2014 Annual Drinking Water Quality Report

(Consumer Confidence Report)

City of La Marque

(409) 938-9280

PWSID # 0840006

SPECIAL NOTICE Required language for ALL community public water supplies:

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; 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 (800-426-4791).

Public Participation Opportunities

Date: June 10th, 2015
Time: 10 a.m. - 12 p.m.
Location: Community Room, 1109 B Bayou Rd., La Marque, TX 77568
Phone Number: 409-938-9280

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 espanol, favor de llamar al tel. (409) 938-9280. Para hablar con una persona bilingüe en español.

Our Drinking Water Is Regulated

This report is a summary of the quality of the water we provide our customers. The analysis was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

Sources of 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 pickup substances resulting from the presence of animals or from human activity. 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.

Published June 2014

Where do we get our drinking water

The source of drinking water used by CITY OF LA MARQUE is Purchased Surface Water. 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 Confidence Report. For more information on source water assessments and protection efforts at our system, contact Jason Hubbell, Plant Operations Manager at 409-938-9289.

ALL drinking water may contain contaminants

When drinking water meets federal standards, there may not be any health benefits to purchasing bottled water or point of use devices. 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 (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. The 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.

Required Additional Health Information for Lead

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. 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.

Definitions

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 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 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.

Maximum Residual Disinfectant Level (MRDL)
The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

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

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.

Abbreviations

NTU	Nephelometric Turbidity Units
MFL	million fibers per liter (a measure of asbestos)
pCi/L	picocuries per liter (a measure of radioactivity)
ppm	parts per million, or milligrams per liter (mg/L)
ppb	parts per billion, or micrograms per liter (µg/L)
ppt	parts per trillion, or nanograms per liter
ppq	parts per quadrillion, or picograms per liter

Violations Table

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 experince stomach discomfort.

Violation Type	Violation Begin	Violation End	Violation Explanation
Disinfectant Level Quarterly Operating Report (DLQOR).	10/01/2014	12/31/2014	We failed to submit the Disinfectant Level Quarterly Report to TCEQ within the specified time frame, these reports are due quarterly.

The CITY OF LA MARQUE water system PWS ID 0840006 has violated the monitoring and reporting requirements set by Texas Commission on environmental Quality (TCEQ) in Title 30, Texas Administrative Code (30 TAC), Section 290, Subchapter F. Public water systems are required to properly disinfect water before distribution, maintain acceptable disinfection residuals within the distribution system, monitor the disinfectant residual at various locations throughout the distribution system, and report the results of that monitoring to the TCEQ on a quarterly basis.

Results of regular monitoring are an indicator of whether or not your drinking water is safe from microbial contamination.

This violation occurred in the monitoring period: October 1, 2014 – December 31, 2014. We are taking the following actions to address this issue: The report for the above monitoring period was submitted to TCEQ immediately upon receiving the notice of the reporting violation.

If you have questions regarding this matter, you may contact Jason Hubbell at 409-938-9289.

About The Following Tables:

The Following Tables list all of the federally regulated or monitored constituents which have been found in your drinking water.
The U.S. EPA requires water systems to test up to 97 contaminants.

Purchased Surface Water from GCWA Texas City

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorite	2014	0.425	0.104-0.425	0.8	1	ppm	N	By-product of drinking water disinfection.
Haloacetic Acids (HAA5)*	2014	12	11.8-11.8	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TThm)*	2014	50	49.7-49.7	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

* Not all sample results may have been used for calculating the Highest Level because some results may be part of an evaluation to determine where compliance sampling should occur in the future.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2014	0.0859	0.0859-0.0859	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2014	0.2	0.23-0.23	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)	2014	1	0.79-0.79	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

NITRATE ADVISORY — 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.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	03/21/2012	1	1-1	0	5	pCi/L	N	Erosion of natural deposits.

Synthetic Organic Contaminants including Pesticides & Herbicides	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Atrazine	2014	0.29	0.29-0.29	3	3	ppb	N	Runoff from herbicide used on row crops.

Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0		0	0	0	N	Naturally present in the environment.

Disinfectant Residual

Disinfectant Type	Average Level	Min Level	Max Level	MRDL	MRDLG	Unit	Source
Chlorine	2.25	0.5	3.9	4.0	<4.0	ppm	Disinfectant used to control microbes.

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)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2013	1.3	1.3	0.171	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2013	0	15	4.13	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

City of La Marque

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)*	2014	11.8	10 - 30.6	No goal for the total	60	ppb	N	By-product of drinking water chlorination.
Total Trihalomethanes (TThm)*	2014	50	31 - 90.2	No goal for the total	80	ppb	N	By-product of drinking water chlorination.

* Not all sample results may have been used for calculating the Highest Level because some results may be part of an evaluation to determine where compliance sampling should occur in the future.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Nitrate (measured as Nitrogen)	2014	.79	0.72 - 1.82	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

NITRATE ADVISORY — 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.

Nitrite (measured as Nitrogen)	2014	Levels lower than detect level	0 - 0	1	1	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Synthetic Organic Contaminants including Pesticides	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Dalapon	2014	Levels lower than detect level	0-0	200	200	ppb	N	Runoff from herbicide used on rights of way.

Volatile Organic Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Vinyl Chloride	2014	Levels lower than detect level	0-0	0	2	ppb	N	Leaching from PVC piping; Discharge from plastics factories.

Turbidity

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.

Year	Contaminant	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits	Unit of Measurement	Source of Contaminant
2014	Turbidity	0.62	100	0.5	NTU	Soil run off.