

# Water and Wastewater Authority of Wilson County

## Lebanon Supply Water Quality Report 2007

### Is my drinking water safe?

Yes, our water meets all of EPA's health standards. We have conducted numerous tests for over 80 contaminants that may be in drinking water. As you'll see in the chart on the back, we only detected 12 of these contaminants. We found all of these contaminants at safe levels.

### What is the source of my water?

Your water comes from The Cumberland River at 231 North and Gilmore Hill Road. 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. 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.shtml](http://www.state.tn.us/environment/dws/dwassess.shtml) or you may contact the water system to obtain copies of specific assessments.

### Why are there contaminants in my water?

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).

For more information about your drinking water, please call Chris Leuber at 449-2951.

Este informe contiene información muy importante. Tradúscalo o hable con alguien que lo entienda bien.

### How can I get involved?

Our Water Board meets Quarterly except for special called meetings at the Water Authority Office. Please feel free to participate in these meetings.

### Is our water system meeting other rules that govern our operations?

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.

### 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 the Water and Wastewater Authority 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.

### DO I NEED TO TAKE SPECIAL PRECAUTIONS?

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 under-gone 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 not only their drinking water, but food preparation, personal hygiene, and precautions in handling infants and pets from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

# Water Quality Data

## 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 Levels are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.
- **AL - Action Level,** or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- **Parts per million (ppm) or Milligrams per liter (mg/l)** – explained as a relation to time and money as 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** - explained as a relation to time and money as one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- **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.
- **TT - Treatment Technique,** or a required process intended to reduce the level of a contaminant in drinking water.
- **BDL- Below Detection Limit**
- **ND- Non-Detects-**laboratory analysis indicates that the contaminant is not present.
- **mrem/yr- Millirems per year-** measure of radiation absorbed by the body.
- **MRDL-Maximum Residential Disinfectant Level-**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.
- **MRDLG – Maximum residual disinfection level goal.** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Unless otherwise noted, data presented in table is from sampling performed by the City of Lebanon during the 2007 calendar year.

Contaminant	Violation Yes/No	Level Detected	Range of Detections	Date of Sample	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria <sup>1</sup>	No	1	0	2007	0	<5% positive samples	Naturally present in the environment
Turbidity*	No	0.3 NTU avg.	0.02-0.3 NTU	2007	N/A	TT (95% <0.3 NTU)	Soil run-off
Turbidity (Lowest monthly percent of samples meeting limit)	No	100 %	N/A	2007	N/A	TT (95% <0.3 NTU)	Soil run-off
HAA <sup>**1</sup> (Haloacetic Acids)	Yes	69 ppb	34 – 96 ppb	2007	N/A	60 ppb	By-product of drinking water disinfection
Copper <sup>1</sup> 0 out of 30 sites exceeded action level	No	90 <sup>th</sup> % = 0.23 ppm		2006	0	AL=1.3 ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	No	0.90 ppm avg.	0.10 – 1.20 ppm	2007	4 ppm	4 ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead <sup>1</sup> 0 out of 30 sites exceeded action level	No	90 <sup>th</sup> % = 1.4 ppb		2006	0	AL=15 ppb	Corrosion of household plumbing systems, erosion of natural deposits
Sodium	No	8.9 ppm	N/A	2007	N/A	N/A	Erosion of natural deposits; used in water treatment
TTHM <sup>***1</sup> (Total Trihalomethanes)	No	76 ppb	31 - 147 ppb	2007	N/A	80 ppb	By-product of drinking water chlorination
TOC <sup>****</sup> (Total Organic Carbon)	No	1.6ppm avg.	1.3-2.0 ppm	2007	N/A	TT	Naturally present in the environment
Chlorine <sup>1</sup>	No	1.7ppm avg.	0.7-2.4 ppm	2007	MRDLG 4 ppm	MRDL 4 ppm	Water additive used to control microbes
Nitrate	No	0.53 ppm	N/A	2007	10 ppm	10 ppm	Runoff from fertilizer
Aluminum	No	150 ppb	N/A	2007	N/A	SMCL 200 ppb	Erosion of natural deposits; Residual from some surface water treatment processes

<sup>1</sup> Sampling performed by the Water and Wastewater Authority of Wilson County.

\* **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. We met the treatment technique for turbidity with 100% of monthly samples below turbidity limit of 0.3 NTU.

\*\* **HAA's:** For the monitoring period October 1, 2006 through September 30, 2007 and the monitoring period January 1, 2007 through December 31, 2007, the Water & Wastewater Authority of Wilson County (WWA) exceeded the MCL of 60 ppb for Total Haloacetic Acids based on a running annual average. The level reported for October 1, 2006 through September 30, 2007 was 65 ppb and for January 1, 2007 through December 31, 2007 it was 69 ppb. Some people that drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer. The WWA anticipates being in compliance on the 3<sup>rd</sup> Quarter of 2008. The City of Lebanon, our water supplier, continues to evaluate their disinfection methods and the WWA will continue our flushing program in order to keep disinfection byproducts below the MCL and maintain the proper level of disinfectant in your drinking water to prevent waterborne diseases. For more information call 449-2951.

\*\*\* **TTHM's:** Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

\*\*\*\* **TOC:** We meet the Treatment Technique required for Total Organic Carbon.

**About the data:** Most of the data presented in this table is from testing done between Jan. 1 and Dec. 31, 2007. 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.