



2016 Annual Drinking Water Quality Report

(Consumer Confidence Report for the year ending 12/31/2016)

CITY OF JAMAICA BEACH
(409) 737-1142

SPECIAL NOTICE FOR THE ELDERLY, INFANTS, CANCER PATIENTS, AND PEOPLE WITH HIV/AIDS OR OTHER IMMUNE PROBLEMS

You may be more vulnerable than the general population to certain microbial contaminants, such as *Cryptosporidium*, in drinking water. Infants, some elderly or immuno-compromised persons such as those undergoing chemotherapy for cancer; those 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 provider. Additional guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline at 1-800-426-4791.

Public Participation Opportunities

For inquiries, questions, or concerns about water quality, policy decisions or public participation, please contact us at (409) 737-1142. All legislative, policy, and budgetary decisions are made by City Council. Unless otherwise posted, City Council meets on the 1st & 3rd Monday of every month at 6:00 p.m. at 16628 San Luis Pass Rd., Jamaica Beach, TX 77554. The City of Jamaica Beach Drinking Water Quality Report (Consumer Confidence Report) can be accessed on our website at: <http://www.ci.jamaicabeach.tx.us/helpful.htm> in the Helpful Info section.

En Español

Este reporte incluye información importante sobre el agua para tomar. Si tiene preguntas o discusiones sobre éste reporte en español, favor de llamar al tel. (409) 737-1142 para hablar con una persona bilingüe en español.

Our Drinking Water Meets or Exceeds the Environmental Protection Agency (EPA) Requirements

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. In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

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. Contaminants that may be present in source water before treatment 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.

Where do we get our drinking water?

The City of Jamaica Beach (PWS: 0840030) is Purchased Surface Water. Our drinking water is purchased treated and pressurized from the City of Galveston (PWS: 0840003). Galveston receives their drinking water from the Gulf Coast Water Authority (GCWA) (PWS: 0840153) in Texas City; the GCWA obtains their water from the Brazos River. The TCEQ has completed a Source Water Assessment for all drinking water systems that own their sources. The report 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 system(s) from which we purchase our water received the assessment report. For more information on source water assessments and protection efforts at our system, please contact us. For more information about your sources of water, please refer to the Source Water Assessment Viewer at <http://www.tceq.texas.gov/gis/swaview>. Further details about sources and source-water assessments are available on the Texas Drinking Water Watch at <http://dww2.tceq.texas.gov/DWWW/>.

ALL drinking water may contain contaminants

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 Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

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 concerns. Therefore, secondaries are not required to be reported in this document, but they may greatly affect the appearance and taste of your water.

Required Additional Health Information for Lead

If present, elevated levels of lead can cause serious 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. This water supply is responsible for providing high quality drinking water, but 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>.

About The Following Page

The page that follows lists all of the federally regulated or monitored contaminants which have been found in your drinking water. The U.S. EPA requires water systems to test up to 97 contaminants.

DEFINITIONS/ABBREVIATIONS

Maximum Contaminant Level (MCL) – The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to 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 health risk. 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.

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

Average – Regulatory compliance with some MCLs are based on running annual average of monthly samples.

NTU – Nephelometric Turbidity Units (a measure of turbidity)

MFL – million fibers per liter (a measure of asbestos)

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

mrem/year – millirems per year (a measure of radiation absorbed by the body)

ppm – parts per million, or milligrams per liter (mg/L)

ppb – parts per billion, or micrograms per liter (ug/L)

ppt – parts per trillion, or nanograms per liter (ng/L)

ppq – parts per quadrillion, or picograms per liter (pg/L)

CITY OF JAMAICA BEACH

Regulated Contaminants

Disinfectants and Disinfection By-Products

Year	Contaminant	Highest Level Detected	Range of Levels Detected	Violation	MCL	MCLG	Unit of Measure	Likely Source of Contaminant
2016	Halocetic Acids (HAAS)	22	14.1 - 21	N	60	No goal for the total	ppb	By-product of drinking water disinfection.
2016	Total Trihalomethanes (TTHM)	56	47.2 - 52.2	N	80	No goal for the total	ppb	By-product of drinking water disinfection.

