

# City of Lubbock

# Water Quality Report 2005

July 2006

## Be a Smart Consumer

How do you use water? The most common answer to this question is water is used to drink. According to the American Water Works Association, the average American drinks approximately two pints of water per day, so statistically this is not the case.

Based on a comparison of winter and summer water use patterns, water consumption increases by 50% in the summer time. Typically the only thing that changes from winter to summer is our outdoor water use. It is important that we understand how we use water so that we may continue to learn how to use it more wisely.

The City of Lubbock continues to encourage our customers to use our water wisely and prevent run off by following a few simple common sense rules:

- During Daylight Savings Time, water only between the hours of 6 p.m. to 10 a.m. This is when evaporation and wind is typically at its lowest during the day. This allows more of the water to go on the grass rather than evaporating. This is required in the City of Lubbock Code of Ordinances 28-44.
- Make sure your sprinkler timer is set correctly. If the sprinkler applies water faster than the grass can absorb the water, run off will occur. This is the most common issue faced by City of Lubbock employees sent to investigate these types of complaints.
- Make sure your sprinkler system is maintained properly. Broken heads can create a shooting fountain in the yard, but can also cause a customer's monthly water bill to shoot up. Proper maintenance of a sprinkler system is required in the City of Lubbock Code of Ordinances 28-44.
- Unattended hoses also generate many complaints for City of Lubbock staff. Customers put the hose in flower beds with every intention of returning to check on them. Many times they are then forgotten. Again this can cause a substantial increase in your monthly bill.

By practicing these few simple rules, you can use your water wisely and save money on your water bill.

## Where Does Our Water Come From?

The City of Lubbock's drinking water comes from both surface and ground water sources. During 2005, the citizens of Lubbock used approximately 13 billion gallons of water. Our primary water source is Lake Meredith and wells located in Roberts County which is located approximately 150 miles north of Lubbock. The Canadian River Municipal Water Authority (CRMWA) manages and maintains these water sources and the aqueduct system that transports this water to Lubbock. Of the 13 billion gallons of water used, 75% of the water was supplied by CRMWA. The remaining 25% of water used was supplied by well fields located in Bailey County.

## Source Water Assessment

TCEQ completed an assessment of your source water and results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detection of these contaminants will be found in this Water Quality Report. For more information on source water assessments and protection efforts in our system, contact the numbers located on the back of this report.

Este reporte incluye informacion importante sobre el agua para tomar. Para ayuda en espanol, favor de llamar al telefono 775-2592.

## Drinking Water Meets or Exceeds All Federal (EPA) Drinking Water Requirements

This report is a summary of the quality of the water Lubbock provides to its customers. The analysis was made using data from the most recent EPA required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about what is in your drinking water. This report represents data for the year 2005.

# Helpful Definitions for Reading this Report

**Maximum Contaminant Level Goal (MCLG)** – The level of a contaminant, or substance, in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

**Maximum Contaminant Level (MCL)** – The highest level of a contaminant, or substance, that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available technology.

**Action Level (AL)** – The concentration of a contaminant, or substance, which, if exceeded, triggers treatment or other requirement which a water system must follow.

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

**Part per million (ppm)** – One part per million. For example, if you had one million dollars, one part per million would equal one dollar.

**Part per billion (ppb)** – One part per billion. For example, if you had one billion dollars, one part per billion would equal one dollar.

**mrem/year** – millirems per year (a measure of radiation absorbed by the body)

**NTU** – nephelometric turbidity units (a measure of turbidity)

**pCi/L** – picocuries per liter (a measure of radioactivity)

**MRDL** – Maximum Residual Disinfection Level. 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.

**MRDLG** – Maximum Residual Disinfection Level Goal. The level of a drinking water contaminant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to

## Important Information for Your Consideration

**Special Information for People with Weakened Immune Systems: 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. EPA/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)**

## What Do You Know About Bottled Water?

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. 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 about taste, odor or color of drinking water, please call 775-2587. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at (800) 426-4791.

SUBSTANCE	MONITORING DATE	MCL	HIGHEST LEVEL DETECTED	MCLG	RANGE	SOURCES OF CONTAMINATION
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**REGULATED AT TREATMENT PLANT**

