

2016 Annual Drinking Water Quality Report

(Consumer Confidence Report)

HARRIS COUNTY MUNICIPAL UTILITY DISTRICT NO. 109
PWS ID No. TX1010620 Phone No: 281-895-8547

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 contaminants that may be present in source water:

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

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 color of drinking water, please contact the system's business office. 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; 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 infections 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 is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

In the Water Loss Audit submitted to the Texas Water Development Board for the time period of January – December 2016, our system lost and estimated 29,798,625 gallons of water. Overall, our system accounted for approximately 90.88 % of the water produced during that period. If you have any questions about the water loss audit, please call 281.895.8547.

Public Participation Opportunities

Date: 3rd Tuesday of Each Month

Time: 6:00 PM

Location: Holiday Inn Express
5619 FM 1960 East
Humble, Texas 77346

Phone No: 281-895-8547

To learn about future public meetings (concerning your drinking water), or to request to schedule one, please call us.

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)895-8547 para hablar con una persona bilingüe en español.

The TCEQ completed an assessment of your source water and results indicate that our sources have a low susceptibility to 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 this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system, contact the system's business office.

Information about Source Water Assessments

The TCEQ completed an assessment of your source water and results indicated 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 this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system, contact 281-895-8547.

For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL:
<http://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/>.

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.

About The Following Pages

The pages that follow list all 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.

Water Quality Test Results

Maximum Contaminant Level Goal or MCLG:	The level on 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 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:	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 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.
Avg:	Regulatory compliance with some MCLs are based on running annual average of monthly samples.
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.
na:	Not applicable.
Definitions:	The following tables contain scientific terms and measures, some of which may require explanation.
TCR:	Total coliform rule
MFL	Million fibers per liter (a measure of asbestos)
NTU	Nephelometric turbidity units (a measure of turbidity)
pCi/L	picocuries per liter (a measure of radioactivity)
ppt:	parts per trillion, or nanograms per liter (ng/L)
ppq:	parts per quadrillion, or pictograms per liter (pg/L)

Regulated Contaminants Detected

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.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90 th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	8/23/2015	1.3	1.3	0.14	0	ppm	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead	8/23/15	0	15	0.34	0	ppb	No	Corrosion of household plumbing systems; Erosion of natural deposits

Regulated Contaminants

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2014	0.356	0.356 – 0.356	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	4/30/2014	0.18	0.14 – 0.18	4	4.0	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	3/27/12	4.3	4.3 – 4.3	0	50	pCi/L	N	Decay of natural and man-made deposits.
Synthetic organic contaminants including pesticides and herbicides	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Di (2-ethylhexyl) phthalate	2015	16	0 – 16	0	6	ppb	No	Discharge from rubber and chemical factories

Disinfectant Residual Table

Disinfectant	Year	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Violation (Y/N)	Likely Source of Contamination
Chlorine	2015	1.71	1.00	1.6	0.2	< 4.0	ppm	N	Water additive used to control microbes.