Cleveland Utilities Authority
WATER QUALITY REPORT - 2025

Water Sources and Protection

Sources of Cleveland's drinking water include surface water from the Hiwassee and Tennessee Rivers, and ground water from limestone aquifers in the area (Waterville Spring). Cleveland Utilities (CU) also purchases water from other utilities in the area to ensure an adequate water supply to the service areas of Cleveland and Bradley County. These utilities include the Hiwassee Utilities Commission and Eastside Utility District.

Our goal is to protect our water from contaminants, and CU is working with the State to determine the vulnerability of our water sources to potential contamination. The Tennessee Department of Environment and Conservation (TDEC) and CU prepared a Source Water Assessment Program (SWAP) Report including a Wellhead Protection Plan for susceptibility of untreated water sources to potential contamination. To ensure safe drinking water, all public water systems treat and routinely test their water. CU sources have been rated as reasonably susceptible based on geologic factors and human activities in the vicinity of the water source. An explanation of Tennessee's Source Water Assessment Program, the Source Water Assessment summaries, susceptibility scorings and overall TDEC report to the Environmental Protection Agency (EPA) can be viewed online at https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/source-water-assessment.html or contact CU at (423) 559-5277 or (423) 478-0698, Monday – Friday between 8:00 a.m. and 4:00 p.m.

Water Operations and Testing

Cleveland Utilities operates 3 water treatment plants which are staffed with state licensed operators. The operations staff are responsible for overseeing treatment operations and performing quality control checks over all the water produced by these plants. The Environmental and Regulatory Compliance Department is responsible for ensuring that the quality and protection of the drinking water is maintained and is compliant with stringent State and Federal regulations.

Contaminant Information

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 EPA's Safe Drinking Water Hotline at (800) 426-4791.

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. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Special 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 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 drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

Information About Lead

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. Cleveland Utilities is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact CU at (423) 472-4521. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at https://www.epa.gov/safewater/lead and www.clevelandutilities.com/lead.

Health Effects of Lead Exposure

Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney or nervous system problems. Additional information about the health effects of lead can be found at https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water.

Lead Service Line Inventory

Cleveland Utilities has developed a Lead Service Line Inventory to assist customers with identifying the service line material at their location. The inventory is accessible via an interactive map, searchable by address or account number. Visit the **Lead and Copper Rule Web Page** at www.clevelandutilities.com/lead to access the map. In addition, customers can find information to help identify their service line material, an instructional Service Line Self-Assessment video, and a Customer-Side Service Line Material Survey that you can complete and submit. You can contact CU at (423) 472-4521 or leadcopper@clevelandutilities.com for assistance on identifying the service line material or if you are planning to replace your service line.

Cryptosporidium

Cryptosporidium is a microscopic parasite which is found in surface water throughout the U.S. and comes from animal waste and run-off. When ingested, it can result in diarrhea, fever and other gastrointestinal symptoms. Cryptosporidium is eliminated by an effective treatment combination including coagulation, sedimentation, filtration, and disinfection. For more information on Cryptosporidium, contact the Safe Drinking Water Hotline (800) 426-4791.

The EPA and TDEC require water systems to give consumers an annual report on the quality of their drinking water. Cleveland Utilities provides consumers current water quality information by calling (423) 559-5277 or (423) 478-0698 between the hours of 8:00 a.m. and 4:00 p.m. Monday – Friday or on our web site at www.clevelandutilities.com.

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

Cleveland Utilities Authority Board generally meets on the fourth Friday of each month at 12:30 p.m. at Cleveland Utilities Tom Wheeler Training Center, 2455 Guthrie Avenue, NW, Cleveland, Tennessee.

2025 WATER QUALITY DATA

REGULATED AT THE DISTRIBUTION SYSTEM ENTRY POINT (WATER TREATMENT FACILITY)

Contaminant (unit)	Level Detected					Level Detected		MCL	MCLG	Source of Contaminant
	Analyzed	Violation Yes/No	CFP	WAT	HUC	Analyzed	EUD			
Turbidity (ntu) ①	2025	No	0.25	0.22	0.33	2025	0.05	TT	NA	Soil runoff.
	Range		0.01 - 0.25	0.02 - 0.22	0.02 - 0.33	Range	0.02 - 0.05			
Nitrate (ppm)	2025	No	0.266	0.907	0.272	2025	0.272	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Total Organic Carbon (TOC) (ppm)	2025	No	0.94 ④	NR	1.13 ④	2025	1.17 ④	TT	TT	Naturally present in the environment.
	Range		0.68 - 0.81		0.72 - 1.05		1.05 - 1.38			
Sodium (ppm)	2025	No	4.36	(2023) 2.29	6.95	2025	8.38	NA	NA	Erosion of natural deposits; Used in water treatment.

