# 2019 Annual Drinking Water Quality Report SAN LEON MUNICIPAL UTILITY DISTRICT

(CONSUMER CONFIDENCE REPORT)

PUBLIC BOARD MEETINGS - Date: Third Wednesday of Every Month
Time: 6:30 p. m. Location: San Leon Volunteer Fire Department at 337 12th Street in San Leon
EPA'S SAFE DRINKING WATER HOTLINE 1-800-426-4761

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

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. For more information regarding this contact: San Leon Municipal Utility District Customer Service (281)339-1586

### En Española

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo o hable con alguien que lo entienda bien.

# Sources of Drinking Water

The source of drinking water used by San Leon Municipal Utility District is Purchased Surface Water from Gulf Coast Water Authority in Texas City, Texas.

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 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 at (800)426-4791.

Contaminants that may be present in source water include:

- Microbial contaminants, such as virus and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- <u>Inorganic contaminants</u>, 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
- <u>Pesticides and herbicides</u>, 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 number of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protections 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 cause for health concerns. For more information on taste, the 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 infection by Cryptosporidium are available from the Safe Drinking Water Hotline at (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 detections of these contaminants may be found in this Consumer Confident Report. For more information on source water assessments and protection efforts at our system, contact San Leon Municipal Utility District, 281-339-1586 located at 443 24th Street, San Leon, Texas 77539.

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/

SOURCE WATER NAME

TYPE OF WATER

REPORT STATUS

LOCATION

SW FROM GULF COAST

SW

ACTIVE

TEXAS CITY, TEXAS/BRAZO RIVER

COUNTY OF GALVESTON

WATER AUTHORITY

CC FROM TX0840153 GULF

<u>Definitions and Abbreviations:</u> The following tables contain scientific terms and measures, some of which may require explanation. Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALG's 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

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

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

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 Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety on multiple occasions.

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 contaminations.

MFL: Million fibers per liter (a measure of asbestos).

na: Not applicable.

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).

ppb: Micrograms per liter or parts per million - or one ounce in 7,350,000 gallons of water.

ppm: Milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

ppt: Parts per trillion, or monograms per liter(ng/L).

ppg: Parts per quadrillion, or pictograms per liter (pg/L).

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over All	Units	Violation	Likely Source Of Contamination
Copper	2018	1.3	1.3	0.0392	0	ppm	N	Erosion of natural deposit; Leaching from wood preservatives; Corrosion of household plumbing systems.

Water Quality Test Results

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorite	2019	0.306	0 - 0.306	0.8	1	ppm	N	By-Products of drinking water disinfection.
Haloacetic Acids (HAA5)	2019	16	5.8 – 21.1	No goal for the total	60	ppb	N	By-Products of drinking water disinfection.
Total Trihalomethanes (TTHM)	2019	45	37 – 53.3	No goal for the total	80	ppb	N	By-Products of drinking water disinfection.

The value in the Highest Level or Average Deleted column is the highest average of all HAA5 and TTHM sample results collected at a location

over a year.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCL G	MCL	Units	Violation	Likely Source of Contamination
Nitrate (measured as Nitrogen)	2019	1	0.64 - 0.64	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Disinfectant Residual

Disinfectant Residuals	Year	Average Level	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
CL2 Totals	2019	2.5	.5 – 2.5	4	4	ppm	N	Water additive used to control microbes.

### Violations

Chlorine

Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

Violation Type	Violation Begin	Violation End	Violation Explanation
Disinfectant Level Quarterly	01/01/2019	03/31/2019	We failed to submit the DLQOR to the State. Because of this failure, we cannot be sure of the quality of our drinking water
Operating Report (DLQOR)	_		during the period indicated.

# Consumer Confidence Rule

The Consumer Confidence Rule requires community water systems to provide to their customers annual consumer confidence reports on the quality of the water delivered by the systems

Violation Type	Violation Begin	Violation End	Violation Explanation
CCR	07/01/2019	11/07/2019	We failed to provide to you, our drinking water customers, an annual report that adequately informed you about the quality
ADEQUACT/AVAILABLITY/CO		Į	of our drinking water and the risks from exposure to contaminates detected in our drinking water.
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2019 Consumer Confidence Report for Public Water System GULF COAST WATER AUTHORITY TEXAS CITY

Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorite	2019	0.306	0 - 0.306	0.8	1	ppm	N	By-product of drinking water disinfection.
Haloacetic Acids (HAA5)	2019	15	15.2 - 15.2	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2019	42	41.7 - 41.7	No goal for the total	60	ppb	N	By-product of drinking water disinfection.

The value in the Highest Level or Average Deleted column is the highest average of all HAA5 and TTHM sample results collected at a location over a

vear.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2019	0.0688	0.0688 - 0.0688	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Cyanide	2019	30	30 - 30	200	200	ppb	N	Discharge for plastic and fertilizer factories; Discharge for steel/metal factories.
Fluoride	2019	0.5	0.53 - 0.53	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]	2019	0.46	0.46 - 0.46	10	10	ppm		Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Radioactive Contaminants	aminants Collection Date Highest Level Detected		Range of Individual Samples MC		MCL	Units Violation		Likely Source of Contamination
Beta/photon emitters	05/09/2018	5.4	5.4 - 5.4	0	50	pCi/L*	N	Decay of natural and man-made deposits.

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

Synthetic organic contaminants including pesticides and herbicides	<del> </del>	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Atrazine	2019	0.13	0.13 - 0.13	3	3	ppb	N	Runoff from herbicide used on row
Simazine	2019	.25	0.25 - 0.25	4	4	ppb	N	Herbicide runoff.

## **GCWA Violations**

### Interim Enhanced SWTR

The Interim Enhanced Surface Water Treatment Rule improves control of microbial contaminants, particularly Cryptosporidium, in systems using surface water, or ground water under the direct influence of surface water. The rule builds upon the treatment technique requirements of the Surface Water Treatment Rule.

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE (IESWTR/LT1), MAJOR	01/01/2019	01/31/2019	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we

# Surface Water Treatment Rule (SWTR)

The Surface Water Treatment Rule seeks to prevent waterborne diseases caused by viruses, Legionella, and Giardia lamblia. The rule requires that water systems filter and disinfect water from surface water sources to reduce the occurrence of unsafe levels of these microbes.

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, RTN/RPT MAJOR (SWTR-FILTER)	01/01/2019	01/31/2019	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be
			sure of the quality of our drinking water during the period indicated.