

Harris County Water Control and Improvement District 50 (WCID 50)

Annual Drinking Water Quality Report (January 1 - December 31, 2017)

TX1010241

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.

HARRIS COUNTY WCID 50 EL LAGO owns and operates 3 wells, and purchases treated surface water from the City of Seabrook. The well water is pumped from the Gulf Coast Aquifer (Evangeline aquifer) and the surface water is treated at the Southeast Water Purification Plant at 3100 Genoa Red Bluff, Pasadena. The surface water is then delivered to us by way of a transmission

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Este reporte incluye información sobre el agua para tomar.
Para asistencia en español, favor de llamar al telefono (281) 326-5573.

Sources of Drinking Water and Related Health Information

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.

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 EPAs Safe Drinking Water Hotline at (800) 426-4791.

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; these 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; these 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.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which 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 drinking water color, please contact the system's business office.

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, which can be found in drinking water. Infants, some elderly, or immunocompromised persons such as those undergoing chemotherapy for cancer; persons 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 providers. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline (800-426-4791).

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. We are responsible for providing high quality drinking water, but we 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 are available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Information about Source Water Assessments

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 detection of these contaminants may be found in the Consumer Confidence Report. For more information on source water assessments and protection efforts for our system please contact our office.

For more information about your sources of water please refer to the Source Water Assessment Viewer available at the following URL: <https://www.tceq.texas.gov/gis/swaview>.

Further details about sources and source-water assessments are available in Drinking Water Watch at the following URL: <http://dww2.tceq.texas.gov/DWW>.

District Water Sample Locations

Source Water Name	Water Source Address or Origin	Type of Water	Report Status	Region/County
1 - 123 Ferndale Drive	123 Ferndale Drive	GW	A	Gulf Coast/Harris County
2 - 123 Ferndale Drive	123 Ferndale Drive	GW	A	Gulf Coast/Harris County
3 - 123 Ferndale Drive	123 Ferndale Drive	GW	A	Gulf Coast/Harris County
HOUSTON SW THRU SEABROOK	CC FROM TX1010062 CITY OF	SW	A	Gulf Coast/Harris County

Water Quality Test Results 2017 Regulated Contaminants Detected

Table 1. Lead and Copper

Lead and Copper	Date(s) Sampled	MCLG	Action Level (AL)	Measured Value (90th Percentile) ¹	Number of Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	9/6&7/2017	1.3	1.3	0.57	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	9/6&7/2017	0	15	1.1	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

1. The value reported is the 90th percentile value or the third highest of the measurements taken.

Table 2. Regulated Contaminants by Category other than Lead and Copper

Regulated Contaminant	Collection Date	Average of Levels Detected	Range of Levels Detected ²	MCLG	MCL	Units	Violation	Likely Source of Contamination
Disinfectants and Disinfection By-Products								
Haloacetic Acids (HAA5)	2/6, 5/8, 7/31, & 10/30 2017	21	18.7 – 25.5	No goal established for this constituent	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2/6, 5/8, 7/31, & 10/30 2017	43	33.9 – 60.2	No goal established for this constituent	80	ppb	N	By-product of drinking water disinfection.
Inorganic Contaminants								
Barium	1/25/2016*	0.0489	0.0489 - 0.0489	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	5/8/2017	0.45	0.45-0.45	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]	5/8/2017	0.85	0.85-0.85	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Radioactive Contaminants								
Beta/photon emitters	02/02/2011*	4.9	4.9-4.9	0	50	pCi/L	N	Decay of natural and man-made deposits.
Combined Radium 226/228	02/02/2011*	1.0	1.0-1.0	0	5	pCi/L	N	Erosion of natural deposits.
Synthetic organic contaminants including pesticides and herbicides								
Altrazine	2/6/2017	0.22	0.22-0.22	3	3	ppb	N	Runoff from herbicide used on row crops.
Simazine	2/6/2017	0.17	0.17-0.17	4	4	ppb	N	Herbicide runoff.
Disinfectants								
Chlorines	Monthly 2017	2.24	1.0 – 3.9	4	4	ppm	N	Water additive used to control microbes

2. Where range numbers are the same, this is a result of rounding of higher order decimal places from actual measurements to 1, 2, or 3 decimal places for the report depending upon the constituent. For example, in the case of Nitrate 0.85-0.85 might represent 0.8517-0.8543.

* Not required on annual basis.

Glossary of Abbreviations and Definitions

The following tables contain scientific terms and measures, some of which may require explanation.

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.
Level 1 Assessment:	A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in a water system.
Level 2 Assessment:	A very detailed study of the water system to identify potential problems to determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in a water system on multiple occasions.
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 Contaminant Level Goal or MCLG:	The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
Maximum residual Disinfectant Level or MDL:	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.
MFL:	Million fibers per liter (a measure of asbestos)
Mrem:	Millirems per year (a measure of radiation absorbed by the body)
NTU:	Nephelometric turbidity units (a measure of turbidity)
pCi/L:	Picocuries per liter (a measure of radioactivity)
ppm	Parts per million (milligrams per liter – or one ounce in 7,350 gallons of water)
ppt:	Parts per trillion, or nanograms per liter (ng/L)
ppq:	Parts per quadrillion, or picograms per liter (pg/L)