

2010 Drinking Water Quality Report



LCRA Bonanza Beach Water System

We're committed to providing safe drinking water

The State of Texas has completed a Source Water Susceptibility Assessment for your drinking water sources as required by the U.S. Environmental Protection Agency. This assessment identifies potential contaminant sources and will help in the development of source water protection efforts. Additional information about source water assessments can be found at <http://www.epa.gov/safewater/protect.html>.

LCRA tests your drinking water and reports the results to you annually in compliance with the federal Safe Drinking Water Act. This is your report for 2010.

Tests conducted in 2010 verify that the water delivered by LCRA to residents served by the Bonanza Beach Water System is safe according to federal and state standards with the **exception of Radium 226 & 228**. Residents receive quarterly notices by mail of this violation of the drinking water standards.

Special notice from EPA for the elderly, infants, cancer patients and people with HIV/AIDS or other immune system problems

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.

What is the source of drinking water?

The LCRA Bonanza Beach Water System gets its water from the Hickory aquifer. Well water is pumped to a storage tank where chlorine is added for disinfection. Treated water then passes through pipelines to your home.

Why must drinking water be treated?

The source of water — both tap and bottled — includes rivers, lakes, streams, ponds, reservoirs, springs and wells. As water flows over land or seeps through the ground it dissolves naturally occurring minerals and, in some cases, natural or manmade radioactive material. It might also pick up substances resulting from the presence of animals or from human activity. Untreated water may contain microbial contaminants, such as bacteria and viruses; suspended materials such as silt and metals, which can be natural or the result of stormwater runoff; pesticides and herbicides; organic chemicals from industry and petroleum production; and radioactive contaminants that are either natural or the byproduct of oil and gas production and mining operations.

What effect does chlorine have on drinking water?

Chlorine is a natural element commonly used to disinfect drinking water. Since its use began in the United States almost 100 years ago, chlorination has virtually eradicated waterborne diseases such as typhoid fever, cholera and dysentery.

Scientists discovered about 30 years ago that chlorine reacts with naturally occurring chemicals in the water to create low concentrations of disinfectant byproducts (DBPs). EPA regulates the sum of these

byproducts because they are considered a health risk if consumed in high concentrations over many years.

The disinfectant byproducts detected in your water are listed individually in the table and also shows the sum of these substances as total trihalomethanes. The level of total trihalomethanes in your water is below the EPA limit of 80 parts per billion.

What measures are in place to ensure water is safe to drink?

Drinking water, including bottled water, may be reasonably 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 at (800)426-4791.

EPA and the Texas Commission on Environmental Quality (TCEQ) regulate the amount of certain substances in public water systems. LCRA and TCEQ routinely monitor these systems for the presence of these regulated substances according to state and federal law. The U.S. Food and Drug Administration regulates the quality of bottled water.

Improvements to the Bonanza Beach Water System.

LCRA has completed installation of a new water storage tank and a new pressure tank to replace the old water storage tanks.

Special Notice from EPA concerning Lead in Water

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. LCRA Bonanza Beach Water System 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 www.epa.gov/safewater/lead.

Contact

For answers to other questions about your water system, please contact Gloria Broussard at (512) 473-3200, or by e-mail at gloria.broussard@lcra.org. The information in this report is on LCRA's Web site at www.lcra.org.

Contáctenos

Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (512) 397-6766 o 1-800-776-5272, Ext. 6766, o por correo electrónico a gloria.broussard@lcra.org.

Analyses

2010 Coliform

Parameter	Number of Tests	Result
Total Coliform	12	No Total Coliform Bacteria
Escherica Coliform	12	No Escherica Coliform Bacteria

Total coliform bacteria are naturally present in the environment and are used as an indicator for other, potentially harmful bacteria which may be present.

Water Hardness – 23 gpg or 389 ppm

Key to Water Quality Terms

Action level (AL) – The concentration of a contamination that, if exceeded, triggers treatment or other requirements that a water system must follow.

Grain per gallon (gpg) – One grain per gallon equals 17.12 ppm. For customers with new appliances hardness is usually referenced in grains per gallon (gpg).

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 allows 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 maximum contaminant level goals 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 a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants. The running annual average of the chloramine residual in the distribution system shall not exceed the MRDL of 4.0 mg/L

NA – Not applicable, constituent is not yet regulated.

Nephelometric turbidity unit (NTU) – A measure of turbidity. Only surface water systems report turbidity, groundwater systems do not.

Parts per million (ppm) – One part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) – One part per billion corresponds to one minute in 2,000 years or a single penny in \$10 million.

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

Inorganics							
Year	Constituent	Highest Level at Any Sampling Point	Complies with Regulation	MCL	MCLG	Units of Measure	Source of Constituent
2010	Fluoride	0.27	Yes	4	4	ppm	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
2010	Nitrate	1.87	Yes	10	10	ppm	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
2007	Barium	0.008	Yes	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
2007	Selenium	5	Yes	50	50	ppb	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.
2007	Sodium	28	NA	NA	NA	ppm	Erosion of natural deposits; Oilfield activity.

Radiochemicals								
Year	Constituent	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Units of Measure	Source of Constituent
2010	Uranium	6	5.3	6.0	30	0	ppb	Erosion of natural deposits.
2010	Combined Radium 226 & 228	8	7.88	9.5	5	0	pCi/L	Erosion of natural deposits. <i>Some people who drink water containing radium 226 & 228 in excess of the MCL over many years may have an increased risk of getting cancer.</i>
2010	Gross Beta Emitters	16	14.8	17.8	50	0	pCi/L	Decay of natural and man-made deposits. The MCL for beta particles is 4 mrem/year. EPA considers 50 pci/L to be the level of concern for beta particles.
2010	Gross Alpha	17	12.7	21.9	15	0	pCi/L	Erosion of natural deposits.
LCRA's Bonanza Beach Water System was in violation of the Combined Radium 226 & 228 drinking water standard during all 4 monitoring periods in 2010. As explained above Radium 226 & 228 is caused by erosion of natural deposits. LCRA is still looking for a cost effective solution for the residents of Bonanza Beach.								

Disinfectant Residual Levels – MRDL applies to the running annual average level and disinfectant residuals are in compliance.								
Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Units of Measure	Source of Constituent
2010	Chlorine	1.95	0.3	4.9	4.0	<4.0	ppm	Disinfectant used to control microbes

Disinfection Byproducts (DBPs) – System is in compliance.								
Year	Constituent	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Constituent	
2008	Total Trihalomethanes	14.8	14.8	14.8	80	ppb	By-product of drinking water disinfection	
2008	Total Haloacetic Acids	4.5	4.5	4.5	60	ppb	By-product of drinking water disinfection	

Lead and Copper – Flushing water through your tap anytime the water has gone unused for more than 6 hours will reduce your exposure to lead and copper.							
Year	Constituent	The 90th Percentile	Number of Sites Exceeding the Action Level	Action Level	Units of Measure	Complies with Regulations	Source of Constituent
2009	Lead	11.1	1	15	ppb	Yes	Corrosion of household plumbing systems; Erosion of natural deposits.
2009	Copper	0.231	0	1.3	ppm	Yes	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.