Halocetic acids (HAAS) - Some people who drink water containing HAAs in excess of the MCL over many years may have an increased risk of getting cancer.
 Trihalomethanes (TTHM) - Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Inorganic Contaminants

Year	Contaminant	Highest Level Detected	Range of Levels Detected	Violation	MCL	MCLG	Unit of Measure	Likely Source of Contaminant
2016	Nitrate (measured as Nitrogen)	1	0.92 - 0.92	N	10	10	ppm	Runoff from fertilizer use; Leaching from septic tanks; sewage; Erosion of natural deposits.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

Lead and Copper

Year	Contaminant	The 90th Percentile	# of Sites Over Action Level	Violation	MCLG	Action Level	Unit of Measure	Likely Source of Contaminant
2014	Lead	0.67	0	N	0	15	ppb	Corrosion of household plumbing systems; Erosion of natural deposits.
2014	Copper	0.024	0	N	1.3	1.3	ppm	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

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.

Disinfectant Residuals

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Disinfectant
2016	Chloramine	1.23	1.02	1.80	4	4	ppm	Disinfectant used to control microbes.

Chloramines - Some people who use water containing chloramines well in excess of the MRDL could experience stomach discomfort and anemia.

Violation Table

Disinfectant Level Quarterly Operating Report (DLOOR)	Violation Type	Violation Begin	Violation End	Violation Explanation
4/1/2016		06/30/2016		We failed to submit the results from our DLOOR to TCEO by the due date. Because of the failure, we received a reporting violation. Corrective Action: DLOOR was submitted to TCEO.
7/1/2016		09/30/2016		We failed to submit the results from our DLOOR to TCEO by the due date. Because of the failure, we received a reporting violation. Corrective Action: DLOOR was submitted to TCEO.

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.

Unregulated Contaminants, Organic Contaminants & Secondary and Other Not Regulated Constituents (TESTING WAIVED, NOT REPORTED OR NONE DETECTED)

Fecal Coliform (REPORTED MONTHLY, TESTS FOUND NO FECAL COLIFORM BACTERIA)

TX0940030

CITY OF GALVESTON (The City of Jamaica Beach purchases its water from the City of Galveston; below are the Contaminants detected by the City of Galveston.)

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Inorganic Contaminants

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2016	Gross beta emitters	<4.0	<4.0	<4.0	50	0	pCi/L	Decay of natural and man-made deposits.
2016	Nitrate	0.54	0.54	0.54	10	10	ppm	Runoff from fertilizer use; Leaching from septic tanks; sewage; Erosion of natural deposits.
2016	Fluoride	0.18	0.18	0.18	4	4	ppm	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
2016	Barium	0.0870	0.0870	0.0870	2	2	ppm	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.

Organic Contaminants

Year	Contaminant	Highest Average	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2016	Sinrazine	<0.07	<0.07	<0.07	4	4	ppb	Herbicide runoff.
2016	Altrazine	<0.10	<0.10	<0.10	3	3	ppb	Runoff from herbicide used on row crops.

Unregulated Contaminants

Year	Contaminant	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2016		Chloroform	4.15	1.0	7.3	ppb	By-product of drinking water disinfection.
2016		Bromoform	2.75	1.0	4.5	ppb	By-product of drinking water disinfection.
2016		Bromodichloromethane	6.65	1.0	12.3	ppb	By-product of drinking water disinfection.
2016		Dibromochloromethane	8.2	1.0	15.4	ppb	By-product of drinking water disinfection.

Chloroform, bromoform, bromodichloromethane, and dibromochloromethane are disinfection by-products. There is no maximum contaminant level for these chemicals at the entry point to distribution. Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is

Turbidity

Year	Contaminant	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits	Unit of Measure	Source of Contaminant
2016	Turbidity	0.40	99.4%	0.3	NTU	Silt runoff.

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

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