2012 Annual Drinking Water Quality Report

(Consumer Confidence Report)

CITY OF LEANDER

Office Phone No. (512) 259-2640

Special Notice for the ELDERLY, INFANTS, CANCER PATIENTS, 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 immune-compromised, such as those undergoing chemotherapy for cancer; those who have undergone organ transplants; those who are undergoing treatment with steroids; and or people with other immune system disorders can be particularly at risk from infection. You should seek advice about drinking water from your physician or health care provider. Additional guidelines for 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

The City Council meets on the first and third Thursday of each month at 7:00 p.m. at 201 North Brushy St., Leander, Texas. To confirm meeting dates and times, please call 528-2700.

The City's water system is operated by the Public Works Water and WasteWater Department. If you have any questions concerning water quality or the source of your water, please call (512) 528-2700. You may review the Consumer Confidence report on the City of Leander's website at www.leandertx.org.

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.

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 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.

En Español

Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre este informe en Español, favor de llamar al tel. (512) 528-2700 para hablar con una persona bilingue en Español.

Where do we get our drinking water?

The source of drinking water used by CITY OF LEANDER is purchased surface water. A Source Water Susceptibility Assessment for your drinking water sources 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 http://www.tceq.state.tx.us/DWW/. 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, secondary's 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.

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.

Avg
Regulatory compliance with some MCLs is based on running annual average of monthly samples.

ppm
Milligrams per liter or parts per million – or one ounce in 7,350,000 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 litter
ppq – parts per quadrillion, or picograms per litter

Inorganic Contaminants

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Violations	Source of Contaminant
2005	Barium (ppm)	NA	0.0569	0.0569	2	2	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
2013	Fluoride (ppm)	0.21	0.21	0.21	4	4	N	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2013	Nitrate (ppm)	0.24	0.18	0.30	10	10	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
2012	Gross beta emitters (pCi/L)	<4.0	<4.0	<4.0	50	0	N	Decay of natural and man-made deposits.

Organic Contaminants

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Source of Contaminant
2009	Xylenes (ppm)	.00052	<0.0005	0.0006	10	10	Organic compound generally found in solvents.

Maximum Residual Disinfectant Level

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Source of Disinfectant
2012	Chloramines (ppm)	3.0	1.0	3.9	4.0	4.0	Disinfectant used to control microbes

Unregulated Initial Distribution System Evaluation (IDSE) Reporting

This evaluation is sampling required by EPA to determine the range of total trihalomethanes and haloacetic acids in the system for future regulations. The samples are not used for compliance, and may have been collected under non-standard conditions. EPA requires data to be reported here. Please contact your water system representative if you have any questions.

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Contaminant
2011	Total Haloacetic Acids	8.75	3.7	23.2	60	ppb	Byproduct of drinking water disinfection.
2011	Total Trihalomethanes	13.65	3.0	48.2	80	ppb	Byproduct of drinking water disinfection.

Disinfection Byproducts

Year	Contaminant	Average Level	Minimum Level	Highest Level	MCL	Unit of Measure	Source of Contaminant
2012	Total Haloacetic Acids	11.5	5.0	17.4	60	ppb	Byproduct of drinking water disinfection.
2012	Total Trihalomethanes	22.7	4.0	41.3	80	ppb	Byproduct of drinking water disinfection.

Unregulated Contaminants

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

Year	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2012	Chloroform	6.4	2.9	10.2	ppb	Byproduct of drinking water disinfection.
2012	Bromoform	3.2	<1.0	6.0	ppb	Byproduct of drinking water disinfection.
2012	Bromodichloromethane	6.5	1.1	11.4	ppb	Byproduct of drinking water disinfection.
2012	Dibromochoromethane	7.5	<1.0	13.8	ppb	Byproduct of drinking water disinfection.

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

YEAR	Contaminant	The 90th Percentile	MCLG	Number of Sites Exceeding Action Level	Action Level	Unit of Measure	Violation	Source of Contaminant
2010	Lead	1.91	0	0	15	ppb	N	Corrosion of household plumbing systems; erosion of natural deposits.
2010	Copper	0.817	1.3	0	1.3	ppm	N	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

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	Source of Contaminant
2012	Turbidity (NTU)	0.29	100.00	0.3	Soil runoff.

Total Organic Carbon

Total organic carbon (TOC) has no health effects. The disinfectant can combine with TOC to form disinfection byproducts. Disinfection is necessary to ensure that water does not have unacceptable levels of pathogens. Byproducts of disinfection include trihalomethanes (THMs) and haloacetic acids (HAA) which are reported elsewhere in this report.

Year	Contaminant	Average Level	Minimum Level	Maximum Level	Unite of Measure	Source of Contaminant
2012	Source Water	3.87	3.43	4.29	ppm	Naturally present in the environment
2012	Drinking Water	3.62	3.27	4.13	ppm	Naturally present in the environment
2012	Removal Ratio	0.26	0.19	0.15	% of removal*	NA

*Removal ratio is the percent of TOC removed by the treatment process divided by the percent of TOC required by TCEQ to be removed.

Total Coliform REPORTED MONTHLY TESTS FOUND NO TOTAL COLIFORM BACTERIA

Fecal Coliform REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA

Secondary and Other Constituents Not Regulated (No associated adverse health effects)

Year	Contaminant	Average Level	Minimum Level	Maximum Level	Limit	Source of Contaminant
2013	Bicarbonate (ppm)	159	159	159	NA	Corrosion of carbonate rocks such as limestone.
2013	Chloride (ppm)	40.3	40.3	40.3	300	Abundant naturally occurring element; used in water purification; byproduct of oil field activity.
2012	Hardness Ca/Mg (ppm)	165	156	176	NA	Naturally occurring calcium and magnesium
	Grains/Gallon	9.59	9.06	10.2		
2012	pH (units)	8.4	8.0	8.7	7	Measure of corrositivity of water.
2013	Sulfate (ppm)	27.5	27.5	27.5	300	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
2013	Total Alkalinity as CaCO3 (ppm)	159	159	159	NA	Naturally occurring soluble mineral salts.
2013	Total Dissolved Solids (ppm)	276	276	276	1000	Total dissolved mineral constituents in water.

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