



# Anderson County Water Authority Water Quality Report

## Is My Drinking Water Safe?

Yes, our water meets all the EPA's health standards. We have conducted numerous tests for over 80 contaminants that may be present in drinking water. As shown in the chart below, we detected only a small amount of these contaminants and found that their levels are safe.

## What is the Source of My Water?

Your water, which is surface water, comes from the Clinch River. Our goal is to protect our water from contaminants, and we are collaborating 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 that serve this water system. This report evaluates vulnerability to contamination based on geological factors and human activities nearby. The Anderson County Water Authority's sources are rated as reasonably susceptible to potential contamination.

Further information and the full TDEC report 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 small amounts of certain contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. For more information about contaminants and potential health effects, please call the EPA's Safe Drinking Water Hotline at **800-426-4791**.

## How Can I Get Involved?

Our Water Board meets on the third Tuesday of each month at 5:00 p.m. at the utility office. Please feel free to participate. Commissioners serve four-year terms and are appointed by the mayor when vacancies occur. Decisions on customer complaints can be reviewed by the Utility Management Review Board of the Tennessee Department of Environment and Conservation.



## Is Our Water System Meeting Other Rules That Govern Our Operations?

The State and EPA require us to test and report on our water regularly. We have met all these requirements. Results of unregulated contaminant analysis are available upon request. We want you to know that we pay close attention to all regulations.

## Other Information About Drinking Water Contaminants

Sources of drinking water include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the land or through the ground, it dissolves naturally occurring minerals and sometimes picks up substances resulting from the presence of animals or human activity.

Contaminants that may be present in source water include:

- **Microbial contaminants:** viruses and bacteria from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants:** salts and metals from natural sources or urban runoff, industrial discharges, mining, or farming.
- **Pesticides and herbicides:** from agriculture, urban runoff, and residential uses.
- **Organic chemical contaminants:** synthetic and volatile chemicals from industrial processes, petroleum production, gas stations, and septic systems.
- **Radioactive contaminants:** natural or from oil, gas production, and mining activities.

To ensure safety, EPA and TDEC set regulations to limit contaminants in public water systems and treatment processes to reduce these to safe levels.

## Do I Need to Take Special Precautions?

Some people are more vulnerable to contaminants, such as immuno-compromised individuals, pregnant women, infants, and elderly people. Such persons should consult their healthcare providers about drinking water and precautions to reduce infection risks, including from microorganisms like *Cryptosporidium*. EPA/CDC guidelines are available via the Safe Drinking Water Hotline (**800-426-4791**).

## Water System Security

Since September 2001, we have understood concerns about water safety. Please report any suspicious activity at utility facilities (treatment plants, pumping stations, tanks, hydrants, etc.) by calling (**865**) **457-3033**.



## Think Before You Flush!

Flushing unused or expired medicines can harm drinking water. Proper disposal protects you and the environment. Use one of nearly 100 permanent pharmaceutical take-back bins across Tennessee. Find locations at <https://tdeconline.tn.gov/rxtakeback/>.

## Lead in Drinking Water

Lead causes serious health problems at all ages, especially for pregnant people, infants, and young children. Lead in water mainly comes from service lines and home plumbing materials. Anderson County Water Authority provides high-quality water and removes lead pipes where possible but cannot control in-home plumbing materials.

You can reduce exposure by:

- Using a filter certified by an American National Standards Institute (ANSI) to reduce lead, following instructions carefully.
- Using only cold water for drinking, cooking, and baby formula.
- Flushing pipes for several minutes before use (running tap, shower, laundry, dishes).

Boiling water does NOT remove lead. If you suspect lead plumbing, flush longer. For water testing or questions, call Anderson County Water Authority at **(865) 457-3033**. More info is available at <https://www.epa.gov/safewater/lead>.

Lead exposure impacts IQ, attention span, learning, behavior in children, and increases risks of heart disease, high blood pressure, kidney, and nervous system issues in adults.

