# 2003 Annual Drinking Water Quality Report City of Lebanon

# The Water We Drink Lebanon Water System

We're pleased to present to you this year's **Annual Drinking Water Quality Report**. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water meets all of the EPA's health standards.

Did You Know?

75% of the human brain is water

RMATION: 75% of a living tree is water

### **CONTACT INFORMATION:**

For more information about your drinking water, please call **James Arnold or Alton Driver at 444-0485**.

Our Water Board meets on the first and third Tuesdays of each month at the City Hall. Please feel free to participate in these meetings.

The State and EPA require us to test and report on our water on a regular basis to ensure its safety. We have met all of these requirements. We want you to know that we pay attention to all the rules.

# WHERE DOES MY WATER COME FROM?

Your water comes from the Cumberland River. Our goal is to protect our water from contaminants and we are working with the State to determine the vulnerability of our water supply to contamination. A source water assessment will be developed and will be available for review at our office after its completion.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. Community water systems are required to disclose the detection of contaminants; however, bottled water companies are not required to comply with this regulation. 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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

The Tennessee Dept. of Environment has prepared a Source Water Assessment Program Report for the untreated water sources. The Report assesses the susceptibility of untreated water sources to potential contamination. To ensure safe drinking water, all public water systems treat and routinely test their water. Water sources have been rated as reasonably susceptible, moderately susceptible, or slightly susceptible based on geological factors and human activities in the vicinity of the water source. Our rating is slightly susceptible. An explanation of the Tennessee Source Water Assessment Program, the Source Water Assessment summaries, susceptibility scorings and the overall TDEC report to EPA can be viewed at <a href="https://www.state.tn.us/environment/dws/dwassess.php">www.state.tn.us/environment/dws/dwassess.php</a> or you may contact the water system to obtain copies of specific assessments.

## **DEFINITIONS:**

In the following table you will find many terms and abbreviations you might not be familiar with. To help vou better understand these terms we have provided the following definitions:

n/a - not applicable.

Parts per million (ppm) or Milligrams per liter (mg/l)
- one part per million corresponds to one minute in two
years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter (ug/l) - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**Action Level (AL)** - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) - (mandatory language) A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level (MCL) - Maximum Contaminant Level, or the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) - Maximum Contaminant Level Goal, or the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

#### Maximum Residential Disinfectant Level (MRDL)

The highest level of disinfectant allowed in drinking water.
 There is convincing evidence that addition of a disinfectant is necessary for the control of microbial disinfectants.

# Test Results Water Quality Report for City of Lebanon

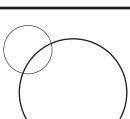
Contaminant	MCLG in CCR units	MCL in CCR units	Level found in CCR units			Date of sample	Typical source of contamination
Total Coliform Bacteria	0	< 5% positive samples	0	0	No	2003	Naturally present in the environment
Turbidity	n/a	TT (95% < 0.3 NTU)	0.05 Avg	0.04 – 0.09 NTU	No	2003	Soil run-off
Copper*	1.3	AL=1.3 ppm	90 th % = 0.19 ppm	-	No	2002	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead*	0	AL=15 ppb	90 th % = < 2.5 ppb	-	No	2002	Corrosion of household plumbing systems; erosion of natural deposits
Sodium	n/a	n/a	8.2 ppm	-	No	2003	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Chlorine	MRDLG 4 ppm	MRDL 4 PPM	< 4		No	2003	Disinfectant to control microbes
TTHMs [Total trihalomethanes]	0	80 ppb	36 ppb avg	21-52 ppb	No	2003	Byproduct of drinking water chlorination
Fluoride	4 ppm	4 ppm	1 ppm		No	2003	Water additive for strong teeth, erosion of natural deposits
Total Organic Carbon	TT	TT	.54 ppm avg	.70 - <.50ppm	No	2003	Naturally present in the environment
Total HaloAceticAcids (HAA 5)	0	60 ppb	31 ppb avg	14-46 ppb	No	2003	By-product of drinking water disinfection

<sup>\* 0</sup> out of 30 sites sampled had a level exceeding the lead or copper action level

**Turbidity:** Turbidity does not present any risk to your health. We monitor turbidity, which is a measure of the cloudiness of water, because it is a good indicator that our filtration system is functioning properly.

**About the data:** Most of the data presented in this table is from testing done between Jan. 1 and Dec 31, 2003. We monitor for some contaminants less than once per year, and for those contaminants, the date of the last sample is shown in the table.

**Total Organic Carbon (TOC)** has no health effects. However, total organic carbon provides a medium for the formation of disinfection by products. These by-products include trihalomethanes (THMs) and haloacetic acids (THAAs). Drinking water containing these by-products in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.



#### **CONSERVATION TIPS:**

- Installing a low-flow toilet can save a family of 4 more than 45 gallons of water a day. That's 1,350 gallons a month.
- By planting low-water-use grasses and shrubs, you can cut your lawn watering by 20 to 50 percent.
- The average automatic dishwasher uses 12 to 20 gallons of water in one cycle. Save water by running the dishwasher only when it is full. Washing by hand is less efficient and wastes more water.
- Running the faucet while brushing your teeth or shaving can use two to five gallons of water per minute. Shut off the water until you're ready to rinse. You could save about 100 gallons a month.
- A leaking faucet can waste up to 100 gallons of water a day. Check for leaking faucets, toilets or pipes around the house to cut water waste.
- When watering the lawn, adjust sprinklers so only the lawn is watered, not the house, sidewalk or street.
- Recycle water from fish tanks by using it to water plants.
   Fish emulsion is a good, inexpensive fertilizer that is high in nitrogen and phosphorous.

#### **OTHER INFORMATION**

Due to all water containing dissolved contaminants, occasionally your water may exhibit slight discoloration. We strive to maintain the standards to prevent this. We at Lebanon Water System work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.