

## 2017 Water Quality Report



# Important Information About Your Drinking Water

## Monitoring Requirements Not Met for PWSID# 0000286

Our water system violated drinking water requirements over the past year. Even though these were not emergencies, as our customers, you have a right to know what happened and what we did to correct this situation.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During September 14 from 12:01 to 04:01, we did not monitor or test for turbidity in 1 filter out of 26 filters and therefore cannot be sure of the quality of the water from that filter during that time. The finished water turbidity during this time, however, was well within limits..

## What should I do?

There is nothing you need to do at this time.

The table below lists the contaminant we did not properly test for during the last year, how often we are supposed to sample for this contaminant, how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which follow-up samples were taken.

CONTAMINANT	REQUIRED SAMPLING FREQUENCY	NUMBER OF SAMPLES TAKEN	WHEN SAMPLES SHOULD HAVE BEEN TAKEN	WHEN SAMPLES WERE TAKEN
TURBIDITY	1 SAMPLE EVERY 4 HOURS	0	SEPTEMBER 14, 12:01-04:01	SEPTEMBER 14, 04:35

## What is being done?

We have since taken the required samples, as described in the last column of the table above. The samples showed we are meeting drinking water standards. Procedures have been put in place to insure this does not have again.

For more information, please contact Bruce Trotter at 615-352-7076 or PO Box 210319 Nashville TN 37221.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand.

## Is my drinking water safe?

Yes, your drinking water is safe. In 2017, we conducted tests for more than 57 contaminants that might be found in drinking water. The state and the EPA also require us to test our water and report the findings on a regular basis to ensure safety and quality standards. We continually strive to maintain and improve the water you drink because our families drink it, too.

## Where does our water come from?

Our water source is the Cumberland River commonly known as Cheatham Lake. We work closely with the Tennessee Department of Environment and Conservation (TDEC) to assess the status of our water source for contamination. TDEC rates the potential for water source contamination based on geologic factors and human activities in the vicinity of the water source. TDEC has rated our source, classified as surface water, as reasonably susceptible.

Specific information about HVUD and its Source Water Assessment Program (SWAP) Report from TDEC can be viewed online at: <https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/source-water-assessment.html> or you may contact the Harpeth Valley Utilities District or TDEC at 1-888-891-TDEC (1-888-891-8332) to obtain copies of specific assessments.

## Important health information.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people can be particularly at risk for infections. This includes those undergoing chemotherapy, people who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants. These people should seek advice from a health care provider about their drinking water. More information about EPA guidelines on appropriate means to lessen the risk of infection by Cryptosporidium or other microbial contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

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. Harpeth Valley Utilities 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 two 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>.

## About the data.

The data presented in the table below is from testing done between January 1, 2017 and December 31, 2017. HVUD monitors for some contaminants less than once per year. For those contaminants, the date of the last sample is shown on the table.

CONTAMINANT	VIOLATION YES / NO	LEVEL DETECTED	RANGE OF DETECTIONS	DATE OF SAMPLE	UNIT OF MEASUREMENT	MCLG	MCL	LIKELY SOURCE OF CONTAMINANT
TURBIDITY <sup>1</sup>	NO	0.05 AVG	0.03-0.16*	2017	NTU	N/A	TT	• SOIL RUNOFF
TOTAL ORGANIC CARBON (TOC)	NO	1.37 MAX	1.03-1.37**	2017	PPM	N/A	TT	• NATURALLY PRESENT IN THE ENVIRONMENT
TOTAL COLIFORM BACTERIA (RTCR)	NO	1.43%	-	70 samples per month	-	0	TT Trigger	• NATURALLY PRESENT IN THE ENVIRONMENT
<b>INORGANIC CONTAMINANTS</b>								
CHLORINE	NO	1.28 AVG	0.21-2.15	2017	PPM	4.0 (MRDLG)	4.0 (MRDL)	• WATER ADDITIVE USED TO CONTROL MICROBES
FLUORIDE	NO	0.49 AVG	0.04-0.81	2017	PPM	4.0	4.0	• EROSION OF NATURAL DEPOSITS • WATER ADDITIVE THAT PROMOTES STRONG TEETH
NITRATE	NO	0.29	-	10/10/17	PPM	10.0	10.0	• SOIL RUNOFF FROM FERTILIZER
SODIUM	NO	8.8	-	9/19/17	PPM	N/A	N/A	• EROSION OF NATURAL DEPOSITS
<b>VOLATILE CONTAMINANTS</b>								
TTHM TOTAL TRIHALOMETHANES	NO	55.8	18.5-66.2	4 QUARTERLY SAMPLES FOR 2017	PPB	0	80	• BY-PRODUCT OF DRINKING WATER CHLORINATION
THAA TOTAL HALOACETIC ACIDS	NO	28.3	11.5-34.1	4 QUARTERLY SAMPLES FOR 2017	PPB	0	60	• BY-PRODUCT OF DRINKING WATER CHLORINATION
CHLOROBENZENE	NO	0.586	-	8/15/17	PPB	100	100	• CHEMICAL AND AGRICULTURAL FACTORY DISCHARGE/STORMWATER RUNOFF
<b>LEAD AND COPPER</b>								
LEAD <sup>2</sup>	NO	1.1***	-	9/6/17	PPB	0	AL=15	• CORROSION OF HOUSEHOLD PLUMBING SYSTEMS • EROSION OF NATURAL DEPOSITS
COPPER <sup>2</sup>	NO	0.084***	-	9/6/17	PPM	1.3	AL=1.3	• CORROSION OF HOUSEHOLD PLUMBING SYSTEMS • EROSION OF NATURAL DEPOSITS • LEACHING FROM WOOD PRESERVATIVES
<b>MISCELLANEOUS COMPOUNDS</b>								
ALKALINITY	NO	90 AVG	71-123	2017	PPM	N/A	N/A	• THE CAPACITY OF WATER TO NEUTRALIZE ACIDS
HARDNESS <sup>3</sup>	NO	104 AVG	86-130	2017	PPM	N/A	N/A	• EROSION OF NATURAL DEPOSITS

