City of Lubbock
Water Quality Report 2004

July 2005

Are You an Educated Consumer?

We would all like to think of ourselves as educated consumers, yet in the State of Texas the average homeowner over waters their yard by approximately 50%. This calculates to about 8,500 gallons per month. This not only wastes water, but also causes the consumer to pay a larger water bill than is necessary. Water is a finite resource so it is critical that we at Water Utilities know and understand how our citizens need and use water. As we review the use of water by our customers we find the most prevalent use of water is outdoor watering and water used on landscaping. We would like to encourage our customers to become educated consumers and save money on their water bill by using these tips:

1. Watch for run-off. Run-off indicates water is being applied quicker than the ground can absorb the it. Observe your sprinklers to know the amount of time the sprinklers run before run-off begins. At that time, shut the sprinklers off and allow the ground to absorb the water you have already applied.
2. Know the amount of water your turf and plants require. Typically your grass needs a certain number of inches per week. Rain would discount this amount. A simple way to determine the necessary amount is to check the Texas Cooperative Extension Service web page. It is updated daily and gives the amount of water needed for different types of turf. Knowing this information will help save money on your water bill. The website address is: http://lubbock.tamu.edu/waterconservation/
3. Place similar plants together and in the proper places. Proper landscaping involves grouping plants together that have similar watering and sunlight requirements. If you have plants that require full shade, don't plant them in the sun. Be an educated consumer, know the watering and sunlight requirements for the plants you consider purchasing and make sure you have an area in your yard that will meet those requirements. The City of Lubbock encourages the use of our new website: www.txsmartscape.com to choose plants that perform well in the West Texas area.

Where Does Our Water Come From?

The City of Lubbock's drinking water comes from both surface and ground water sources. During 2004, the citizens of Lubbock used approximately 12 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 12 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 detections 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 elagua para tomar. Para assistencia 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 2004.

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 control microbial contamination.

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	AVERAGE LEVEL	MCLG	RANGE	SOURCES OF CONTAMINATION
Regulated at the Treatment Plant						
ARSENIC	2002 - 2004	10 ppb**	3.15 ppb	N/A	2.1 – 4.2 ppb	Erosion of natural deposits; runoff from orchards
BARIUM	2002 - 2004	2 ppm	0.134 ppm	2 ppm	0.119 – 0.149 ppm	Erosion of natural deposits
FLUORIDE	2002 - 2004	4 ppm	0.8 ppm	4 ppm	0.7 – 0.9 ppm	Erosion of natural deposits
NITRATE	2002 -2004	10 ppm	1.03 ppm	10 ppm	1.0 – 1.05 ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion
SELENIUM	2002 - 2004	50 ppb	2.15 ppb	50 ppb	0 – 4.3 ppb	Erosion of natural deposits
TURBIDITY	2004	TT = 5 NTU	0.27 NTU	0	N/A	Soil runoff
		TT = % of samples <0.3 NTU	100%			
TOTAL ORGANIC CARBON	2004	TT	2.9 ppm	TT	1.7 –2.9 ppm	Naturally present in environment
CHLORAMINES	2004	MRDL = 4 ppm	2.3 ppm annual ave.	MRDLG = 4 ppm	0-3.3 ppm	Water additive used to control microbes
GROSS ALPHA ADJUSTED	2002	15 pCi/L	4.8 pCi/L	0	3.8 – 5.8 pCi/L	Erosion of natural deposits.
GROSS BETA EMITTERS	2002	50 pCi/L	7.45 pCi/L	0	6.2 – 8.7 pCi/L	Decay of natural and manmade deposits.
COMBINED RADIUM	2002	5 pCi/L	0.35 pCi/L	0	0 – 0.7 pCi/L	Erosion of natural deposits
Regulated in the Distribution System						
TOTAL TRIHALOMETHANES	2004	80 ppb	19.3 ppb	N/A	11.6 – 29.9 ppb	By-product of drinking water chlorination
TOTAL COLIFORM	2004	(Systems that collect greater than or equal to 40 samples per month) 5% of monthly samples are positive.	3 %	0	N/A	Naturally present in environment
HALOACETIC ACIDS (5)	2004	60 ppb	7.53 ppb	N/A	0 – 23 ppb	By-product of drinking water chlorination
Regulated at the Customer's 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	2004	Not Regulated	0.5 ppb	Not Regulated	0 -1.9 ppb	Component of Total Trihalomethanes
BROMODICHLOROMETHANE	2004	Not Regulated	4.1 ppb	Not Regulated	2.1-6.3 ppb	Component of Total Trihalomethanes
DIBROMOCHLOROMETHANE	2004	Not Regulated	8.7 ppb	Not Regulated	3.5-15.1 ppb	Component of Total Trihalomethanes
BROMOFORM	2004	Not Regulated	4.9 ppb	Not Regulated	2.6-6.6 ppb	Component of Total Trihalomethanes
SULFATE	2002 - 2004	300 ppm^	134 ppm	Not Regulated	35 – 232 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.

#Availability of Unregulated Contaminant Monitoring Rule Data (UCMR). We participated in gathering data under the UCMR in order to assist EPA in determining the occurrence of possible drinking water contaminants. If any unregulated contaminants were detected, they are shown in the tables elsewhere in this report. This data may also be found on EPA's website at http://www.epa.gove/safewater/data/ncod.html, or you can call the Safe Drinking Water Hotline at 1-800-426-4791.

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

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

Additional Monitoring						
ALUMINUM	2002 - 2004	50 ppb^	32 ppb^^	N/A	0 – 64 ppb	Water Treatment Chemical
CHLORIDE	2002 - 2004	300 ppm^	150 ppm	N/A	20 – 280 ppm	Naturally occurring
TOTAL DISSOLVED SOLIDS	2002 - 2004	1000 ppm^	654 ppm	N/A	330 – 977 ppm	Naturally occurring
AMMONIA	2004	Not Regulated	0.421ppm average	N/A	0.189-0.690 ppm	Water Treatment Chemical
CALCIUM	2002 - 2004	Not Regulated	64.1 ppm	N/A	58.8 – 69.4 ppm	Naturally occurring
MAGNESIUM	2002 - 2004	Not Regulated	27.5 ppm	N/A	20.5 – 34.5 ppm	Naturally occurring
SODIUM	2002 - 2004	Not Regulated	133 ppm	N/A	34.1 – 232 ppm	Naturally occurring
HARDNESS	2002 - 2004	Not Regulated	273 ppm	N/A	257 – 288 ppm	Naturally occurring
TOTAL ALKALINITY	2002 - 2004	Not Regulated	213 ppm	N/A	177 – 248 ppm	Naturally occurring

^ Secondary Constituent Levels set by the Texas Commission of Environmental Quality.
^^Exceed Secondary Constituent Levels. Substances that exceed secondary levels generally pose no health risks but may cause aesthetic problems relating to taste, odor, and other nuisance conditions.

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.ci.lubbock.tx.us

Your Annual Water Quality Report

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