

# THIS IS YOUR ANNUAL REPORT ON DRINKING WATER QUALITY.

## WHAT ARE DRINKING WATER STANDARDS?

Under the authority of the Safe Drinking Water Act (SDWA), EPA sets standards for approximately 90 contaminants in drinking water. For each of these contaminants, EPA sets a legal limit, called a maximum contaminant level, or requires a certain treatment. Water suppliers may not provide water that doesn't meet these standards. Water that meets EPA standards is safe to drink.

**En Español:**  
**Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.**

The Safe Drinking Water Act (SDWA), which celebrated its 25th anniversary in 1999, is the main federal law that ensures the quality of Americans' drinking water.

Under SDWA, EPA sets standards for drinking water quality and oversees the states, localities, and water suppliers who implement those standards. The SDWA covers all public water systems with piped water for human consumption with at least 15 service connections or a system that regularly serves at least 25 individuals.

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 the water poses a health risk. **More information about contaminants and potential health effects can be obtained by simply calling the EPA's Safe Drinking Water Hotline at (1-800-426-4791).**

## IMPORTANT INFORMATION

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).**

## WHY DO I NEED TO READ THIS?

A survey conducted by the American Water Works Research Foundation in 1993 found that nearly two-thirds of water consumers surveyed said they received "very little" or "no"

information on the quality of their water. The water quality reports will increase the availability of information. Informed and involved citizens can be strong allies of water systems, large and small, as they take action on pressing problems. Also, an increase in public awareness can give sensitive sub-populations the information that they need to protect themselves. Drinking water can come from either ground water sources (via wells) or surface water sources (such as rivers, lakes, and streams).

Nationally, most water systems use a ground water source (80%), but most people (66%) are served by a water system that uses surface water. This is because large metropolitan areas tend to rely on surface water, whereas small and rural areas tend to rely on ground water. In addition, 10-20% of people have their own private well for drinking water.

## WHERE CAN I GET MORE INFORMATION?

Information on water quality in your area is available from several sources, including your local public health department and your water supplier. You can determine whom to contact by checking your water bill or by calling your local town hall. You can also contact your state drinking water program or call EPA's Safe Drinking Water Hotline at 1-800-426-4791. EPA has also prepared a citizen's guide to drinking water called "**Water on Tap: A Consumer's Guide to the Nation's Drinking Water.**"

## TERMINOLOGY

Contaminants that may be present in source water include: **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

**Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

**Pesticides and herbicides**, which may come from a variety of sources such as agriculture, stormwater runoff, and residential uses.

**Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

**Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

**THE SOURCES OF DRINKING WATER (BOTH TAP WATER AND BOTTLED WATER) INCLUDE RIVERS, LAKES, STREAMS, PONDS, RESERVOIRS, SPRINGS, AND WELLS. AS WATER TRAVELS OVER THE SURFACE OF THE LAND OR THROUGH THE GROUND, IT DISSOLVES NATURALLY-OCCURRING MINERALS AND, IN SOME CASES, RADIOACTIVE MATERIAL, AND CAN PICK UP SUBSTANCES RESULTING FROM THE PRESENCE OF ANIMALS OR FROM HUMAN ACTIVITY.**

# 2004 WATER REPORT CONSUMER CONFIDENCE REPORT

# 2004 ANNUAL DRINKING WATER QUALITY REPORT

## TOWN OF LEBANON WATER DISTRICT

### THE WATER WE DRINK

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.

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.

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 [www.state.tn.us/environment/dws/dwassess.php](http://www.state.tn.us/environment/dws/dwassess.php) 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 you 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.

### 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.

### DID YOU KNOW?

75% OF THE HUMAN BRAIN IS WATER

75% OF A LIVING TREE IS WATER

## TEST RESULTS WATER QUALITY REPORT FOR TOWN OF LEBANON

### WHAT DOES THIS CHART MEAN?

- 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.
- 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.
- MRDL: Maximum Residential Disinfectant Level: The highest level of disinfectant allowed in drinking water. There is convincing evidence that an addition of a disinfectant is necessary for the control of microbial disinfectants.

