

Safe, plentiful and reliable drinking water.

That's what you and your family rely on. And that's what we at the Hendersonville Utility District work around the clock to provide, 24 hours a day, every day!

In fact, Hendersonville Utility District was selected as having the "Best Tasting Water" in Tennessee Association of Utility Districts' Region 5 in 2008 and 2009. In addition, our water plant and distribution system are inspected annually by the State Environmental Office for quality and reporting techniques. We are proud that we received a perfect score for 2011.

This water quality report is designed to inform you about the series of tests we routinely conduct to ensure that the drinking water delivered to your home is of the highest quality. We thank you for taking time to review this report, and would be happy to answer any questions you may have at 615-824-3717.

2012-13 CONSTRUCTION PROJECT LIST

WATER IMPROVEMENTS/ SEWER INSTALLATION PROJECTS

- Sewer Rehabilitation Projects
- Water System Improvements
- Water Plant Expansion Construction



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Hendersonville Utility District



Water
Quality
Report 2012

What is the source of my water?

Is my drinking water safe? Yes, our water meets all of the Environmental Protection Agency's (EPA's) health standards. We have conducted numerous tests for over 80 contaminants that may be in drinking water. As you will see in the chart included in this report, we only detected 12 of these substances. The water delivered to your home is surface water from Old Hickory Lake, which is fed by the Cumberland River. We are fortunate that the Old Hickory Lake source is known for its high-quality "raw" water — or the water directly from the lake before treatment. The Hendersonville Utility District draws this water at an intake near Rockland Park and then routes the water through a series of carefully monitored treatment and disinfection steps in the Water Treatment Plant. The plant, which was built in 1983, has a capacity to treat eight million gallons of water each day but currently produces 4.5 million gallons of water on an average day.

Our Goal

Our goal is to protect our water from contaminants 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 the Hendersonville Utility District. 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, moderately susceptible or slightly susceptible based on geologic factors and human activities in the vicinity of the water source. The Hendersonville Utility District's sources rated as reasonably susceptible to potential contamination. An explanation of Tennessee's SWAP program, the Source Water Assessment summaries, susceptibility scorings and the overall TDEC report to EPA can be viewed online at www.state.tn.us/environment/dws/dwassess.php or you may contact the Hendersonville Utility District directly to obtain copies of the specific assessments.

Why are there contaminants in my water?

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. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants, however, does not necessarily indicate that water poses a health risk. Community water systems are required to disclose the detection of contaminants; however, bottled water companies are not required to comply with this regulation. More information about contaminants and potential health effects can be obtained by calling the U.S. Environmental Protection Agency's Safe Drinking Water Hotline 800-426-4791.



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 by-products 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 the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency prescribes regulations which limit the amount of certain contaminants in the water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health. For more information about your drinking water, please call John Wunner, Water Plant Superintendent at 615-824-5550.

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 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 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 microbial contaminants are available from the **Safe Drinking Water Hotline 800-426-4791**.

What about water system security?

We realize that our customers are concerned about the security of their drinking water. In partnership with the EPA, Homeland Security and the Tennessee Department of Environment and Conservation we have and continue to take active steps to protect the precious resources and system that serves our community. You can help! We urge you and your neighbors to report any suspicious activity at any utility facility – including fire hydrants, pumping stations, etc. – to 615-824-5550.

How can I get involved?

Issues of drinking water are important for any healthy, thriving community and are best managed through an informed and involved customer base and community. The Hendersonville Utility District Board of Commissioners meets on the third Monday of every month, beginning at 4:30 p.m. We encourage you to come to these meetings to learn more about the systems and people that serve you, or call Tom Atchley, General Manager at 615-824-3717 with questions. You may also visit our website at www.hendutil.net.

2011 TEST RESULTS

About the DATA. The data presented in this table is from testing done between January 1, 2011 and December 31, 2011.

Contaminant	Violation Yes/No	Level	Range of Detection	Date of Sample	Unit	MCLG/MRDLG	MCL	Likely Source of Contamination
Turbidity ²	No	.50	.02 - .50	Daily 2011	NTU	N/A	TT	Soil runoff
Total Coliform Bacteria	No	99.9%	Presence/Absence	50/Month	—	0	Presence of coliform bacteria in 5% of monthly samples	Naturally present in the environment
Total Organic Carbon **	No	41% Removal Achieved	25% Removal Required	1/MONTH	PPM	N/A	TT	Naturally present in the environment
INORGANIC CONTAMINANTS								
Chlorine	No	1.98	.30 – 1.98	Monthly	PPM	4.0	4.0 PPM	Water additive used to control microbes
Aluminum	No	.11		7/14/11	PPM		.20 (Secondary Standard)	
Barium	No	.024	.024	7/14/11	PPM	2.0	2.0	Discharge of drilling wastes, metal refineries; Erosion of natural deposits
Fluoride	No	1.06	.32 – 1.54	Quarterly	PPM	4.0	4.0 PPM	Erosion of natural deposits; additive used to prevent tooth decay
Nitrate	No	0.39	.10	1/12/11	PPM	10.0	10.0 PPM	Soil runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits
Sodium	No	5.4	5.4	7/14/11	PPM	N/A	N/A	Erosion of natural deposits
VOLATILE CONTAMINANTS								
(TTHM) Total Trihalomethanes	No	.041	.011 -.041	Quarterly	PPM	0	.80	By-product of drinking water chlorination
(TTHA5) Total Haloacetic Acids	No	.0211	.011 -.038	Quarterly	PPM	0	.60	By-product of drinking water chlorination
LEAD AND COPPER								
Lead ¹	No	.0013	BDL - .0013*	7/27/11	PPM	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits
Copper ¹	No	0.18	.0039 - .18*	7/27/11	PPM	0	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

1. During the most recent round of lead and copper testing, no samples contained concentrations exceeding the action level (AL). * 90th percentile met for both lead and copper. Lead's 90th percentile was BDL. Copper's 90th percentile was .058 PPM.

NOTE:

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. Hendersonville Utility District 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 (1-800-426-4791) or at (<http://www.wpa.gov/safewater/lead>).

** Hendersonville Utility District met all required removal levels for Total Organic Carbon (TOC) in 2011.

2. Hendersonville Utility District met the treatment technique for turbidity with 99.9% of monthly samples below the turbidity limit of 0.3 NTU. 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.

Disinfection By-Products:

While your drinking water meets EPA's standards for trihalomethanes, it does contain low levels. 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 system and may have an increased risk of getting cancer.

What does this chart mean?

- **AL:** Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- **ARA:** Annual Running Average
- **BDL:** Below Detection Limits
- **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. MCL's are set as technology close to the MCLG's as feasible using the best available treatment.
- **MRDL:** Maximum Residual Disinfectant Level: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for the control of microbial contaminants.
- **MRDLG:** Maximum residual disinfectant 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.
- **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.
- **N/A:** Not applicable