

# The NOLENSVILLE/COLLEGE GROVE UTILITY DISTRICT

## Water Quality Report for 2011

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

### What is the source of my water?

Your water comes from the Town of Smyrna (surface water), Metro Nashville (surface Water), Mallory Valley U.D. and one well located in College Grove (ground water). 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 water to 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, moderately susceptible or slightly susceptible based on geologic factors and human activities in the vicinity of the water source. The Nolensville/College Grove Utility District sources rated as reasonably susceptible to potential contamination.



An explanation of Tennessee's Source Water Assessment 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.shtml](http://www.state.tn.us/environment/dws/dwassess.shtml) or you may contact the Water System to obtain copies of specific assessments.

A wellhead protection plan is available for your review by contacting Charles Strasser at the Nolensville/College Grove Utility District office between 8:00 A.M. to 4:00 P.M. weekdays.

### 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. 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).

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

**For more information about your drinking water, please call Charles Strasser at 776-2511.**

### How can I get involved?

Our Water Board meets on the first Tuesday each month at 7:00 p.m. at the utility 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. Results of unregulated contaminant analysis are available upon request. We want you to know that we pay attention to all the rules.

### Other Information

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.

Contaminants that may be present in source water:

- 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, 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 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 and the Tennessee Department of Environment and Conservation prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

### 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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

### Lead in Drinking Water

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. Nolensville/College Grove 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 or at <http://www.epa.gov/safewater/lead>

### Water System Security

Following the events of September 2001, we realize that our customers are concerned about the security of their drinking water. We urge the public to report any suspicious activities at any utility facilities, including treatment plants, tanks, fire hydrants, etc. to 776-2511.





# W a t e r   Q u a l i t y   D a t a

## 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. 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.
- **MRDL**: Maximum Residual Disinfectant Level or MRDL: 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.
- **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 money as one penny in \$10,000.
- **Parts per billion (ppb) or Micrograms per liter** - explained as a relation to money as one 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.

Contaminant	Violation Yes/No	Level Found	Range of Detections	Date of Sample	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria	No	1		9/7/11		0	<2 positive samples/mo	Naturally present in the environment
Turbidity*	No	0.26	0.10 – 0.26	2011	NTU	n/a	0.3	Soil runoff
Total Organic Carbon (TOC)**	No	1.57 Avg.	.67 – 3.1	2011	ppm	N/A	TT	Naturally present in the environment
Copper****	No	90 <sup>th</sup> % =.29		8-25-10	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	No	1.34	0.16-1.34	2011	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum fact.
Sodium	No	9.6	5.8-9.6		ppm	N/A	N/A	Erosion of natural deposits; used in water treatment
Lead****	No	90 <sup>th</sup> % =.0013		8-25-10	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Chlorine	No	2.3	1.0-2.3	2011	ppm	4	4	Water additive used to control microbes.
Nitrate	No	0.61	0.05-.061	10-13-10	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
TTHM*** [Total trihalomethanes]	No	44.3 Avg.	5.8 125	2011	ppb	n/a	80	By-product of drinking water chlorination
Haloacetic Acids (HAA5)	No	36.5 Avg.	1.2-96.6	2011	ppb	N/A	60	By-product of drinking water disinfection.

\*We met the treatment technique for turbidity with 100% of our monthly samples below the turbidity limit of 0.3 NTU. Turbidity is a measure of the cloudiness of water. We measure it because it is a good indicator of the effectiveness of our filtration system.

\*\*We met the treatment technique for total organic carbon in 2011.

\*\*\*Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their livers, kidneys, or central nervous systems, and may have at risk of getting cancer.

\*\*\*\*During the most recent round of Lead and Copper testing, only 0 out of 30 households sampled contained concentrations exceeding the action level.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask for advice from your health care provider.

Note: The Commissioners of Nolensville/College Grove Utility District serve four year terms. Vacancies on the Board of Commissioners are filled by appointment by the Williamson County Mayor from a list of three nominees by the Board of Commissioners to the Williamson County mayor to fill a vacancy. Decisions by the Board of Commissioners on customer complaints brought before the Board of Commissioners under the District's customer complaint policy may be reviewed by the Utility Management Review Board of the Tennessee Department of Environment and Conservation pursuant to Section 7-82-702(7) of Tennessee Code Annotated.

## Water Quality Report – page 3

Nolensville/College Grove Utility District did not receive any violations during 2011, however, one of our suppliers reported the following violation:

### Town of Smyrna Water System

Notice of violation – On May 1, 2011 the Smyrna Water System was out of compliance with the treatment technique requirement for turbidity for approximately 2 minutes, following a plant startup. A water sample taken at this time showed levels of 1.56 turbidity units. This was above the standard of 1 turbidity unit. Normal turbidity levels at our plant are .050 turbidity units. Turbidity has no health effects. However, turbidity can interfere with distribution and provide a medium for microbial growth. Turbidity may indicate the presence of disease causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, diarrhea, and associated headaches. These symptoms are not caused only by organisms in drinking water.

The Smyrna Water System has reviewed the Standard Operational Procedure for plant startup with all operational staff to prevent any future occurrences. The grab sampling point was also changed to better represent combined filtered water during plant startup events. All Water Quality monitoring/testing conducted at the water plant and throughout the town's distribution system since this event have met or exceeded all State and Federal requirements.