*Discretionary language regarding the use of averages to report levels of some contaminants.*

Contaminant	MCLG in CCR Units	MCL in CCR Units	Level Found in CCR Units	Range of Detections	Violation Y / N	Date of Sample	Typical Source of Contaminant
Total Coliform Bacteria	0	< 5 % positive samples	1	1	No	2004	Naturally present in the environment
Turbidity	n/a	TT (95% < 0.3 NTU)	0.06 Avg	0.05 – 0.12 NTU	No	2004	Soil run-off
Copper*	1.3	AL = 1.3ppm	90th% = 0.19ppm		No	2002	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead*	0	AL = 15ppb	90th% = < 2.5 ppb		No	2002	Corrosion of household plumbing systems; Erosion of natural deposits.
Sodium	n/a	n/a	8ppm		No	2004	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Chlorine	MRDLG 4ppm	MRDL 4ppm	< 4		No	2004	Disinfectant to control microbes
TTHMs Total trihalomethanes	0	80ppb	44 ppb Avg	37 – 52ppb	No	2004	By-product of drinking water disinfection.
Fluoride	4ppm	4ppm	1ppm		No	2004	Water additive for strong teeth, erosion of natural deposits
Total HaloAceticAcids (HAA 5 )	0	60ppb	36ppb Avg	27 – 49ppb	No	2004	By-product of drinking water disinfection
TOC ** Total Organic Carbon	N/a	TT	1.22 ppm avg	1.4 – .98	No	2004	Naturally present in the environment

*\*0 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, 2004. 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.*

*\*\*We met the Treatment Technique requirement for Total Organic Carbon*

### IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER MONITORING REQUIREMENTS NOT MET FOR LEBANON WATER SYSTEM

Our water system violated one drinking water standard over the past year. Even though these were not emergencies, as our customers, you have the right to know what happened and what we did to correct these situations.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During August 2004, due to an equipment failure we did not monitor # 2 filter for individual filter turbidity for a period of 9.5 hours. Therefore we cannot be sure of the quality of our drinking water at that time. However water quality at the time of failure was good and was good when sampled at 9.5 hours later. There is nothing you need to do at this time. The table below lists the contaminant we did not properly test for during the last year, how often we are supposed to sample for this contaminant and how many samples we are supposed to take, how many samples we took, when samples should have been taken and the date on which follow-up samples were taken.

CONTAMINANT	REQUIRED SAMPLING FREQUENCY	NUMBER OF SAMPLES TAKEN	WHEN ALL SAMPLES SHOULD HAVE BEEN TAKEN	WHEN SAMPLES WERE OR WILL BE TAKEN
# 2 Filter effluent Turbidity	Continuously or when down grab sample every 4 hrs.	No samples were taken for 9.5 hours following equipment failure	Within 4 hrs of equipment failure	9.5 hrs after failure until equipment was repaired

For more information, please contact Alton Driver at 444 0485 or Lebanon Water System, 7 Gilmore Hill Road Lebanon, Tn. 37087. Please share this information with all the other people who drink this water, especially those who may not have received this notice directly.

This notice is being sent to you by Lebanon Water System PWSID # 0000393 Date: April 15, 2005

THANK YOU FOR ALLOWING US TO CONTINUE TO PROVIDE YOUR FAMILY WITH QUALITY DRINKING WATER THIS YEAR. WE ASK THAT ALL OUR CUSTOMERS HELP US PROTECT OUR WATER SOURCES, WHICH ARE THE HEART OF OUR COMMUNITY. IF YOU NOTICE SOMETHING UNUSUAL OR OUT OF THE ORDINARY, PLEASE CONTACT US. AS ALWAYS, WE WELCOME YOUR QUESTIONS AND CONCERNS.