

# RIVER ROAD UTILITY DISTRICT 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 will see in the chart, we only detected 9 of these contaminants. We found all of these contaminants at safe levels. The state and EPA also require us to test our water and report the finding on a regular basis to insure the safety and quality standards. We continually strive to maintain and improve the water you drink, because our families drink it, too.

## What is the source of my water?

Your water, surface water, comes from mainly a spring located in Brush Creek and Harpeth Valley Utility which their water source is on the Cumberland River and The Water Authority of Dickson County whose water source is Piney River, Cumberland River and Turnbull Creek. 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 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 reasonable 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. A source water assessment has been developed and is available for review at our office.

## Water System Security

Customers are concerned about security of their drinking water. We urge the public to report any suspicious activities at any Utility facility, including treatment plant, tanks, fire hydrants, etc. to 615-792-4603.

## 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. 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 R.R.U.D. 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. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency Safe Drinking Water Hotline (800-426-4791). 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:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operation, 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 natural-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 6:30 p.m. at the utility office located at 2201 River Road. Please feel free to participate in these meetings.

## Board Vacancy

Our Water Board is comprised of 3 Board Members. Vacancies on the Board of Commissioners are appointed by the County Mayor from a list of three nominees, in order of preference, submitted by the Board. Decisions by the Board on customer complaints brought before the Board under the District's customer complaint policy may be reviewed by the Utility Management Board of the Tennessee Department of Environment and Conservation pursuant to Section 7-82-702(7) of Tn. Code Annotated.

## 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.

## Important health information

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. More information about EPA 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 home plumbing. The R.R.U.D. 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 the 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>.

## Other Information

**Cross-connection** is any physical connection between a public water supply and any other supply. This type connection is a violation.

**For more information about your drinking water, please call Harold Lovell at 792-4603.**

**Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.**

## WATER QUALITY DATA

### What does this data below 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.
- **MDRL**- Maximum Disinfectant Residual 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.
- **MDRLG**- Maximum Disinfectant Residual Level Goal, the level of a drinking water disinfectant below which there is no known or expected risk to health. MDRLGs do not reflect the benefits of use of disinfectants to control microbial contaminants.
- **N/A**----- Not Applicable
- **AL** ----- Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- **BDL** - -----Below detection limit
- **PPM** ----- Parts per million or Milligrams per liter (mg/l) – explained in terms of money as one penny in \$10,000.
- **PPB** -----Parts per billion or Micrograms per liter - explained in terms of money as one penny in \$10,000,000.
- **MFL** ----- Million Fibers per Liter - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.
- **TT** - ----- Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.
- **NTU** ----- Nephelometric Turbidity Units--- Turbidity does not present any risk to your health. RRUD monitors turbidity , a measure of cloudiness of water, because it is a good indicator that the filtration system is functioning properly. Turbidity in excess of 5 NTUs is just noticeable to the average person.

**MOST OF THE DATA PRESENTED IN THIS TABLE IS FROM TESTING DONE BETWEEN JANUARY AND DECEMBER OF 2015**

Contaminant	Violation Yes/No	Level Detected	Range of Detections	Date of Sample	Unit Measurement	MCLG	MCL	Likely Source of contaminant
Turbidity <sup>1</sup>	No	0.44max	.02-.44	2015	NTU	N/A	TT	Soil runoff
Total Organic Carbon <sup>2</sup> (TOC)	No	1.8 max	1.2-1.8	2015	PPM	N/A	TT	Naturally present in the environment
Total Coliform Bacteria	No	0	4 samples/month			0		Naturally present in the environment
<b>INORGANIC CONTAMINANTS</b>								
Chlorine	No	1.4avg	1-2.1	2015	PPM	4.0 (MDRLG)	4.0 (MDRL)	Water additive used to control microbes
Nitrate	No	BDL		1/23/15	PPM	10.0	10.0	Soil Runoff from Fertilizer
Sodium	No	13		6/2/15	PPM	N/A	N/A	Erosion of natural deposits:
<b>VOLATILE CONTAMINANTS</b>								
TTHM total	No	47	14.4-95.1	2015	PPB	N/A	80	By-product of drinking water chlorination
Trihalomethanes								
THAA Total	No	29	12.3-80.2	2015	PPB	N/A	60	By-product of drinking water chlorination
Haloacetic Acids								
<b>LEAD AND COPPER</b>								
Lead <sup>4</sup>	No	3.8 <sup>3</sup>		8/18/15	PPB	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits

Copper<sup>4</sup> No .026<sup>3</sup> 8/18/15 PPM 1.3 AL=1.3 Corrosion of household plumbing systems, erosion of natural deposits

<sup>1</sup>99% of our samples were below the turbidity limit of 0.3 NTU.

<sup>2</sup>We meet all required removal levels for total organic compound treatment technique regulation.

