

# Lewisburg Water and Wastewater Water Quality Report 2015

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

## What is the source of my water?

Your water, which is surface water, comes from Duck River, 9 miles North of town. 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 Department of Environment and Conservation (TDEC) has prepared a Source Water Assessment Program (SWAP) Report for the water supply serving this water system. The SWAP Report assesses the susceptibility of public water supplies to potential contamination. 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. The Lewisburg Water System sources rated as moderately 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.php](http://www.state.tn.us/environment/dws/dwassess.php) or you may contact the Water System or TDEC at 1-888-891-TDEC 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).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, spring, 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.

## How can I get involved?

Our Water Board meets on the third Thursday of each month, at 4:00 P.M. at 100 Water St. Please feel free to participate in these meetings.

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

## Cross Connection

Be aware and never connect your safe drinking water with a source that could be contaminated. This includes wells that have not been tested and garden hoses hooked to lawn chemicals. A back-siphonage of water or a faulty valve could allow dangerous chemicals to enter your safe drinking water supply. If you have a well or use chemicals that come in contact with the public's safe drinking water, you must install a backflow prevention device and have it tested annually to insure that it is in proper working condition. A backflow prevention device will separate and not allow your safe drinking water to come into contact with anything unsafe.

## 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 Lewisburg Water and Wastewater 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.

Cryptosporidium is a microbial parasite which is found in surface water throughout the US. Although cryptosporidium can be removed by filtration, the most commonly used filtration methods cannot guarantee 100% removal. Monitoring of our source water indicated the presence of cryptosporidium in 7 out of 24 samples tested. No cryptosporidium were detected in finished water samples. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals are able to overcome the disease within a few weeks. However, immunocompromised people have more difficulty and are a greater risk of developing severe, life threatening illness. Immunocompromised individuals are encouraged to consult their doctor regarding appropriate precautions to take to prevent infection. For more information on cryptosporidium, contact the Safe Drinking Water Hotline 800-426-4791.

## 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.

## DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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).

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. Lewisburg Water and Wastewater 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>.

**For more information about your drinking water, please call Trigg Cathey, General Manager, at 931-359-6831 or Cathey Nash, Supervisor, at 931-359-3345.**

# 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.

**MRDL:** Maximum Residual Disinfectant Level or MRDL: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of 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.

Discretionary language regarding the use of averages to report levels of some 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 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.

**BDL - Below Detection Level**

**ND - No Detection**

**UCMR 3 –Unregulated Contaminant Monitoring Rule**

Most of the data presented in this table is from testing done between January and December of 2015.

Contaminant	Violation Y/N	Level Detected	Range of Detection	Date of Sample	Unit Measurement	MRDL	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria	N	0		2015			0	>1 Positive Sample	Naturally present in the environment
Turbidity <sup>1</sup>	N	0.11	.04- .18	2015	NTU		N/A	TT	Soil runoff
Copper <sup>2</sup>	N	90 <sup>th</sup> % = .089		06/18/13	ppm		1.3	AL = 1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead <sup>2</sup>	N	90 <sup>th</sup> % = ND		06/18/13	ppb		0	AL = 15	Corrosion of household plumbing systems, erosion of natural deposits
Sodium	N	4.5		2015	ppm		N/A	N/A	Erosion of natural deposits; used in water treatment
TTHM Total Trihalo- methanes	N	31.	01. - 61.	2015	ppb		0	100	By-product of drinking water chlorination
HAA5 Total Haloacetic Acids	N	38.	009. - 68.	2015	ppb		0	100	By-product of drinking water chlorination
Chlorine	N	1.96	.70 – 3.70	2015	ppm		MRDLG = 4	MRDL = 4	Water additive used to control microbes.
TOC (Total organic Carbon)	N	1.2	1.2 - 1.5	2015	ppm			TT	Naturally present in the environment.
Atrazine	N	BDL	BDL	2015	ppb		3	3	Runoff from herbicide used on row crops.
Nitrate	N	0.390		2015	ppm		10	10	Runoff from fertilizer use.
2,4,D	N	BDL	BDL	2015	PPB		70	70	Runoff from herbicide use on row crops.
UCMR3									
Dioxane	No	0.080	0.070	2015	ppb		N/A		It is used as a solvent or solvent stabilizer in the manufacture and processing of paper, cotton, textile products, automotive coolant, cosmetics and shampoos.
Chromium 6+	N	0.030	.051-10	2015	ppb		N/A	N/A	Discharge from steel and pulp Mills; erosion of natural deposits
Strontium, Total	N	.30	85-85	2015	ppb		N/A	N/A	It is naturally-occurring element and is used as strontium carbonate in pyrotechnic, in steel production, as a catalyst and as a lead scavenger.
Vanadium, Total	N	0.20	.25-.27	2015	ppb		N/A	N/A	It is a naturally-occurring element and is commonly used as vanadium pentoxide in the production of other substances and as a catalyst.

\***UCMR3** Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. For additional information call the Safe Drinking Water Hotline at (800) 426-4791.

## Other Information

<sup>1</sup>100 % (100%) of our samples were below the turbidity limit.

<sup>2</sup>During the most recent round of Lead and Copper testing, only 0 out of 34 households sampled for copper contained concentrations exceeding the action level. 0 out of 34 tested for lead exceeded action level. Tests are performed every three years.

<sup>3</sup> TT-Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water. We met the Treatment Technique requirement for Total Organic Carbon in 2015.. 25% average removal required. Lowest quarterly removal was 45.5%.

<sup>4</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.

## THINK BEFORE YOU FLUSH!

Flushing unused or expired medicines can be harmful to your drinking water. Properly disposing of unused or expired medication helps protect you and environment. Keep medications out of Tennessee's water ways by disposing in one of our permanent pharmaceutical take back bins. Visit [www.epa.gov/ppcp/pdf/drawing.pdf](http://www.epa.gov/ppcp/pdf/drawing.pdf) for more information. There are nearly 100 take back bins located across the state, to find a convenient location please visit [www.tn.gov/environment/sustainable-practices\\_unwanted-prescriptions.shtml](http://www.tn.gov/environment/sustainable-practices_unwanted-prescriptions.shtml)