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 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.

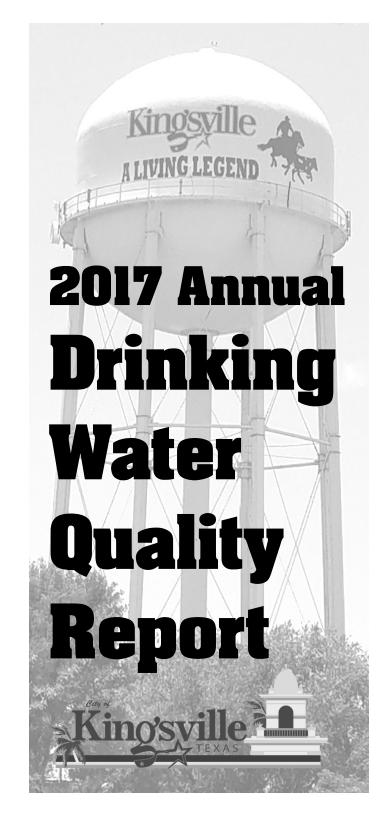
Maximum residual disinfectant level goal or MRDLG:

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.

- MFL million fibers per liter (a measure of asbestos)
- millirems per year (a measure of radiation absorbed by the mrem: body)
- not applicable. na:
- NTU nephelometric turbidity units (a measure of turbidity)
- picocuries per liter (a measure of radioactivity) pCi/L
- ppb: micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.
- milligrams per liter or parts per million or one ounce in ppm: 7,350 gallons of water.
- parts per quadrillion, or picograms per liter (pg/L) ppq
- parts per trillion, or nanograms per liter (ng/L) ppt

Treatment Technique or TT: A required process inted to reduce the level of a contaminant in drinking water.







Water Quality Report)

KINGSVILLE

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Drinking [O ALL Water System

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595-8040

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2017 Annual Drinking Water Quality Report

TX1370001

CITY OF KINGSVILLE

Annual Water Quality Report for the period of January 1 to December 31, 2017.

CITY OF KINGSVILLE: Self Supply - Ground Water Purchase - Surface Water

For more information regarding this report contact: Name: **JOE CASILLAS**

Phone: 361-595-8090

Este reporte incluye la información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (361) 595-8090.

Information about your 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.

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, 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 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 is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/

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 Joe Casillas 361-595-8090.

A Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by the Texas Commission on Environmental Quality. This information describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions.

The information contained in the assessment allows us to focus source water protection strategies.

For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL: http://gis3.tceq.state.tx.us/swav/Controller/index.jsp?wtrsrc=

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	
14 - W Kenedy St.	W. Kenedy St.	GW	Active	Goliad Sands
19 - 6th/Henrietta	6th/Henrietta	GW	Active	Goliad Sands
21 - 3rd/Caesar	3rd/Henrietta	GW	Active	Goliad Sands
22 - Ave. C/5th	Ave. C/5th	GW	Active	Goliad Sands
23 - FM 1356/Hwy 77	FM 1356/Hwy 77	GW	Active	Goliad Sands
24 - 13th/E Kenedy Ave	13th/E. Kenedy Ave	GW	Active	Goliad Sands
SW from Corpus Christi Thru South Texas	CC from TX 1370035 South	SW	Active	Corpus Christi/ Choke Canyon Lake

CITY OF KINGSVILLE purchases water from SOUTH TEXAS WATER AUTHORITY. SOUTH TEXAS WATER AUTHORITY provides purchase surface water from Corpus Christi Lake and Choke Canyon Lake.

DEFINITIONS AND ABBREVIATIONS

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

Action Level:

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.

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.

2017 Water Quality Test Results

Coliform Bacteria

Ma	aximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level		Total No. of Positive E. Coli or Fecal Coliform Samples		Likely Source of Contamination
	0	5% of monthly samples are positive.	3	0	Ν	Naturally present in the environment.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	08/16/2016	1.3	1.3	0.1	0	ppm	Ν	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

Disinfection By-Products	Collection Date	Highest Level or Average Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2017	22	0 - 40	No goal for the total	60	ppb	Ν	By-product of drinking water disinfection.

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

Total Trihalomethanes (TTHM) 2017	19 0 - 88 No	goal for the 80 total	ppb N	By-product of drinking water disinfection.
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'* The value in the Highest Level or Average Detected column is the highest average of all TTHM sample results collected at a location over a year'

Inorganic Contaminants	Collection Date	Highest Level or Average Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2017	5.7	4 - 5.7	0	10	ppb		Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.

While your drinking water meets EPA standards for arsenic, it does contain low levels of arsenic. EPAs standard balances the current understanding of arsenics possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Barium	2017	0.0357	0.0309 - 0.0357	2	2	ppm	Ν	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	2017	13.2	10.2 - 13.2	100	100	ppb	Ν	Discharge from steel and pulp mills; Erosion of natural deposits.
Cyanide	2017	70	0 - 70	200	200	ppb	Ν	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
Fluoride	2017	0.7	0.59 - 0.7	4	4.0	ppm	Ν	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from
Nitrate [measured as Nitro- gen]	2017	4	0.43 - 3.6	10	10	ppm	Ν	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Nitrite [measured as Nitrogen]	09/16/2015	0.05	0 - 0.05	1	1	ppm	Ν	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	2017	8.8	7 - 8.8	50	50	ppb	N	Discharge from petroleum and metal refiner- ies; Erosion of natural deposits; Discharge from mines.
Radioactive Contaminants	Collection Date	Highest Level or Average Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	2017	11.1	7.7 - 11.1	0	4	mrem/yr	N	Decay of natural and man-made deposits.

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

Gross alpha excluding radon and uranium	2017	16.3	4 - 16.3	0	15	pCi/L	Ν	Erosion of natural deposits.
Uranium	2017	9.8	8.4 - 9.8	0	30	ug/l	Ν	Erosion of natural deposits.

Disinfectant Residual

' A blank disinfectant residual table has been added to the CCR template, you will need to add data to the fields. Your data can be taken off the Disinfectant Level Quarterly Operating Reports (DLQOR).'

Disinfectant Residual	Year	Average Level	Range of Levels Detected	MRDL	MRDLG	Unit of Measure	Violation (Y/N)	Source in Drinking Water
Chloramines	2017	1.34	0.50-3.8	4	4	ppm	N	Water additive used to control microbes.

Water Loss

Year	Purchased and Produced Water	Total Accounted for Water	Total Unaccounted for Water	% Unaccounted	Reason for Unaccounted Water
2017	1,351,463,000	1,231,252,000	120,211,000	8.89%	Water leaks and unauthorized use