<sup>3</sup>90<sup>th</sup> percentile

<sup>4</sup> During the most recent round of Lead and Copper testing, 0 out of 10 households sampled contained concentrations exceeding the action level

<sup>5</sup>These results are from the month of 1/2015 through 6/2015 After 6/10/ 2015 we begin purchasing all water from HVUD

## RIVER ROAD UTILITY DISTRICT - Water Quality Report (CONTINUED)

(THE FOLLOWING DATA IS WATER PURCHASED FROM THE WATER AUTHORITY OF DICKSON COUNTY)

Contaminant	Violation Yes/No	Level Detected	Range of Detections	Date of Sample	Unit Measurement	MCLG	MCL	Likely Source of contaminant
Turbidity	No	0.23 max	0.03-0.23	2015	NTU	N/A	TT	Soil runoff
Total Organic Carbon	No	2.20 max	0.59-2.20	2015	PPM	N/A	TT	Soil runoff
Total Coliform Bacteria	No	0	0	2015		0	≤2	Naturally present in the environment

### INORGANIC CONTAMINANTS

Chlorine	No	1.90avg	0.83-3.72	2015	PPM	4.0	4.0	Additive used to control microbes
Fluoride	No	0.66avg	0.53-0.84	2015	PPM	4.0	4.0	Erosion of natural deposits
Nitrate	No	0.30max	0.14-0.30	10-07-15	PPM	10.0	10.0	Soil Runoff from Fertilizer
Sodium	No	7.8max	4.3-7.8	05-16-15	PPM	N/A	N/A	Erosion of natural deposits:

### VOLATILE CONTAMINANTS

Total Trihalomethanes	No	43avg	22-63	2015	PPB	80	80	By-product of chlorination
Haloacetic Acids	No	36avg	21-48	2015	PPB	60	60	By-product of chlorination

### LEAD AND COPPER

Lead	No	≤ 2.2 <sup>1</sup>		2014	PPB	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Copper	No	≤ 0.13 <sup>1</sup>		2014	PPM	1.3	AL=1.3	Corrosion of household plumbing systems, erosion of natural deposits, leaching of wood preservatives

<sup>1</sup>90<sup>th</sup> % percentile

<sup>2</sup> Sample for 3<sup>rd</sup> qtr. HAA5 in violation---In compliance after resampling.

## (THE FOLLOWING DATA IS WATER FROM HARPEETH VALLEY UTILITY DISTRICT)

Contaminant	Violation Yes/No	Level Detected	Range of Detections	Date of Sample	Unit Measurement	MCLG	MCL	Likely Source of contaminant
Turbidity	No	0.06 avg	0.03-0.41 <sup>1</sup>	2015	NTU	N/A	TT	Soil runoff
Total Organic Carbon <sup>2</sup>	No	1.5 max	1.2-1.5 <sup>2</sup>	2015	PPM	N/A	TT	Naturally present in the environment
Total Coliform Bacteria	No	2.86%		60 samples per month		0	presence of bacteria in 5% of monthly samples	Naturally present in the environment

### INORGANIC CONTAMINANTS

Chlorine	No	1.28avg	0.24-2.3	2015	PPM	4.0 (MRDLG)	4.0 (MRDL)	Water additive used to control microbes
Fluoride	No	0.15	BDL-0.73	2015	PPM	4.0	4.0	Erosion of natural deposits
Nitrate	No	0.35		10/7/15	PPM	10.0	10.0	Water additive that promotes strong teeth
Sodium	No	9.9		8/19/15	PPM	N/A	N/A	Soil Runoff from Fertilizer
								Erosion of natural deposits:

### VOLATILE CONTAMINANTS

TTHM total	No	53.8	21.5-59.5	4 quarterly	PPB	0	80	By product of drinking water chlorination
THAA Total	No	22.8	10.4-27.5	4 quarterly	PPB	0	60	By product of drinking water chlorination
Haloacetic Acids								

### LEAD AND COPPER

Lead <sup>4</sup>	No	0.5 <sup>3</sup>		7/9/14	PPB	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Copper <sup>4</sup>	No	0.064 <sup>3</sup>		7/9/14	PPM	1.3	AL=1.3	Corrosion of household plumbing systems, erosion of natural deposits, leaching from wood preservatives

### MISCELLANEOUS COMPOUNDS

Alkalinity	No	74avg		2015	PPM	N/A	N/A	the capacity of water to neutralize acids
Hardness <sup>5</sup>	No	101avg		2015	PPM	N/A	N/A	erosion of natural deposits

<sup>1</sup>We meet treatment technique requirement for Turbidity in 2015 with 100% of monthly samples below limit of .03 NTU.

<sup>2</sup>We meet treatment technique requirement for Total Organic Carbon in 2015.

<sup>3</sup>90<sup>th</sup> percentile

<sup>4</sup> During the most recent round of Lead and Copper testing, 0 out of 30 households sampled contained concentrations exceeding the action level

<sup>5</sup> Equivalent to 5.7 grains per gallon of hardness