

2008 Annual Drinking Water Quality Report

(Consumer Confidence Report)

LOWER VALLEY WATER DISTRICT

Phone Number:

Special Notice for the ELDERLY, INFANTS, CANCER PATIENTS, people with HIV/AIDS or other immune problems:

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The EPA/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Public Participation Opportunities

Date:

Time:

Location:

Phone Number:

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

OUR DRINKING WATER IS REGULATED

by the Texas Commission on Environmental Quality (TCEQ) and they have determined that certain water quality issues exist which prevent our water from meeting all of the requirements as stated in the Federal Drinking Water Standards. Each issue is listed in this report as a violation and we are working closely with the TCEQ to achieve solutions.

WATER SOURCES: 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: microbes, inorganic contaminants, pesticides, herbicides, radioactive contaminants, and organic chemical contaminants.

En Español

Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre éste informe en español, favor de llamar al tel. () _ _ _ - _ _ _ _ - para hablar con una persona bilingüe en español.

Where do we get our drinking water?

Our drinking water is obtained from SURFACE AND GROUND water sources. It comes from the following Lake/River/Reservoir/Aquifer: HUECO-MESILLA BOLSON, RIVERSIDE CANAL, FRANKLIN CANAL, ALLUVIAL. A Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by the Texas Commission on Environmental Quality and will be provided to us this year. The report will describe 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 will allow us and/or the system(s) from which we receive water to focus on source water protection strategies. For more information on source water assessments and protection efforts at our system, please contact us.

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 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. These 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.

About The Following Pages

The pages that follow list 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 for up to 97 contaminants.

DEFINITIONS

Maximum Contaminant Level (MCL)

The highest permissible level of a contaminant in drinking water. MCLs are set as close to the 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 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 contamination.

Treatment Technique (TT)

A required process intended to reduce the level of a contaminant in drinking water.

Action Level (AL)

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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

Inorganic Contaminants

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2008 2006	Arsenic <i>* The arsenic value was effective January 23, 2006. In the event of a violation, you will be notified.</i>	6	0	7	10	0	ppb	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
2008 2005	Barium	0.078	0.026	0.119	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
2008 2005	Chromium	3.3	0	8.4	100	100	ppb	Discharge from steel and pulp mills; erosion of natural deposits.
2008 2005	Fluoride	0.71	0.56	1.07	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2008 2005	Nitrate	1.39	0	4.82	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
2008 2005	Selenium	3.3	0	9.1	50	50	ppb	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.
2008 2005	Thallium	0.02	0	0.49	2	.5	ppb	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories.
2008 2005	Combined Radium 226 & 228	0.18	0	0.35	5	0	pCi/L	Erosion of natural deposits.
2008 2005	Gross beta emitters	7.28	0	16.5	50	0	pCi/L	Decay of natural and man-made deposits.
2008 2005	Gross alpha	2.15	0	4.9	15	0	pCi/L	Erosion of natural deposits.

Required Additional Health Information for Arsenic

The maximum contaminant level (MCL) for arsenic decreased from 0.05 mg/L (50 ppb) to 0.010 mg/L (10 ppb) effective January 23, 2006. Because the highest reported arsenic level on this report is between 5 ppb and 10 ppb, the following information is required by EPA:

"While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's 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."

Organic Contaminants TESTING WAIVED, NOT REPORTED, OR NONE DETECTED

Maximum Residual Disinfectant Level

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Disinfectant
2008	Chlorine Residual, Free	0.9	0.2	3.3	4	4	ppm	Disinfectant used to control microbes.

Disinfection Byproducts

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Contaminant
2008	Total Haloacetic Acids	13.7	0	31	60	ppb	Byproduct of drinking water disinfection.
2008	Total Trihalomethanes	44.6	2.9	110.4	80	ppb	Byproduct of drinking water disinfection.

Unregulated Initial Distribution System Evaluation for Disinfection Byproducts

This evaluation is sampling required by EPA to determine the range of total trihalomethane and haloacetic acid in the system for future regulations. The samples are not used for compliance, and may have been collected under non-standard conditions. EPA also requires the data to be reported here.