## Lead Service Line Inventory

A Lead Service Line Inventory is completed and is available by contacting Anderson County Water Authority at **(865) 457-3033** or by emailing [Jeremiah.sweat@acwatn.org](mailto:Jeremiah.sweat@acwatn.org).



## Water Quality Data and Explanations

The following explains terms used in water quality data:

- **MCLG:** Maximum Contaminant Level Goal — contaminant level with no known health risk.
- **MCL:** Maximum Contaminant Level — the highest allowed contaminant level.
- **MRDL:** Maximum Residual Disinfectant Level — highest allowed disinfectant.
- **MRDLG:** Maximum Residual Disinfectant Level Goal — disinfectant level with no health risk.
- **AL:** Action Level — concentration triggering treatment or actions.
- **BDL:** Below Detection Level — contaminant not detected.
- **ND:** Non-Detect — contaminant not present.
- **ppm:** Parts per million (mg/L).
- **ppb:** Parts per billion (µg/L).
- **pCi/L:** Picocuries per liter — radioactivity measure.
- **mrem/yr:** Millirems per year — radiation absorbed by the body.
- **MFL:** Million Fibers per Liter — asbestos fibers count.
- **NTU:** Nephelometric Turbidity Unit — water clarity measure.
- **RTCR:** Revised Total Coliform Rule.
- **TT:** Treatment Technique — process to reduce contaminants.



## Water Quality Chart: Contaminants Detected in 2024

Contaminant	Violation	Level Detected	Range	Sample Date	Unit	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria (RTCR)	No	0	N/A	2024	30 Samples	0	TT Trigger	Naturally present in the environment
Turbidity	No	0.10	0.2 - 0.10	2024	NTU	n/a	TT	Soil runoff
Antimony	No	0.002		2024	ppb	6	6	Discharge from petroleum refineries, fire retardants, ceramics, electronics, solder
Arsenic	No	0.10	0.02 - 0.10	2024	ppb	n/a	50	Erosion of natural deposits; runoff from orchards, glass and electronics wastes
Barium	No	0.045	0.0302 - 0.045	2024	ppm	2	2	Discharge of drilling wastes; metal refineries; erosion of deposits
Beryllium	No	1	0.0003 - 1	2024	ppb	4	4	Discharge from metal refineries, coal-burning, aerospace, defense industries
Cadmium	No	0.0002		2024	ppb	5	5	Corrosion of galvanized pipes; metal refineries; waste batteries, paints
Chromium	No	0.0005		2024	ppb	100	100	Discharge from steel and pulp mills; erosion of deposits
Copper (90th %)	No	0.388	0.017 - 0.388	2023	ppm	1.3	AL=1.3	Corrosion of household plumbing; erosion of deposits; wood preservatives
Cyanide	No	0.0033		2024	ppb	200	200	Discharge from steel/metal, plastic, fertilizer factories



Contaminant	Violation	Level Detected	Range	Sample Date	Unit	MCLG	MCL	Likely Source of Contamination
Fluoride	No	0.760	0.252 - 0.760	2024	ppm	4	4	Erosion of deposits; water additive for teeth; fertilizer, aluminum factories
Lead (90th %)	No	0.0123	1 - 12.3	2023	ppb	0	AL=15	Corrosion of household plumbing; erosion of deposits
Mercury (inorganic)	No	0.002		2024	ppb	2	2	Erosion of deposits; refineries and factories; landfills, cropland runoff
Nickel	No	25	1 - 25	2024	ppb	100	100	
Nitrite (as Nitrogen)	No	0.302	0.286 - 0.302	2024	ppm	1	1	Runoff from fertilizer, septic tanks, sewage; erosion of deposits
Selenium	No	1	0.5 - 1	2024	ppb	50	50	Discharge from refineries, mines; erosion of deposits
Sodium	Yes	7.66	7.47 - 7.66	2025	ppm	N/A	N/A	Erosion of deposits; used in water treatment
Thallium	No	1	0.2 - 1	2024	ppb	0.5	2	Leaching from ore-processing, electronics, glass, drug factories
Total Trihalomethanes (TTHM)	Yes	76.05 (LRAA)	36.10 - 105.00	2024	ppb	N/A	80	By-product of drinking water chlorination
Haloacetic Acids (HAA5)	Yes	55.68 (LRAA)	33.50 - 73.00	2024	ppb	N/A	60	By-product of drinking water disinfection
Chlorine	No	1.61 Avg	0.5 - 2.6	2024	ppm	4	4	Water additive to control microbes
Total Organic Compound	No							Naturally present in the environment



