



**Community Participation**

If you are interested in becoming involved in water quality concerns at Tennessee American Water, please call us at (423) 755-7613. Our normal office hours are 8 a.m. to 5 p.m., Monday-Friday.

**Source Water Information**

Tennessee American Water draws surface water from the Tennessee River. Our goal is to protect our water from contamination and we are working with the state to determine the vulnerability of our water source to potential contamination. The Tennessee Department of Environment and Conservation (TDEC) has prepared a Source Water Assessment Program (SWAP) Report for the untreated water sources serving this water system. The SWAP 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 (high), moderately susceptible (moderate) or slightly susceptible (low) based on geologic factors and human activities in the vicinity of the water source. Tennessee American Water sources rated as reasonably susceptible to potential contamination. An explanation of Tennessee's Source Water Assessment Program, the Source Water Assessment summaries, susceptibility scores and the overall TDEC report to EPA can be viewed online at: <http://state.tn.us/environment/dws/dwassess.shtml> or contact TDEC EAC at 1-888-891-8332 (1-888-891-TDEC) to obtain copies of specific assessments. Tennessee American Water can also be contacted at 1-866-736-6420 to obtain a copy of the source water assessment specifically for our company.

*Cryptosporidium* is a microbial pathogen found in surface water throughout the US. Although *Cryptosporidium* can be removed through commonly-used filtration methods, US EPA issued a new rule in January 2006 that requires systems with higher *Cryptosporidium* levels in their source water to provide additional treatment. In anticipation of this upcoming rule, Tennessee American Water monitored for *Cryptosporidium* in its raw water with no detections in 2005. Based on the results of our *Cryptosporidium* monitoring, no additional treatment will be required by the new US EPA regulation.

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 may 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 EPA's Safe Drinking Water Hotline (800) 426-4791.

**A Message from John Watson, President**

As a trusted leader in the industry, Tennessee American Water places a strong emphasis on sharing information about the quality of the water we provide with our customers.

One way we do this is by reporting to you annually the results of our tests on the water we deliver to your home or business. Please review this Consumer Confidence Report (CCR), which outlines information applicable to your local water system for testing completed through December, 2008. You'll find that we provide water that surpasses or meets all federal and state water quality regulations. In fact, we often address regulations well before they go into effect.

Just as important, Tennessee American Water makes the necessary investments to maintain and upgrade its facilities, so that we can deliver quality water directly to your tap 24 hours a day, seven days a week.

Our customers are our top priority, and we are committed to providing them with the highest quality drinking water and service possible now and in the years to come. In addition to this written report, you can view information about Tennessee American Water and your water system on our website <http://www.tawc.com>.



For more information or for any questions about this report relating to your drinking water, please contact Tennessee American Water at (423) 755-7613.

Thank you for being a Tennessee American Water customer.