REGULATED IN THE DISTRIBUTION SYSTEM AND CUSTOMER TAP

Contaminant (unit)	Level Detected					Level Detected		MCL	MCLG	Source of Contaminant
	Analyzed	Violation Yes/No		CU	HUC	Analyzed	EUD			
Total Trihalomethane** (TTHM) (ppb)	2025 ②	No	Highest LRAA	58.9	36.3	2025	49.87	80	NA	By-product of drinking water chlorination.
			Range	2.6 - 75.1	33.0 - 36.3	Range	15.5 - 50.8			
Haloacetic Acids (HAA5) (ppb)	2025 ②	No	Highest LRAA	48.3	30.7	2025	24.8	60	NA	By-product of drinking water chlorination.
			Range	1.0 - 83.4	26.9 - 30.7	Range	8.99 - 31.7			
Total Coliform (mpn/100ml)	2025	No	Daily	0	(Monthly) 0	Daily	NR	TT	NA	Naturally present in the environment
E.Coli (mpn/100ml)		No		0	0		NR	*See Definition	0	Human and animal fecal waste
Lead (ppb)	2023 ③	No	90th percentile	< 2.0	< 2.0	2023	90th % = 2.32	AL = 15	0	Corrosion of household plumbing systems; Erosion of natural deposits.
			Range	All Sites < 2.0	All Sites < 2.0	Range	< 2.00 - 9.10			
Copper (ppm)	2023 ③	No	90th percentile	0.112	0.00422	2023	90th % = 0.0848	AL = 1.3	1.3	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
			Range	0.016 - 0.765	< 0.001 - 0.00422	Range	0.00756 - 0.158			
Chlorine (ppm)	2025	No	Highest RAA	1.7	1.9	2025	1.89	MRDL 4.0	MRDLG 4.0	Water additive used to control microbes.
			Range	0.3 - 2.2	1.6 - 2.0	Range	0.96 - 2.48			
Fluoride (ppm)	2024	No	Highest RAA	0.26	< 0.15	2025	0.68	4.0	4.0	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
			Range	< 0.15 - 0.28	< 0.15 - < 0.15	Range	0.52 - 0.77			

UNREGULATED AT THE DISTRIBUTION SYSTEM ENTRY POINT

Contaminant (unit)	Level Detected					Level Detected	
	Analyzed		CU	WAT	HUC	Analyzed	EUD
PFBS (ppb)	2024	Average	<MRL	0.0271	0.0029	<MRL	
		Range		0.0249 - 0.0327	< 0.003 - 0.0041		
PFPeA (ppb)	2024	Average	<MRL	0.0031	<MRL	<MRL	
		Range		< 0.003 - 0.0033			
PFBA (ppb)	2024	Average	<MRL			0.0062	
		Range				< 0.005 - 0.0100	

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. UCMR minimum reporting levels (MRLs) were established based on the capability of the analytical method, not based on a level established as "significant" or "harmful." For additional information call the Safe Drinking Water Hotline at (800) 426-4791.For additional information call the Safe Drinking Water Hotline at (800) 426-4791 or Cleveland Utilities at (423) 478-0698.

The table above indicates 'contaminants' that were detected (No Total Coliform/Ecoli Detections) in Cleveland's water supply and are required to be reported. Not indicated are additional 'contaminants' for which tests were conducted and not detected. "Contaminant" means any physical, chemical, biological, or radiological substance or matter in water including chemicals used during treatment.

① = 100% of CFP samples were ≤ 0.3 NTU. 100% of WAT samples were <0.3 NTU. 99.95% of HUC samples were ≤ 0.3 NTU. 100% of EUD samples were ≤ 0.3 NTU. Turbidity is a measure of the cloudiness of the water. It is a good indicator of the effectiveness of the filtration system.

② = Average is the maximum quarterly value from locational running annual averages (LRAA). Compliance with the MCL is based on the locational running annual average. Range is the minimum to maximum for individual samples from all locations and are not averages.

