

Harlingen Waterworks System

Consumer Confidence Report (CCR)

Annual Water Quality Report for the period of January 1 to December 31, 2019

PWS ID Number: TX0310002 PWS Phone Number: 956-430-6100 PWS Website: www.hwws.com

Special Notice: 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 infection by Cryptosporidium are available from the EPA's Safe Drinking Water Hotline at (800) 426-4791.

Public Participation Opportunities

A five-member board appointed by the Harlingen City Commission governs HWWS. All members of the community are invited to participate in our forum and to voice their concerns about their drinking water. The Harlingen Waterworks Board of Trustees meet once a month on the last Wednesday of every month in the second floor Board Room of the administrative offices located at 134 E. Van Buren, Harlingen, Texas. For a copy of the meeting schedule or agenda, please call 956-430-6157 or access the Harlingen Waterworks web page at <https://www.hwws.com/board/>

Harlingen Waterworks System obtains its supply of potable water from the Rio Grande River in Cameron County. The supply is considered surface water. At the Harlingen diversion point, the water travels through a series of canals and is deposited into our holding reservoirs located at each of the two treatment plants. The water stays in these lakes until it is processed for drinking. The Downtown and Runnion drinking water plants are both active.

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. Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en espanol, favor de llamar al telefono 956-440-6563.



Water Loss

In the water loss audit submitted to the TWDB for the time period of January – December 2019, our system lost 478,646,022 gallons of water.

For more information regarding this report contact HWWS Environmental Compliance Coordinator at 956-440-6563.

Lead/Copper: 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. The Harlingen Waterworks System is 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>.

Sources of Drinking Water: The sources of drinking water (both tap 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 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 EPA's Safe Drinking Water Hotline.

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 results 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 results 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 call the Water Superintendent at (956) 440-6540.

Information about Source Water Assessments: The TCEQ completed an assessment of your source water and results indicated 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 (956) 440-6582.

Definitions and Abbreviations:

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.

Average (Avg): Regulatory compliance with some MCLs are based on running annual average of monthly samples.

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 (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 (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 (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.

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 contaminants.

NA: Not applicable.

NTU: nephelometric turbidity units (a measure of turbidity).

pCi/L: picocuries per liter (a measure of radioactivity).

ppb or ug/L: parts per billion or micrograms per liter - or one ounce in 7,350,000 gallons of water.

ppm or mg/L: parts per million or milligrams per liter – or one ounce in 7,350 gallons of water.

SU: Standard unit.

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

Water Quality Test Results:

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

Maximum Residual Disinfectant Level

	Year	Average Level	Range of Levels Detected	MRDL	MRDLG	Unit of Measure	Violation	Likely Source of Contamination
Chloramine	2019	3.4	1.1 - 5.0	4.0	4.0	ppm	No	Water additive used to control microbes.

Coliform Bacteria

MCLG	Total Coliform MCL	Highest No. of Positive	Fecal Coliform or E. coli MCL	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	5% of monthly samples are positive	1.1	0	0	No	Naturally present in the environment

Lead and Copper

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90 th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2018	1.3	1.3	0.0943	0	ppm	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2018	0	15	1.6	1	ppb	No	Corrosion of household plumbing systems; Erosion of natural deposits.

Regulated Contaminants

Disinfection By-Products	Collection Date	Highest Level Detected*	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2019	24	4.6 – 36.2	No goal for the total	60	ppb	No	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2019	69	19 – 67.3	No goal for the total	80	ppb	No	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2019	2.4	2.4 - 2.4	0	10	ppb	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2019	0.0893	0.0856 - 0.893	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Cyanide	2019	120	90 - 120	200	200	ppb	No	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
Fluoride	2019	0.62	0.57 - 0.62	4	4	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2019	0.20	0.13 - 0.20	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	2019	4.2	3.2 – 4.2	50	50	ppb	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	2017	7.0	5.2 – 7.0	0	50	pCi/L**	No	Decay of natural and man-made deposits.
Uranium	2017	2.3	1.2 - 2.3	0	30	ug/L	No	Erosion of natural deposits.

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

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

Turbidity

	Year	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	2019	1 NTU	0.29 NTU	No	Soil runoff.
Lowest monthly % meeting limit	2019	0.3 NTU	100%	No	Soil runoff.

Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

Total Organic Carbon (TOC)

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.

Water Conservation Tips

1. Reducing a 10 minute shower using a standard showerhead to 5 minutes will save 12.5 gallons of water in each occasion.
2. Water efficient toilets can save up to 13,000 gallons of water a year. Replace faulty toilet flappers if they don't close properly after flushing.
3. A faucet leaking at a rate of one drop per second can waste up to 3,000 gallons of water a year. Periodically look under your sink for signs of water leaks and replace old and worn washers and gaskets.
4. Turn off the water when brushing your teeth and save up to 2 gallons a minute. That's up to 220 gallons of water a year for a family of four.
5. Washing only full loads of laundry can save an average household 3,400 gallons of water each year.

Wastewater Tips

1. Don't flush any types of wipes down the toilet, even flushable wipes. Food can attach to them and build up more quickly in wastewater pipes which can cause sewer backups.
2. Recycle used cooking oil or pour it into a sealable container and place it in the trash. Never pour oil or grease down the drain.
3. Compost food scraps when possible or throw scraps in the trash.
4. Never pour cooking oil, gravy, bacon grease, lard, butter, or mayonnaise down the sink or toilet.
5. Place a strainer in the sink drain to catch small pieces of food to avoid plugging your home's wastewater lines.