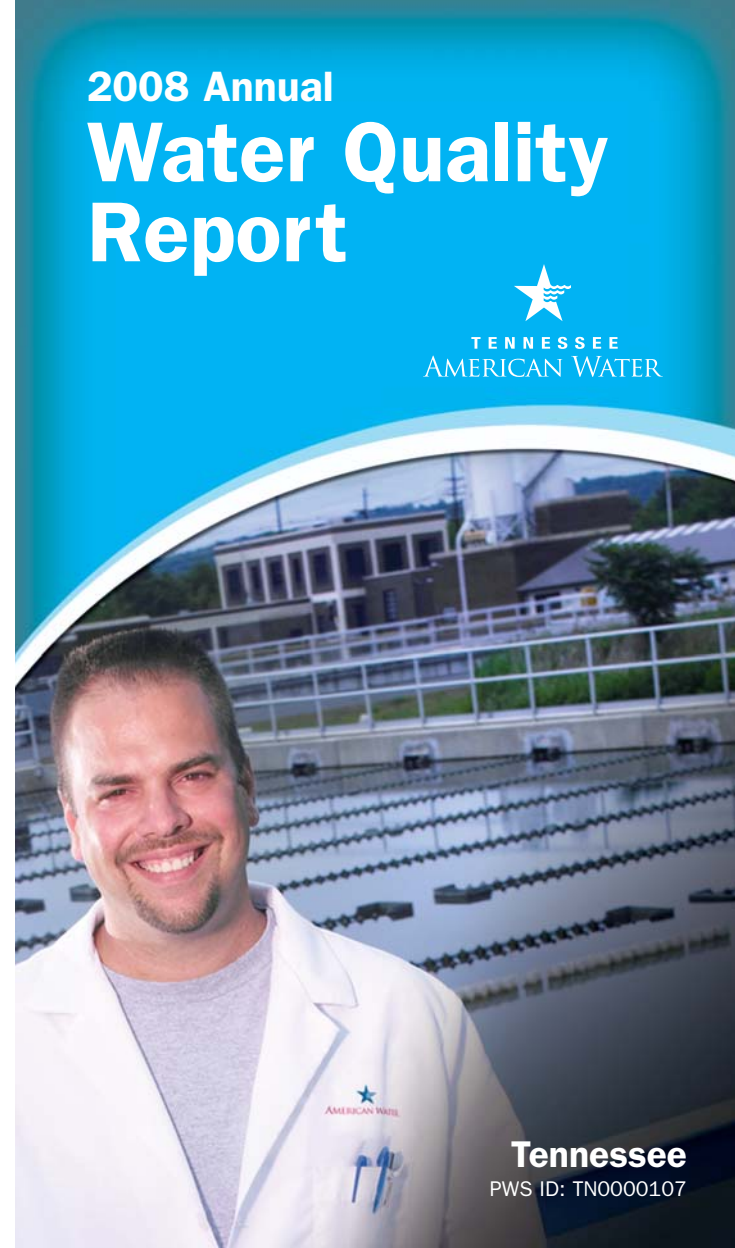
Sincerely  
John Watson

**TENNESSEE AMERICAN WATER**  
1101 Broad Street  
Chattanooga, TN 37402

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

This report contains important information about your drinking water. If you do not understand it, please have someone translate it for you.

AW574i



2008 Annual Water Quality Report

TENNESSEE AMERICAN WATER

Tennessee  
PWS ID: TN0000107

**How to Contact Us**

For more information about this report, or for any questions relating to your drinking water, please call Kim Dalton, Communications Specialist, at (423) 755-7613. For questions about your water bill, please call our Customer Service Center at (866) 736-6420.

**Water Information Sources**  
[www.tawc.com](http://www.tawc.com)  
**Tennessee American Water**

**Tennessee Department of Environment and Conservation**  
[www.state.tn.us/environment/dws](http://www.state.tn.us/environment/dws)

**United States Environmental Protection Agency**  
[www.epa.gov/safewater](http://www.epa.gov/safewater)

**Safe Drinking Water Hotline:** (800) 426-4791

**Centers for Disease Control and Prevention**  
[www.cdc.gov](http://www.cdc.gov)

**American Water Works Association**  
[www.awwa.org](http://www.awwa.org)

Printed on recycled paper. Each ton of recycled paper saves 7,000 gallons of water.

## Water Quality Statement

We are pleased to report that during the past year, the water delivered to your home or business complied with, or was better than, all state and federal drinking water requirements. For your information, we have compiled a list in the table, showing what substances were detected in your drinking water during 2008. Although all of the substances listed below surpasses or meets all federal and state water quality regulations, we feel it is important that you know exactly what was detected and how much of the substance was present in the water.

Regulated Substances							
Substance (units)	Year Sampled	MCLG	MCL	Amount Detected	Range	Violation	Typical Source
<b>MICROBIOLOGICAL</b>							
Total Coliform	2008	0	5%	0.8%	0% - 0.8%	No	Naturally present in the environment
E. coli Coliform	2008	0	A routine sample and repeat sample are total coliform positive, and one is also fecal coliform or E. coli positive	0	0	No	Human and animal fecal waste
Total Organic Carbon <sup>1</sup> (ppm)	2008	N/A	TT	1.67	1.10 - 1.67	No	Naturally present in the environment
Turbidity <sup>2</sup> (NTU)	2008	N/A	TT	0.93	0.03 - 0.93	No	Soil runoff
<b>RADIOACTIVE</b>							
Beta/photon emitters <sup>3</sup> (pCi/L)	2003	0	50	3.2	0.0 - 3.2	No	Decay of natural and man-made deposits
Tritium <sup>4</sup> (pCi/L)	2003	0	20,000	398	0 - 398	No	Decay of natural and man-made deposits
Alpha emitters (pCi/L)	2003	0	15	1.3	0.0 - 1.3	No	Erosion of natural deposits
Combined Radium (pCi/L)	2003	0	5	1.1	0.0 - 1.1	No	Erosion of natural deposits
<b>INORGANICS</b>							
Chlorine <sup>5</sup>	2008	MRDLG=4	MRDL=4	2.17	0.00 - 2.17	No	Water additive used to control microbes
Fluoride (ppm)	2008	4	4	1.12 (0.97 average)	0.72 - 1.12	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (ppm)	2008	10	10	0.23	0.23	No	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits

VOLATILE ORGANICS								
Substance (units)	Year Sampled	MCLG	MCL	Amount Detected	Range	Violation	Typical Source	Health Effects Language
Haloacetic Acids (HAA5)(ppb)	2008	N/A	60	24.4 (3rd Quarter)	11.9 - 54.0	No	By-product of drinking water disinfection.	
TTHMs [Total trihalomethanes](ppb)	2008	N/A	80	56.7 (4th Quarter)	40.1 - 94.9	No	By-product of drinking water chlorination.	Some people who drink water containing trihalomethanes in excess of the MCL over many years could have problems with their liver, kidneys, or central nervous systems and may have an increased risk of getting cancer