BETA/PHOTON EMITTERS	2002-2005	50 pCi/L*	8.7 pCi/L	0	6.2-6.5 pCi/L	Decay of natural and made deposits
ALPHA EMITTERS	2002-2005	15 pCi/L	7.6 pCi/L	0	3.8-5 pCi/L	Erosion of natural deposits
RADIUM 226 & 228 COMBINED	2002-2005	5 pCi/L	1.5 pCi/L	0	0.7-2.3 pCi/L	Erosion of natural deposits
ARSENIC	2004-2005	10 ppb**	3.9 ppb	0	2.1-3.9 ppb	Erosion of natural deposits; runoff from orchards
BARIUM	2004-2005	2 ppm	0.149 ppm	2 ppm	0.101-0.149 ppm	Erosion of natural deposits
FLUORIDE	2004-2005	4 ppm	1.21 ppm	4 ppm	0.7 - 1.21 ppm	Erosion of natural deposits
CHROMIUM	2004-2005	100 ppb	6.7 ppb	100 ppb	0-6.7 ppb	Run off from fertilizer use; leaching from septic tanks; sewage; erosion
NITRATE	2004-2005	10 ppm	1.06 ppm	10 ppm	0.81-1.06 ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion
TURBIDITY	2005	TT = 5 NTU	0.20 NTU	0	N/A	Soil runoff
		TT = % of samples <0.3 NTU	100%			
TOTAL ORGANIC CARBON	2005	TT	2.4 ppm	TT	1.8-3.4 ppm	Naturally present in environment
CHLORAMINES	2005	MRDL = 4 ppm		MRDLG = 4 ppm	0.1-3.3 ppm	Disinfectant used to control microbes

**REGULATED IN THE DISTRIBUTION SYSTEM**

TOTAL TRIHALOMETHANES	2005	80 ppb	33.7 ppb average	N/A	0-127.3 ppb	By-product of drinking water chlorination
TOTAL COLIFORM	2005	(Systems that collect greater than or equal to 40 samples per month) 5% of monthly samples are positive.	0%	0	0	Naturally present in environment
HALOACETIC ACIDS (5)	2005	60 ppb	13.4 ppb average	N/A	0-22.1 ppb	By-product of drinking water chlorination

**REGULATED AT THE CUSTOMERS' TAP**

LEAD	2003	15 ppb AL	2.0 ppb*** No sites exceeded AL	0	< 0.3-4.0 ppb	Erosion of natural deposits; corrosion of household plumbing systems
COPPER	2003	1.3 ppm AL	0.109 ppm*** No sites exceeded AL	1.3 ppm	0.004-0.262 ppm	Erosion of natural deposits; corrosion of household plumbing systems

**UNREGULATED SUBSTANCES**

CHLOROFORM	2005	Not Regulated	3.0 ppb average	Not Regulated	0-7.8 ppb	Component of Total Trihalomethanes
BROMODICHLOROMETHANE	2005	Not Regulated	8.4 ppb average	Not Regulated	0-25.0 ppb	Component of Total Trihalomethanes
DIBROMOCHLOROMETHANE	2005	Not Regulated	15.5 ppb average	Not Regulated	0-49.2 ppb	Component of Total Trihalomethanes
BROMOFORM	2005	Not Regulated	10.2 average	Not Regulated	0-45.3 ppb	Component of Total Trihalomethanes
SULFATE	2005	300 ppm^	211 ppm	Not Regulated	27-211 ppm	Naturally occurring

The state allows us to monitor for some substances less than once per year because the concentrations of these substances do not change frequently.

\*The MCL for Beta/Photon Emitters is 4 mrem/year. The EPA considers 50 pCi/L to be a level for concern.

\*\*These arsenic values are effective January 23, 2006. Until then, the MCL is 50 ppb and there is currently no MCLG.

^Secondary Constituent Levels set by the Texas Commission of Environmental Quality.

\*\*\*Lead and copper values represent the 90<sup>th</sup> percentile of results from the last sampling conducted in September 2003.

**ADDITIONAL MONITORING**

TOTAL DISSOLVED SOLIDS	2005	1000 ppm <sup>^</sup>	977 ppm	N/A	372-977 ppm	Naturally occurring
SODIUM	2004-2005	Not Regulated	232 ppm	N/A	33.1-232 ppm	Naturally occurring
HARDNESS	2004-2005	Not Regulated	288 ppm	N/A	214-288 ppm	Naturally occurring

<sup>^</sup> Secondary Constituent Levels set by the Texas Commission of Environmental Quality.

## We Welcome Your Comments

If you have any questions regarding water quality issues, please contact:

- The Safe Drinking Water Hotline at 1-800-426-4791
- For questions about Lubbock's water quality, call 775-2614  
Monday – Friday between 7:30 a.m. and 4:30 p.m.
- For general questions about Lubbock Water Utilities, or additional copies of this brochure, call 775-2592  
Monday – Friday between 8 a.m. and 5 p.m.
- City Council meetings are held the 2nd and 4th Thursday of each month.

**We're on the Web!!!**  
[www.water.ci.lubbock.tx.us](http://www.water.ci.lubbock.tx.us)

# Your Annual Water Quality Report

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