

City of Lubbock

2000 Water Quality Report

April 2001

What is the Water Quality Report

Water Quality

The Water Quality Report is designed to give you information about the quality of your drinking water. The City of Lubbock meets all health-related standards for safe drinking water. These standards are established by the Environmental Protection Agency (EPA) under the Safe Drinking Water Act and enforced by the EPA and the Texas Natural Resource Conservation Commission (TNRCC).

Testing

There is no such thing as pure water. If a water supply is pure, it means no animal, mineral or human has been in contact with the water source. Once any of these items come in contact with the water source, they are known as substances or contaminants in the water. Testing is an essential tool used to check for these substances or contaminants. The Safe Drinking Water Act, which was enacted in 1974, determines which substances the water must be tested for, and sets the maximum levels of these substances that can be found in the water. Under the Safe Drinking Water Act, the Environmental Protection Agency requires public water suppliers to test for approximately 90 substances in the water. In order to assure our citizen's they are receiving the safest water possible, the City of Lubbock tests for over 170 substances in the water.

Tests are performed on water collected from the water treatment plant, the distribution system, and even customer's taps. These tests are done to continually monitor the safety of our water supply.

Our Commitment

As citizens of Lubbock and employees of Lubbock Water Utilities, we continually strive to improve our water quality by using the most efficient and cost effective technology available.

Where Do We Get Our Water

The City of Lubbock's drinking water comes from both surface and ground water sources. In the year 2000, the citizens of Lubbock used over 14 billion gallons of water. Our primary water source is Lake Meredith which is located approximately 150 miles north of Lubbock. The Canadian River Municipal Water Authority manages and maintains this water source and the aqueduct system that transports this water to Lubbock. During the year 2000, over 12 billion gallons of the water were supplied by Lake Meredith. The remaining 2 billion gallons used were supplied by well fields located in Bailev

county.

How Much Do You Know About Bottled Water

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 effect can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en espanol, favor de llamar al telefono 775-2351.

Helpful Definitions for Reading this Report

The following is a list of definitions used in the chart on the following this page:

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 treatment.

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.

Maximum Disinfectant Residual Limit (MDRL) -Highest level of disinfectant products that can be placed in the water prior to it leaving the water treatment plant. These disinfectant products insure the safety of the water as it travels in the pipes throughout the city .

Maximum Disinfectant Residual Limit Goal (MDRGL) -Highest level of disinfectant products that can be placed in the water prior to it leaving the water treatment plant based on a annual running average. These disinfectant products insure the safety of the water as it travels in the pipes throughout the city.

Parts Per Million (PPM) -One part per million. For example, if you had a million dollars, one part per million would equal one dollar.

Parts Per Billions (PPB) -One part per billion. For example, if you had a billion dollars, one part per

billion would equal one dollar.

Nephelometric Turbidity Units (NTU) -A unit of measure used to determine water clarity.

Picocuries Per Liter (pCi/l) -This is the unit of measure for radioactivity. For example, if you had a quadrillion dollars, one picocurie per liter would equal one dollar.

Important Information for Your Consideration

You may be more vulnerable than the general population to certain microbial contaminants, such as *Cryptosporidium*, in drinking water. Infants, some elderly, or Immuno-compromised persons such as those undergoing chemotherapy or 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 (800-426-4791).

Cryptosporidium

Cryptosporidium is a microscopic organism that is found in lakes and comes from animal wastes in the watershed. When the organism is ingested, results can be diarrhea, fever and other gastrointestinal symptoms. People with healthy immune systems usually recover within two weeks. Individuals with weak immune systems may be unable to clear the parasite and suffer chronic and debilitating illness. **Lubbock Water Utilities has never detected any measurable amounts in either our source water or our treated water.**

Radon

Radon is a radioactive gas that is dissolved in some ground waters. It is formed when radium or uranium decays naturally. More radon enters homes from the ground than from drinking water. Generally, radon is released in the air before it reaches home water taps.

| Substance | MCL | Highest Level Detected | MCLG | Range of Detections | Possible Source |
|-----------|-----|------------------------|------|---------------------|-----------------|
|-----------|-----|------------------------|------|---------------------|-----------------|

Regulated at the Treatment Plant

| | | | | | |
|------------------------------|--------|------------------------------|---------|---|---|
| Beta/Photon Emitters (pCi/L) | 50 *** | 10.5 | 0 | N/A | Decay of natural and man-made deposits |
| Alpha Emitters (pCi/L) | 15 | 5.20 | 0 | N/A | Erosion of natural deposits |
| Combined Radium (pCi/L) | 5 | 0.30 | 0 | N/A | Erosion of natural deposits |
| Arsenic (ppb) | 50 | 3.1 | N/A | N/A | Erosion of natural deposits; runoff from orchards |
| Barium (ppm) | 2 | 0.203 | 2 | N/A | Erosion of natural deposits |
| Selenium (ppb) | 50 | 4.2 | 50 | N/A | Erosion of natural deposits |
| Fluoride (ppm) | 4 | 0.6 | 4 | N/A | Erosion of natural deposits |
| Nitrate (ppm) | 10 | 0.07 | 10 | N/A | Runoff from fertilizer use, leaking from septic tanks, sewage |
| Turbidity (NTU) | TT | 0.04 Highest Monthly Average | TT | 100% of samples met Turbidity standard of 0.5 NTU | Soil Runoff |
| Total Organic Carbon (ppm) | TT | 3.71 | TT | 2.51-3.71 | Naturally present in the environment |
| Chloramines (ppm) | MDRL=4 | 3.6 | MDRLG=4 | 2.3-3.6 | Water additive used to control microbes |