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Contaminant
2007	Total Haloacetic Acids	11.1	0	47.5	NA	ppb	Byproduct of drinking water disinfection.
2007	Total Trihalomethanes	51.6	0	164	NA	ppb	Byproduct of drinking water disinfection.

Unregulated Contaminants

Bromoform, chloroform, dichlorobromomethane, and dibromochloromethane are disinfection byproducts. There is no maximum contaminant level for these chemicals at the entry point to distribution.

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2008 2005	Chloroform	4.83	0	29.63	ppb	Byproduct of drinking water disinfection.
2008 2005	Bromoform	11.59	0	20.05	ppb	Byproduct of drinking water disinfection.
2008 2005	Bromodichloromethane	9.85	0	28.87	ppb	Byproduct of drinking water disinfection.
2008 2005	Dibromochloromethane	15.11	0	28.39	ppb	Byproduct of drinking water disinfection.

Lead and Copper

Year	Contaminant	The 90th Percentile	Number of Sites Exceeding Action Level	Action Level	Unit of Measure	Source of Contaminant
2007	Lead	1.9	0	15	ppb	Corrosion of household plumbing systems; erosion of natural deposits.
2007	Copper	0.437	0	1.3	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

Recommended Additional Health Information for Lead

All water systems are required by EPA to report the language below starting with the 2009 CCR to be delivered to you by July of 2010. We are providing this information now as a courtesy.

"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>."

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 Measure	Source of Contaminant
2008	Turbidity	0.30	100.00	0.3	NTU	Soil runoff.

Total Coliform

Total coliform bacteria are used as indicators of microbial contamination of drinking water because testing for them is easy. While not disease-causing organisms themselves, they are often found in association with other microbes that are capable of causing disease. Coliform bacteria are more hardy than many disease-causing organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption.

Year	Contaminant	Highest Monthly % of Positive Samples	MCL	Unit of Measure	Source of Contaminant
2008	Total Coliform Bacteria	2	*	Presence	Naturally present in the environment.

*** Presence of coliform bacteria in 5% or more of the monthly samples.**

Fecal Coliform REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA.

VIOLATIONS

Violation Type	Health Effects	Duration	Explanation	Steps to Correct
DISTRIBUTION: DISINFECTANT RESIDUAL - FAILURE TO MONITOR OR REPORT REQUIRED SAMPLES	We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During this compliance period, we did not correctly monitor or report, and therefore TCEQ cannot be sure of the quality of your drinking water during that time.	10/1/2008 to 12/31/2008	<i>PWS must complete this section.</i>	<i>PWS must complete this section.</i>

Secondary and Other Constituents Not Regulated

(No associated adverse health effects)

Year or Range	Constituent	Average Level	Minimum Level	Maximum Level	Secondary Limit	Unit of Measure	Source of Constituent
2008 2005	Bicarbonate	112	63	195	NA	ppm	Corrosion of carbonate rocks such as limestone.
2008 2005	Calcium	40.3	23.3	54.8	NA	ppm	Abundant naturally occurring element.
2008 2005	Chloride	180	19	255	300	ppm	Abundant naturally occurring element; used in water purification; byproduct of oil field activity
2008 2005	Copper	0.004	0	0.01	1	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
2008 2005	Hardness as Ca/Mg	153	0	302	NA	ppm	Naturally occurring calcium and magnesium.
2008 2005	Magnesium	10.4	1.4	15.5	NA	ppm	Abundant naturally occurring element.
2008 2005	Manganese	0.0027	0	0.0181	.05	ppm	Abundant naturally occurring element.
2008 2005	Nickel	0.001	0	0.002	NA	ppm	Erosion of natural deposits.
2008 2005	pH	8.1	7.3	8.3	>7.0	units	Measure of corrosivity of water.
2008 2005	Sodium	145	104	194	NA	ppm	Erosion of natural deposits; byproduct of oil field activity.
2008 2005	Sulfate	104	44	284	300	ppm	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
2008 2005	Total Alkalinity as CaCO ₃	112	63	195	NA	ppm	Naturally occurring soluble mineral salts.
2008 2005	Total Dissolved Solids	579	320	892	1000	ppm	Total dissolved mineral constituents in water.
2008 2005	Zinc	0.007	0	0.024	5	ppm	Moderately abundant naturally occurring element; used in the metal industry.