

Cumberland Utility District Water Quality Report 2023

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 most of these contaminants at safe levels.

What is the source of my water?

Your water, which is surface water, comes from the Little Emory River, Elverton Branch Embayment and from Brushy Mtn. Reservoir. 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 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 Cumberland Utility District 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 <https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/source-water-assessment.html> or you may contact the Water System 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. 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 Allen Morgan at 865-882-0395.

How can I get involved?

Our Water Board meets on the second Thursday of each month, 5:00 P.M., at the Cumberland Utility District office, located at 3201 Harriman Highway in Harriman, TN. Please feel free to participate in these meetings. The Commissioners of Cumberland Utility District serve four year terms. Vacancies on the Board of Commissioners are filled by the vote of the remaining Commissioners in office. 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.

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. Cumberland Utility District's water treatment processes are designed to reduce any such substances to levels well below any health concern. 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 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, 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. Cumberland 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 800-426-4791 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, pumping stations, tanks, fire hydrants, etc. to 615-896-9022

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 the environment. Keep medications out of Tennessee's waterways by disposing in one of our permanent pharmaceutical take back bins. There are nearly 100 take back bins located across the state, to find a convenient location please visit:

<https://tdeconline.tn.gov/rxtakeback/>



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 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.
- **Below Detection Level (BDL)** - laboratory analysis indicates that the contaminant is not present at a level that can be detected.
- **Non-Detects (ND)** - laboratory analysis indicates that the contaminant is not present.
- **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.
- **Picocuries per liter (pCi/L)** - picocuries per liter is a measure of the radioactivity in water.
- **Millirems per year (mrem/yr)** - measure of radiation absorbed by the body.
- **Million Fibers per Liter (MFL)** - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.
- **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.
- **RTCR** – Revised Total Coliform Rule. This rule went into effect on 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.

Contaminant	Violation Yes/No	Level Detected	Range of Detections	Date of Sample	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria (RTCR)	No	0		2023		0	TT Trigger	Naturally present in the environment
Turbidity ¹	No	0.29	0.03-0.29	2023	NTU	n/a	TT	Soil runoff
Barium	No	0.0196		12/21/22	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Copper*	Yes	0.057 90%		2023	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	No	1.05	0.650-1.05	2023	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead* ²	Yes	BDL 90%		2023	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate ⁶ (as Nitrogen) ³	No	.172		2/15/23	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits



Sodium	No	41.9		5/25/22	ppm	N/A	N/A	Erosion of natural deposits; used in water treatment
TTHM ⁴ [Total trihalomethanes]	Yes	109	12.9-163	2023	ppb	n/a	80	By-product of drinking water chlorination
Halo acetic Acids (HAA5)	No	57.1	12.5-88.8	2022	ppb	N/A	60	By-product of drinking water disinfection.
Total Organic Carbon ⁵	No			2023	ppm	TT	TT	Naturally present in the environment.

Contaminant	Violation Yes/No	Level Found	Range of Detections	Date of Sample	Unit Measurement	MRDLG	MRDL	Likely Source of Contamination
Chlorine	No	2.15 Ave.	0.80-3.70	2023	ppm	4	4	Water additive used to control microbes.

*During the most recent round of Lead and Copper testing, 1 out of 60 households sampled contained concentrations exceeding the action level. Please see the attached Public Notice.

*Cumberland Utility incurred a violation in 2022-1 for not sampling lead and copper for 60 sites during this monitoring period. Since then we have pulled the required sampling to conform to the proper monitoring period.

¹100% of our samples were below the turbidity limit. 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.

²Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community because of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791).

³ Please See the attached Public Notice

⁴ **Cumberland Utility District** recently violated a federal drinking water standard. Although this situation does not require that you take immediate action, you as a customer have a right to know what happened, what you should do, and what was done to correct this situation.

During the January 1, 2023 through March 31, 2023 compliance period the water system's Locational Running Annual Average (LRAA) at site #103, 6455 Know Highway, for Total Trihalomethanes (TTHM) has been calculated to be **0.08678 mg/l**. This value exceeds the Maximum Containment Level of 0.080 mg/l set for this parameter.

Corrected actions: Personal has since been instructed on proper sampling times and techniques.

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 systems, and have an increased risk of getting cancer.

Total Trihalomethanes are disinfection byproducts resulting from our chlorination of the water to minimize risk of microbial life in the drinking water. The EPA considers microbial contaminants as the greater risk to the public. We are evaluating the results of the required disinfection and will continue to make an effort to reduce the disinfection byproducts without increasing the microbial risks.

You do not need to boil your water or take other actions. However, if you have specific health concerns, consult your doctor. For more information, please contact Cumberland Utilities at 865-882-0395.

Please share this information with everyone who may drink this water, including 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 or mail.

⁵ In 2023, we have met all treatment technique requirements for Total Organic Carbon removal.

⁶ **Cumberland Utility** did not correctly perform a public notice for nitrate violation that was sampled 2-15-23. Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate 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 advice from your health care provider. Nitrate. Infants below the age of six months who drink

water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

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IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Monitoring Requirements Not Met for Cumberland Utility District

Cumberland Utility District 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 are doing (did) to correct these situations.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether our drinking water meets health standards. During the fourth quarter of 2023 we failed to monitor for Total Trihalomethanes and Total Halo acetic Acids per our Stage 2 LR4A Monitoring Plan and therefore cannot be sure of the quality of your drinking water during that time.

What should I do?

There is nothing you need to do currently.

The table below lists the contaminant(s) we did not test according to our monitoring plan during a recent compliance period, how often we are supposed to sample, how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which samples were (or will be) taken.

Contaminant	Required sampling frequency	Number of samples required	When samples should have been taken during week of	When samples were taken (or will be taken)
Total Trihalomethanes	Quarterly	4	11/8/2023	1/2024
Total Halo acetic Acids	Quarterly	4	11/8/2023	1/2024

What is being done?

We have instructed personal of proper sampling techniques.

For more information, please contact Robert Patty at 865-882-0395

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 or mail.

This notice is being sent to you by Cumberland Utility District.

State Water System TN0000531

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Cumberland Utility violated surface water treatment rule by not monitoring continuous chlorine for the time of February 2023 and did not maintain duplicate chemical feed pumps. Personal has been replaced and new employees has been instructed on proper procedures.

Monitoring Requirements Not Met for Cumberland Utility

Our water system violated drinking water standards 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 these situations.

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 the 2023 sampling period 1 and 2 we did not inform consumers of the laboratory results from Lead and Copper tests within the required time.

What should I do?

There is nothing you need to do at this time.

What is being done?

We have instructed personal of the proper technique

For more information, please contact Robert Patty at 865-882-0395 or Cumberland Utility at P.O.. box 950 Harriman, TN 37748.

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 or mail.

This notice is being sent to you by Cumberland Utility

State Water System ID#: PWSID: TN0000531

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