

# Water and Wastewater Authority of Wilson County

## Consolidated UD Supply Water Quality Report 2006

### 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 17 of these contaminants. We found all of these contaminants at safe levels.

### What is the source of my water?

Your water comes from the east fork of Stones River J. Percy Priest Lake. 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 moderately 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?

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**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.
- **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.
- **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 of health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Unless otherwise noted, data presented in this table is from sampling performed during the 2006 calendar year by Consolidated U.D (CUD).

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	2006	0	<5% positive samples	Naturally present in the environment
Copper <sup>1</sup> 0 out of 30 sites exceeded action level	No	90 <sup>th</sup> %= 0.23 ppm		2006	1.3 ppm	AL=1.3 ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	No	0.963 ppm	0.753 to 0.963 ppm	2006	4.0 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
Nitrate	No	BDL	n/a	2006	10 ppm	10 ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium	No	9.2 ppm	n/a	2006	n/a	None	Erosion of natural deposits
TTHM* (Trihalomethane)	No	59 ppb	29 to 130 ppb	2006	0	80 ppb	By-product of drinking water chlorination
Alpha emitters Radium 226 Radium 228	No No No	BDL BDL BDL	n/a n/a n/a	2003 2003 2003	0 0 0	15 pCi/L 2.5 pCi/L 2.5pCi/L	Certain minerals are radioactive and emit a form of alpha radiation
HAA5** (Haloacetic Acids)	Yes (CUD)	63 ppb	26 to 104 ppb	2006	0	60 ppb	By-product of drinking water chlorination
Turbidity (Lowest monthly percent of samples meeting limit)	No	98.9%	.02 to 1.22 ntu	Continuous		At least 95% of monthly samples must be below 0.3 ntu	Natural river sediment. Turbidity is a measurement of water clarity, which aids in determining the effectiveness of our treatment process.
Chlorine <sup>1</sup>	No	1.7 ppm avg.	0.8 – 2.2 ppm	2006	MRDLG 4 ppm	MRDL 4 ppm	Source water additive to control microbes
Total Organic Carbon	No	1.8 ppm avg.	.91 – 2.9 ppm	2006	TT	n/a	Naturally present in the environment
Chlorine Dioxide	No	.22 mg/l avg.	.04 - .36 mg/l	Daily	0	0.8 mg/l	By-product of water chlorination
Chlorites	No	0.825 mg/l	.71 - .92 mg/l	Daily	0	1 mg/l	By-products of water disinfection
Regulated VOC	No	BDL	BDL	2006	0	1 mg/l	Discharge from industry

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

\* **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.

\*\* **HAA5's:** The Division of Water Supply (DWS) issued a Notice of Violation (NOV) to Consolidated UD in the 1<sup>st</sup> Quarter of 2006 for exceeding the MCL for Haloacetic Acids (HAA5). CUD's Running Annual Average for the 1<sup>st</sup> Quarter of 2006 HAA5's was 63 ppb. The MCL for HAA5's is 60 ppb. Some people who drink water containing Haloacetic Acids in excess of the MCL over many years may have an increased risk of getting cancer. CUD has implemented a new treatment technique which has lowered the level of HAA5's.

**Cryptosporidium:** Out of the 6 months CUD tested for Cryptosporidium in our source water, our laboratory detected 1 oocyst in the December sample. The treatment process for the source water insures that no waterborne pathogens are in the treated water. We test our treated water daily.