natural deposits.

Turbidity

Year	Contaminant (Units)	Turbidity Limit	Highest Single Measurement	Lowest % of Samples Meeting Limit	Typical Source
2018	Turbidity (NTU)	0.3	0.29	100%	Soil runoff

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbiological growth. Turbidity may indicate the presence of disease causing organisms. These organisms include bacteria, viruses and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

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.

Year	Contaminant	90 th Percentile	Number of Sites Over Action Level	Action Level	MCLG	Unit of Measure	Violation	Source of Contaminant
2018	Lead	10.8	2	15	15	ppb	No	Corrosion of household plumbing systems; erosion of natural deposits.
2018	Copper	0.147	0	1.3	1.3	ppm	No	Corrosion of household plumbing systems; erosion of natural deposits.

Required Additional Health Information for Lead

"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>."

Violations

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.			
Violation Type	Violation Begin	Violation End	Violation Explanation
Lead Consumer Notice (LCR)	12/30/2018	03/18/2019	We failed to provide the results of lead tap water monitoring to the consumers at the location water was tested. These were supposed to be provided no later than 30 days after learning the results. The results were sent to the consumers at the locations water was tested, however, the TCEQ did not receive the required paperwork associated with the notification. The paperwork has been filed and the District is in compliance.

DEFINITIONS

Maximum Contaminant Level (MCL)

The highest permissible level of a contaminant in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG)

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

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.

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 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 the use of disinfectants to control microbial contamination.

Action Level (AL)

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

ABBREVIATIONS

- pCi/L** - picocuries per liter (a measure of radioactivity)
- ppm** - parts per million, or milligrams per liter (mg/L)
- ppb** - parts per billion, or micrograms per liter (ug/L)
- Avg** - Regulatory compliance with some MCLs are based on running annual average of monthly samples.
- NTU**- Nephelometric Turbidity Units

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