2014 Annual Drinking Water Quality Report Consumer Confidence Report(CCR)

PWS ID NUMBER: TX0310005 PWS N

PWS Name: LAGUNA MADRE WATER DISTRICT

Annual Water Quality Report for the period of January 1 to December 31, 2014

For more information regarding this report

contact:

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.

ur Name: <u>Carlos Galvan Phone: (956)943-2626</u>

Este reporte incluye informacion importante sobre el agua

para tomar. Para asistencia en español, favor de llamar al telefono (956)943-2626.

LAGUNA MADRE WATER DISTRICT is surface water

Sources of Drinking Water

The sources of 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-occuring minerals and, in some cases, radioactive material, and can pickup 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-occuring 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-occuring 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 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 plumbming. We are responsible for providing high quality drinking water, but we cannot control the variety of materials used in plumbming 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.

Information about Source Water Assessments

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 of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information contained in the assesment allows us to focus 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.txus/swar/Controller/index.jsp?vtrsrc=

Further details about sources and source-water assessments are available in Drinking Water Watch at the following URL: http://dww.tceq.texas.gov/DWW

Source Water Name

Type of Water

PLANT 2 SW

Californ Bastaria

2014 Regulated Contaminants Detected

Maximum Contaminant Level Goal	Total Coliform Max Contaminant Level		Fecal Coliform or E. coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly	7		0	Y	Naturally present in the environment
	sample				1	

Lead and Copper

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected riskto 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	08/06/2013	1.3	1.3	0.171	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing.
Lead	08/06/2013	0	15	3.76	0	ppb	N	Corrosion of household plumbling systems; Erosion of natural deposits.

Water Quality Test Results

Definitions:

MFL

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

Avg: Maximum Contaminant Level or MCL: Regulatory compliance with some MCLs are based on running average of monthly samples. The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasable using the best available treatment

Maximum Contaminant Level Goal or MCLGs: 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

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

microbial contaminants.

Maximum residual disinfectant level goal or MRDLG:

disinfectants to control microbial contaminants. million fibers per liter(a measure of asbestos)

not applicable

nephelometric turbidity units (a measure of turbidity)

NTU pCi/L picocuries per liter (a measure of radioactivity)
micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water. ppb:

milligrams per liter or parts per million - or one ounce in 7,350 gallons of water. parts per trillion, or nanograms per liter (ng/L)

ppm: ppt

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

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Total Haloacetic Acids (HAA5) *	2014	24	1 - 49.9	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TThm) *	2014	79	27.5 - 157	No goal for the total	80	ppb	Y	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2014	2	0 - 2.1	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2014	0.126	0.121 - 0.126	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Cyanide	2014	30	0 - 30	200	200	ppb	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories
Flouride	2014	0.3	0.3 - 0.34	4	4	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum.
Nitrate [measured as Nitrogen]	2014	0.28	0.08 - 0.28	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	2014	3.9	3.7 - 3.9	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	2014	6	6-6	0	50	bCi/L*	N	Decay of natural and man-made deposits.

226/228	2014	 1-1	0	5	bCi/L*	N	Erosion of natural deposits
Turbidity							

	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination	
Highest single measurement	1 NTU	1 NTU	N	Soil runoff.	
Lowest monthly % meeting limit	0.3 NTU	57.70%	V -	Soil runoff.	

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

Total Organic Carbon

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.

Violation Type	s upon the treatment technique Violation Begin	Violation End	Violation Explanation
MONTHLY COMB FLTR EFFLUENT (IESWTR/LT1)	05/01/2014	05/30/2014	Turbidity levels, though relatively low, exceeded a standard for the month indicated. Turbidity (cloudiness) levels are used to measure effective filtration of drinking water.
MONTHLY COMB FLTR EFFLUENT (IESWTR/LT1)	06/01/2014	06/30/2014	Turbidity levels, though relatively low, exceeded a standard for the month indicated. Turbidity (cloudiness) levels are used to measure effective filtration of drinking water.
Lead and Copper Rule			
mainly from corrosion of lead and copper plum	health by minimizing lead and co bming materials.	opper levels in drinking water	r, primarily by reducing water corrosivity. Lead and copper enter drinking water
Violation Type	Violation Begin	Violation End	Violation Explanation
LEAD CONSUMER NOTICE (LCR)	12/30/2013	07/01/2014	We failed to provide the results of lead tap water monitoring to the consumers at the location water was tested. These were supposed to be provided no later than 30 days after learning the results.
Public Notification Rule		***************************************	
The Public Notification Rule helps to ensure the problem with their drinking water (e.g., a boil w	at consumers will always know i	f there is a problem with the	r drinking water. These notices immediately alert consumers if there is a serious
Violation Type	Violation Begin	Violation End	Violation Explanation
PUBLIC NOTICE RULE LINKED TO VIOLATION	11/04/2010	2014	We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations.
PUBLIC NOTICE RULE LINKED TO VIOLATION	11/04/2010	2014	We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations.
PUBLIC NOTICE RULE LINKED TO VIOLATION	11/04/2010	2014	We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations.
Total Coliform			
Coliforms are bacteria that are naturally presenthan are allowed and this was a warning of pot	it in the environment and are use ential problems.	ed as an indicator that other,	potentially harmful, bacteria may be present. Coliforms were found in more samples
Violation Type	Violation Begin	Violation End	Violation Explanation
MCL (TCR), MONTHLY	06/01/2014	06/30/2014	Total coliform bacteria were found in our drinking water during the period indicated in enough samples to violate a standard.
MCL (TCR), MONTHLY	08/01/2014	08/30/2014	Total coliform bacteria were found in our drinking water during the period indicated in enough samples to violate a standard.
MCL (TCR), MONTHLY	09/01/2014	09/30/2014	Total coliform bacteria were found in our drinking water during the period indicated in enough samples to violate a standard.
Total Trihalomethanes (TTHM)			Seman.
Some people who drink water containing trihak have an increased risk of getting cancer.	omethanes in excess of the MCL	over many years may expe	ience problems with their liver, kidneys, or central nervous systems, and may
Violation Type	Violation Begin	Violation End	Violation Explanation
MCL, LRAA	10/01/2014	12/31/2014	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL. for the period indicated