Tap water samples were collected for lead and copper analyses from 54 homes in the service area.							
Substance (units)	Year Sampled	Action Level	MCLG	Amount Detected (90th %tile)	Number of Homes above Action Level	Violation	Typical Source
Copper (ppm)	2007	1.3	1.3	0.19	0	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead <sup>6</sup> (ppb)	2007	15	0	2	1	No	Corrosion of household plumbing systems; erosion of natural deposits

<sup>1</sup> The treatment technique for Total Organic Carbon was met 100% for 2008.

<sup>2</sup> Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. We met the turbidity requirement in 2008 with 99% of samples less than 0.3 NTU.

<sup>3</sup> The MCL for Beta/photon emitters is written as 4 mrem/year. EPA considers 50 pCi/L as the level of concern for beta emitters.

<sup>4</sup> EPA considers 20,000 to be the level of concern for Tritium.

<sup>5</sup> Chlorine levels as measured in the distribution system.

<sup>6</sup> If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Tennessee American Water is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

## Additional Water Quality Parameters of Interest

This table shows average levels of additional water quality parameters which are often of interest to consumers. Values shown here are averages of operating data for 2008. Values may vary from day to day. There are no health-based limits for these substances in drinking water.

Additional Water Quality Parameters of Interest			
Substance	Year Sampled	Amount Detected (average)	Range
Alkalinity (ppm)	2008	61	47 - 71
Chloride (ppm)	2008	13.8	8.5 - 21.0
Hardness (ppm)	2008	79	60 - 92
Hardness (grains/gallon)	2008	4.6	3.5 - 5.4
Sodium (ppm)	2008	12	12
Sulfate (ppm)	2008	19.4	19.4
Temperature (°Celsius)	2008	17.3	7.9 - 25.8
Total Dissolved Solids (TDS) (ppm)	2008	121	121
pH (units)	2008	7.1	6.9 - 7.3

## How to Read This Table

Tennessee American Water conducts extensive monitoring to ensure that your water meets all water quality standards. The results of our monitoring are reported in the following tables. While most monitoring was conducted in 2008, certain substances are monitored less than once per year because the levels do not change frequently. For help with interpreting this table, see the "Table Definitions" section.

Starting with a **Substance**, read across. **Year Sampled** is usually in 2008 or year prior. **MCL** shows the highest level of substance (contaminant) allowed. **MCLG** is the goal level for that substance (this may be lower than what is allowed). **Amount Detected** represents the measured amount (less is better). **Range** tells the highest and lowest amounts measured. A **No** under **Violation** means that the government requirement was met. **Typical Source** tells where the substance usually originates.

## Table Definitions and Abbreviations

- **Action Level:** The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.
- **MCL (Maximum Contaminant Level):** 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.
- **MCLG (Maximum Contaminant Level Goal):** 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.
- **MRDL (Maximum Residual Disinfectant Level):** The highest level of disinfectant routinely allowed in drinking water. Addition of a disinfectant is necessary for control of microbial contaminants.
- **MRDLG (Maximum Residual Disinfectant Level Goal):** The level of 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 contamination.
- **mrem/year:** Millirems per year (a measure of radiation absorbed by the body).
- **N/A:** Not applicable
- **NTU - Nephelometric Turbidity Units:** Measurement of the clarity, or turbidity, of water.
- **pCi/L (picocuries per liter):** Measurement of the natural rate of disintegration of radioactive contaminants in water (also beta particles).
- **ppm (parts per million):** One part substance per million parts water, or milligrams per liter.
- **ppb (parts per billion):** One part substance per billion parts water, or micrograms per liter.
- **TT (Treatment Technique):** A required process intended to reduce the level of a contaminant in drinking water.

During 2008 Tennessee American Water also monitored for unregulated contaminants. The results of all unregulated monitoring are available by contacting Tennessee American Water at 423-755-7613.

## Substances Expected to be in Drinking 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 possesses a health risk. More information about contaminants and potential health effects can be obtained by call the U.S. Environmental Protection Agency's Safe Drinking Water Hotline (800) 426-4791.

To ensure that tap water is of high quality, U.S. Environmental Protection Agency and the Tennessee Department of Environment and Conservations prescribe regulations limiting the amount of certain substances in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Tennessee American Water's advanced water treatment processes are designed to reduce any such substances to levels well below any health concern.

The source of drinking water (both tap water and bottled water) includes 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.

## 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, or wildlife.

**Inorganic Contaminants**, such as salts and metals, which can be naturally occurring or may 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, urban stormwater runoff, and residential uses.

**Organic Chemical Contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff, and septic systems.

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

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.