③ = Analysis must be performed again prior to the end of September 30, 2026 (3 yr cycle). HUC Analysis must be performed again prior to the end of September 30, 2026. 100% of the sites tested for Lead and Copper in the CU, HUC, and EUD systems were below the Action Level.

④ = Plants have met the TT requirements for TOC in 2025. Average is the maximum quarterly average from running annual averages of treated water. Range is the minimum to maximum of individual samples.

***MCL Definition for E.Coli:** Routine and repeat samples are total coliform-positive and either is E. coli-positive or system fails to take repeat samples following E. coli-positive routine sample or system fails to analyze total coliform-positive repeat sample for E. coli.

MCL (Maximum Contaminant Level) = 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

MCLG (Maximum Contaminant Level Goal) = 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.

MRDL (Maximum Residual Disinfectant Level) = 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.

TT (Treatment Technique) = A required process intended to reduce the level of a contaminant in drinking water.

AL (Action Level) = The concentration of a contaminant which, when exceeded, triggers a treatment or other requirement which a water system must follow.

ppm = part per million, **ppb =** part per billion, **NTU =** Nephelometric Turbidity Units (Measure of Water Clarity), **MPN** = Most Probable Number, **pCi/l** = picocuries per liter, **RAA** = Running Annual Average, **LRAA** = Locational Running Annual Average, **ND** = Not Detected, **NR** = Not Required, **NA** = Not Applicable, **MRL** = Minimum Reporting Level

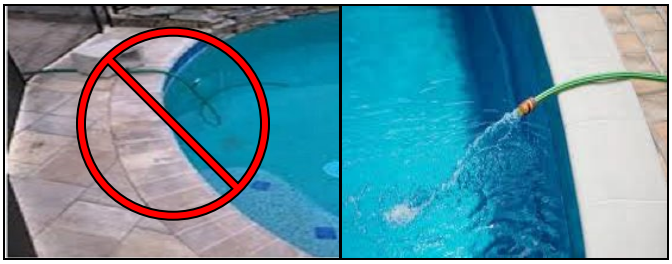
CU = Cleveland Utilities (Distribution System) **HUC** = Hiwassee Utilities Commission (Surface Water)
WAT = Waterville Springs (Ground Water) **EUD** = Eastside Utility District (Surface Water) **CFP** = Cleveland Filtration Plant (Surface Water)

Backflow Prevention

Cleveland Utilities makes every effort to ensure that our customers enjoy a continuous supply of safe drinking water. We also need the help of our customers in this regard, particularly with controlling cross connections.

A cross connection is a link with the public water supply and can cause the water system to become contaminated. An example of a cross connection would be a garden hose submerged in a source of contamination such as a car radiator, swimming pool, or other liquid. Should a water main break occur or a fire pumper use a nearby hydrant while the hose was submerged in a source of contamination, the contaminant could be sucked back into the public water supply. This is called backflow, and it can be prevented easily.

One simple way to avoid backflow is to create an air gap between the end of your hose and any other liquid source. For example: if you're filling a pool, arrange your hose so that the end is at least six inches above the top rim of the pool. The air gap will prevent the contaminant from being sucked back into the water supply.



Wrong Way **Right Way**

Another way to prevent backflow with a garden hose is to use a device known as a vacuum breaker. Vacuum breakers are available at hardware and home improvement stores. They are simple, inexpensive, and screw right onto your outside faucet to prevent contaminants from being siphoned back into your plumbing and the public water system.



Vacuum Breaker

Cross connections that are more hazardous and that have permanently installed plumbing, such as irrigation systems, require more sophisticated devices known as reduced pressure backflow preventers. These more protective devices must be tested annually to ensure they are operating properly. Any residence with an irrigation system must be equipped with this type of device.



Example Installation of Irrigation Backflow Preventer

For more information on preventing cross connections, installing backflow devices and protecting your water supply, please feel free to contact our compliance department at 423-478-0698.

Unused Pharmaceutical Disposal

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. https://www.epa.gov/household-medication-disposal/what-do-unwanted-household-medicines

Keep medications out of Tennessee's waterways by disposing in one of our permanent pharmaceutical take back bins. There are over 340 take back bins located across the state in all 95 counties, to find a convenient location please visit: http://tdeconline.tn.gov/rxtakeback/

The "Take Back" bin in Bradley County is located at:
Bradley County Sheriff's Office
2290 Blythe Avenue SE
Cleveland, TN
423-738-7349
8-4; M-F

