

# 2010 Annual Drinking Water Quality Report

(Consumer Confidence Report)

LAGUNA MADRE WATER DISTRICT

(956) 943-2626

## SPECIAL NOTICE

**Required language for ALL community public water supplies:**

"...Infants, some elderly, or immunocompromised persons such as those undergoing chemotherapy; 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 of infections...", you may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. You should seek advice about drinking water from your physician or health care provider. Additional guidelines appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline at 1(800)426-4791.

## **ALL drinking water may contain contaminants**

When drinking water meets federal standards there may not be any health based 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 the 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 1(800)426-4791.

## **Public Participation Opportunities**

**Date:** Every Second and Fourth Wednesday of the month

**Time:** 6:00 P.M.

**Location:** Laguna Madre Water District Board Room

**Phone Number:** (956) 943 - 2626

To learn about future public meetings (concerning your drinking water), or to request to schedule one, please call us.

## **Where do we get our drinking water?**

The source of drinking water used by LAGUNA MADRE WATER DISTRICT is Surface Water. 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. Some of this source water assessment information is available on Texas Drinking Water Watch at the website <http://dww.tceq.state.tx.us/DWWW/>. For more information on source water assessments and protection efforts at our system please contact us.

## **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.

## **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 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.

## **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 (ug/l)  
ppt- parts per trillion, or nanograms per liter  
ppq- parts per quadrillion, or picograms per liter

## **Source 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. It can also pick up 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 agricultural, 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.

## **En Español**

Este reporte incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre este informe en español, favor de llamar al tel. (956)943-2626 para hablar con una persona bilingue en español.

## 2010 Regulated Contaminants Detected

### Coliform Bacteria

Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E.Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 Positive Monthly Sample	3	Fecal Coliform or E. Coli MCL: A routine sample and a repeat sample are Total coliform positive, and one is also fecal coliform or E. Coli positive.	Y	Naturally Present in the environment

### Maximum Residual Disinfectant Level

Disinfectant Type	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	UNIT	Source
Chloramines	3.28	0.6	4	4	4	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. ALG's allow for a margin of safety.

**Action Level (AL):** 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)	The 90th Percentile	#Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	8/29/2007	1.3	1.3	0.128		ppm	N	Corrosion of household plumbing systems; erosion of natural deposits.
Lead	8/29/2007	0	15	2.5		ppb	N	Corrosion of household plumbing systems; Leaching from wood preservatives.

### 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>."

### Disinfectants and Disinfection By - Products

Disinfection By - Products	Collection Date	Highest Level Detected	Range of Level Detected	MCLG	MCL	Units	Violation	Likely Source of Contaminant
Haloacetic Acids (HAA5)*	2010	37	13.1 - 85.1	No Goal for the Total	17.2	ppb	N	By - Product of drinking water chlorination
Total Trihalomethanes (TTHM)*	2010	68	16 - 163.4	No Goal for the Total	38.8	ppb	N	By - Product of drinking water chlorination

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Level Detected	MCLG	MCL	Units	Violation	Likely Source of Contaminant
Flouride	2010	0.36	0.32 - 0.36	4	4	ppm	N	Erosion of Natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (measured as Nitrogen)	2010	0.16	0.1 - 0.16	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of Natural deposits.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Level Detected	MCLG	MCL	Units	Violation	Likely Source of Contaminant
Beta/Photon emitters	3/20/2008	6	6 - 6	0	4	mrem/yr	N	Decay of natural and man-made deposits.

## 2010 Regulated Contaminants Detected

### Turbidity

	Limit (Treatment Technique)	Level Detected	Violation	Likely source of Contaminant
Highest single measurement	1 NTU	0.54 NTU	N	Soil runoff
Lowest monthly % meeting limit	0.3 NTU	89.45%	Y	Soil runoff

#### Definitions:

##### 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 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 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.

##### 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.

**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 tables used contain scientific terms and measures, some of which may require explanation.

#### Violations Table

<b>Interim Enhanced SWTR</b>			
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 Begins	Violation Ends	Violation Explanation
MONTHLY COMBINED FILTER EFFLUENT (IESWTR/LT1)	4/1/2010	4/30/2010	Turbidity levels, though relatively low, exceeded a standard for the month indicated. Turbidity (cloudiness) levels are used to measure effective filtration of drinking water.

#### Total Coliform

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

Violation Type	Violation Begins	Violation Ends	Violation Explanation
MCL(TCR), MONTHLY	9/1/2010	9/30/2010	Total coliform bacteria were found in our drinking water during the period indicated in enough samples to violate a standard.

#### Steps to Correct Violations

Performed required tests needed to determine the cause and corrected the problem. We cleaned the filtration system and calibrated all our equipment.
We cleaned the affected sampling sites and changed the method on collecting samples. We also changed the Laboratory used to tests our samples.