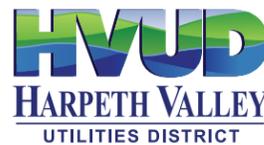
HVUD conducted sampling and analysis of the source water for Cryptosporidium in 2017. Cryptosporidium is a microbial parasite which is found in surface water throughout the U.S. Although Cryptosporidium can be removed by filtration, the most commonly used filtration methods cannot guarantee 100% removal. Monitoring of our source water in 2017 indicated the presence of cryptosporidium in 2 of 6 samples tested. However, no cryptosporidium were detected in finished water. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals are able to overcome the disease within a few weeks. However, immuno-compromised people have more difficulty and are at greater risk of developing severe, life threatening illness. Immuno-compromised 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).

\* We met the Treatment Technique requirement for Turbidity in 2017 with 100% of monthly samples below the Turbidity limit of 0.3 NTU.  
\*\* We met the Treatment Technique requirement for Total Organic Carbon in 2017.  
\*\*\* 90th percentile

- 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.
- During the most recent round of lead and copper testing, 0 out of 30 households sampled contained concentrations exceeding the action level.
- Equivalent to 6.1 grains per gallon of hardness.

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.

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
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.
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 use of disinfectants to control microbial contaminants.
N/A	Not applicable.
NTU	Nephelometric Turbidity Units, a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
PPB	Parts Per Billion or micrograms per liter (1 part per billion equals 1 penny in \$10,000,000).
PPM	Parts Per Million or milligrams per liter (1 part per million equals 1 penny in \$10,000).
RTCR	Revised Total Coliform Rule. This rule went into effect April 1, 2016 and replaces the MCL for total coliform with a Treatment Technique Trigger for a system assessment.
TT	Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.
Turbidity	Turbidity does not present any risk to your health. HVUD monitors turbidity, a measure of the cloudiness of water, because it is a good indicator that the filtration system is functioning properly.





## One final drop.

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.

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. In order to ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) and the Tennessee Department of Environment and Conservation prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which provide protection for public health.

For more information about contaminants and potential health effects, call the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

## HVUD: Quality water, quality service.

This report was issued as a requirement of an amendment to the 1996 Safe Drinking Water Act. The 1998 amendment allows the Environmental Protection Agency (EPA) to require a Consumer Confidence Report every 12 months. The goal of the EPA is to inform all customers about water quality issues in their area and to give customers any information needed to become involved in local water issues, if so desired. Although this is a new law, we have been testing our water for years and are pleased to report that, once again, our water passed the test with flying colors. If you would like more information about this report, please feel free to contact Bruce Trotter or Lynn Osborn at 615-352-7076 or visit us at 5838 River Road, Nashville, Tennessee. Our Board of Commissioners meets on the fourth Monday of each month at 9:00 a.m. in the district office.

*All governmental powers of the District are exercised by the District's Board of Commissioners. The Board consists of three members, serving staggered four year terms. The Members of the Board are appointed by the County Mayor of Williamson County and the Probate Judge of Davidson County from a list of three nominees, in order of preference, submitted by the Board. All decisions by the Board on customer complaints may be reviewed by the Utility Management Review Board pursuant to Tennessee Code Annotated, Section 7-82-702(7).*

*This institution is an equal opportunity provider and employer.*



P.O. Box 210319 • 5838 River Road • Nashville, TN 37221

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