#### Violations During the 2024 Sampling Year

The Anderson County Water Authority had violations for Sodium, Total Trihalomethanes, and Haloacetic Acids in 2024. The sampling schedule has been adjusted to prioritize proper sample collection.

#### Description of the Violation

Anderson County Water Authority failed to collect required samples for Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5) during the designated monitoring period. These are disinfection byproducts that can form when disinfectants used in water treatment react with natural organic matter in the water.

#### When the Violation Occurred

The required samples were not collected during the first quarter of 2024 during the sample window but were collected during the quarter.

#### Potential Adverse Health Effects

TTHM: Some people who drink water containing trihalomethanes over the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of cancer.

HAA5: Some people who drink water containing Haloacetic Acids over the MCL over many years may also have an increased risk of cancer.

#### Population at Risk

However, infants, the elderly, and individuals with compromised immune systems may be more susceptible to the effects of these contaminants.

#### Use of Alternative Water Supplies

Currently, alternative water supplies are not necessary. This notice is precautionary due to a missed monitoring requirement, not a confirmed exceedance of contaminant levels.

#### Recommended Consumer Actions

No immediate action is required

If you have specific health concerns, especially if you are in a vulnerable group, you may wish to consult your healthcare provider.

#### Corrective Actions

We are taking steps to ensure that all future monitoring requirements are met, including:

- Reviewing and updating our sampling schedule.
- Providing additional training for staff.
- Coordinating with our laboratory to ensure timely sample collection and analysis.

#### Expected Resolution

We expect to return to full compliance by the next monitoring period.

#### Contact Information: (865)457-3033

Jeremiah Sweat Compliance Officer: [Jeremiah.Sweat@acwatn.org](mailto:Jeremiah.Sweat@acwatn.org)

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (e.g., 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

For more information, please contact Anderson County Water Authority at **(865) 457-3033** or by email at [jeremiah.sweat@acwatn.org](mailto:jeremiah.sweat@acwatn.org).

Contaminant	Required Sampling Frequency	Number of valid samples taken	When all the samples should have been taken	When samples were or will be taken
Total Trihalomethanes	Quarterly	0	2/14/2024	1/30/2024
Total Haloacetic Acids	Quarterly	0	2/14/2024	1/30/2024
Total Trihalomethanes	Quarterly	0	8/14/2024	7/30/2024
Total Haloacetic Acids	Quarterly	0	8/14/2024	7/30/2024
Sodium	Yearly	0	2024	1/29/25



## Additional Notes

- During recent Lead and Copper testing, 0 out of 30 households exceeded the action level.
- Turbidity levels have been consistently below required limits, indicating effective filtration.
- Although your water meets EPA standards for arsenic and trihalomethanes, low levels are present. Long-term exposure to these may have health effects; ongoing monitoring continues.
- <sup>1</sup>100% 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.
- <sup>2</sup>While your drinking water meets EPA's standard for arsenic; it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.
- <sup>4</sup>Infants and young children are typically more vulnerable to lead in drinking water than the general population. Lead levels at your home may be higher than at other homes in the community because of the 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).
- <sup>5</sup>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 because of rainfall or agricultural activity. If you care for an infant, you should ask for advice from your health care provider.
- <sup>6</sup> While your drinking water meets EPA's standard for trihalomethanes, it does contain low levels. Some people who drink water containing trihalomethanes over the MCL over many years may experience problems with their liver, kidneys, or central nervous systems and may have an increased risk of getting cancer.
- We met all requirements for the sampling year for the total number of organic compounds for 2024.

*Report Date: July 2025*  
*State Water System ID#: TN0000514*