Regulated in the Distribution System

| | | | | | |
|-----------------------------|------------|--------------|---|-----------|-------------------------------------|
| Total Trihalomethanes (ppb) | 80 average | 33.7 average | 0 | 18.2-43.7 | By-product of drinking chlorination |
|-----------------------------|------------|--------------|---|-----------|-------------------------------------|

Regulated at the Customer's Tap

| | | | | | |
|--------------|--------|---------|-------|--------------|---|
| Lead (ppb) | 15 AL | 2.0 * | 0 | < 0.3-5.9 | Errision of natural deposits; corrosion of household plumbing systems |
| Copper (ppb) | 1.3 AL | 0.106 * | 1.3 * | 0.0031-0.177 | Errision of natural deposits; corrosion of household plumbing systems |

Unregulated Substances

| | | | | | |
|----------------------------|---------------|-----|---------------|---------|------------------------------------|
| Chloroform (ppb) | Not Regulated | 3.2 | Not Regulated | 1.9-3.2 | Component of Total Trihalomethanes |
| Bromodichloromethane (ppb) | Not Regulated | 9.6 | Not Regulated | 5.1-9.6 | Component of Total Trihalomethanes |
| Dibromochloromethane (ppb) | Not Regulated | 21 | Not Regulated | 8.4-21 | Component of Total Trihalomethanes |

| | | | | | |
|-----------------|---------------|--------|---------------|--------|------------------------------------|
| Bromoform (ppb) | Not Regulated | 11 | Not Regulated | 2.8-11 | Component of Total Trihalomethanes |
| Sulfate (ppm) | 300 ^ | 333 ** | Not Regulated | N/A | Mineral and Nutrient |

Additional Monitoring

| | | | | | |
|-----------------------------|---------------|-----|-----|---------|---|
| Haloacetic Acids (ppb) | 60 | 17 | N/A | 1.0-17 | By-product of drinking water chlorination |
| Haloacetonitriles (ppb) | Not Regulated | 7.9 | N/A | 0.6-7.9 | By-product of drinking water chlorination |
| Total Organic Halides (ppb) | Not Regulated | 125 | N/A | 52-125 | By-product of drinking water chlorination |
| Chloral Hydrate (ppb) | Not Regulated | 4.1 | N/A | 0.6-4.1 | By-product of drinking water chlorination |

Additional Monitoring for Secondary

| | | | | | |
|------------------------------|---------------|---------|-----|-------------|--------------------------|
| Aluminum (ppm) | 0.05-0.2 ^ | 0.17 | N/A | N/A | Water treatment chemical |
| Chloride (ppm) | 300 ^ | 352 ** | N/A | N/A | Naturally occurring |
| Total Dissolved Solids (ppm) | 1000 ^ | 1238 ** | N/A | N/A | Naturally occurring |
| Ammonia (ppm) | Not Regulated | 0.204 | N/A | 0.081-0.412 | Water treatment chemical |
| Calcium (ppm) | Not Regulated | 72 | N/A | N/A | Naturally occurring |
| Magnesium (ppm) | Not Regulated | 31 | N/A | N/A | Naturally occurring |
| Sodium (ppm) | Not Regulated | 332 | N/A | N/A | Naturally occurring |

| | | | | | |
|------------------------|---------------|-----|-----|---------|---------------------|
| Sodium (ppm) | Not Regulated | 332 | N/A | N/A | Naturally occurring |
| Hardness (ppm) | Not Regulated | 309 | N/A | N/A | Naturally occurring |
| Total Alkalinity (ppm) | Not Regulated | 169 | N/A | 142-192 | Naturally occurring |

* Lead and copper values represent the 90th percentile of results from the last sampling, conducted in September, 2000

^ Secondary Constituent Levels set by the Texas Natural Resource Conservation Commission.

^^ 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.

*** The MCL for Beta/Photon Emitters Is 4 mrem/year Millirems per year is a measure of radiation absorbed by the body. The EPA considers 50 pCi/L to be a level for concern.

^^ Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

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
- 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 on taste, odor, or color of drinking water, call 775-2614 Monday - Friday between 7:30 a.m. and 4:30 p.m.
- For general questions about Lubbock Water Utilities, or hard copies of this report, call 775-2596 Monday - Friday between 8 a.m. and 5 p.m.
- City Council meetings are held the 2nd and 4th Thursday of each month.