CAMPBELL COUNTY UTILITIES AND SERVICE AUTHORITY



2024 WATER QUALITY REPORT

http://www.ccusa-water.com PWSID No. 5031150 — Central System PWSID No. 5031170 — East System

The Campbell County Utilities and Service Authority (CCUSA) presents the 2024 Water Quality Report. The quality of your drinking water must meet state and federal requirements administered by the Virginia Department of Health (VDH). These regulations require CCUSA, along with other water utilities, to provide our customers with valuable information about your drinking water. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water.

If you have questions about this report please contact Jeffrey S. Wells, P.E., Executive Director, at our office (434) 239-8654, Monday through Friday during regular office hours (8:30 AM - 5:00 PM). The Authority Board meets at 5:00 PM on the fourth Tuesday of each month at the Authority office (20644 Timberlake Road). Please visit our website, listed above, for more information about CCUSA.

WHAT'S IN MY WATER?

For your information, we have compiled tables referenced herein, showing the substances detected in our drinking water. These tables show the results of our monitoring for the period of January 1, 2024 to December 31, 2024 unless otherwise noted. All levels of the substances or contaminants found in the water supply or our finished water, listed in the tables are less than the maximum contaminant level (MCL) set by United States Environmental Protection Agency (USEPA) and therefore not expected to cause any health risks. It is important that you know exactly what was detected and the concentration of each substance present in the water. We emphasize that the water supplied to you from CCUSA continues to be safe to drink.

GENERAL 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 USEPA Safe Drinking Water Hotline (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 from their health care providers about drinking water. USEPA/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 (800-426-4791). Cryptosporidium is a naturally occurring microscopic organism found in surface waters throughout the United States. The treatment process utilized by the Otter River Water Treatment Plant (ORWTP) includes filtration which provides high-level protection against Cryptosporidium. However, since the finished water is not sterile, the absence of living Cryptosporidium cannot be guaranteed.

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 include: (1) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife. (2) Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming. (3) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses. (4) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also, come from gas stations, urban storm water runoff, and

septic systems. (5) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, USEPA prescribes regulations which limit the number of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide protection for public health.

Under a program developed by VDH, detailed Source Water Assessments were completed for all the Authority's water sources in 2019 (Central System) and 2002 (East System). Information concerning the assessments is included in this report. This report is available at the Authority's office or at the Virginia Department of Health, Danville Field Office.

OUR COMMITMENT TO QUALITY

CCUSA is committed to provide safe, high quality drinking water. In addition to providing safe drinking water, CCUSA's commitment to customers includes providing quality service, efficient operations, fair rates, and compliance with regulatory requirements.

CCUSA employs 25 people and has an annual operating budget of approximately \$9.2 million to serve approximately 27,200 customers. CCUSA is proud of its history of quality service. This level of water quality is achieved by continuous attention to treatment and distribution processes and by an ambitious water quality testing program that exceeds levels dictated by Federal and State regulations. Water quality professionals performed numerous laboratory tests on your drinking water to assure compliance with all water quality standards.

Balancing the cost to customers and the need to maintain infrastructure is another important measure when providing excellent customer service. CCUSA depends on revenue generated from system users and new connections to support Authority operations. Authority revenues and developer contributions are utilized to support capital projects. CCUSA does not receive operating funds from Campbell County. To ensure continued quality service, the Authority must have funds available for maintenance activities, quality monitoring as required by EPA and State authorities, infrastructure development and the continued rising costs of operation. Drinking water standards are continuously being developed by our lawmakers and are becoming more and more stringent with each law passed. Through foresight and planning, efficiency in operations, and focus on excellence in customer service, CCUSA is confident it can meet and exceed these regulations while continuing to provide customers with high quality drinking water at a reasonable price. The current water rate is \$4.95 per 100 cubic feet (or 748 gallons) and the sewer rate is \$6.45 per 100 cubic feet.

To ensure water quality at your tap, you can perform a few simple maintenance items. During the summer, most people connect a garden hose to their outside faucet and leave it connected the entire time. If the faucet is left on, the heated water can back-siphon into your house plumbing. This could create a bad taste in your house water. As the hose heats up, it expands which can cause it to rupture. If left unattended, a large amount of water can be lost, and this will dramatically increase your water bill cost. It is advised to always close outside faucets and/or disconnect the water hose from the faucet.

The water service, or meter, is located near the street and this is the point where the Authority's responsibility ends. Miss Utility is a call service that provides residents of Virginia a one-call number to report excavation projects. Please be aware that utilities typically will not mark privately-owned underground lines such as irrigation and sprinkler systems or private water and sewer. You are responsible for locating privately owned lines or hire a private locating service to locate them for you. The number to call Miss Utility is 1-800-552-7001 or 811. Every property owner is required to call Miss Utility before any excavation, including planting trees and installing posts.

CCUSA Meter System - Tampering with a water meter is illegal and could result in fines and/or imprisonment. Not only is tampering illegal and ultimately costs all CCUSA customers, but it could also create a cross connection with non-approved sources. Visit our web site at www.ccusa-water.com to learn more about the Cross-Connection Program. CCUSA is experiencing more damages caused by lawn mowing activities, especially with the meter transmitters which protrude through the meter box lid. If you contract your mowing activities, please advise the contractor of the meter location. DAMAGING THE METER AND/OR SERVICE BOX COULD COST YOU SEVERAL HUNDRED DOLLARS TO REPAIR OR REPLACE. Always lift your mower deck or trim around the water meter box with a string trimmer.

Special Lead Notification: 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. CCUSA is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact CCUSA and Josh Pribble, Field Operations Director. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at http://www.epa.gov/safewater/lead.

SOURCE WATER ASSESSMENT REPORTS - (SWAR)

A SWAR consists of maps showing the source water assessment area, an inventory of known land use activities of concern and documentation of any known contamination within the last 5 years. This report was developed by the VDH and is the first step in assisting in the preparation of a Source Water Protection Program (SWPP).

OTTER RIVER WATER TREATMENT PLANT (Central Water System)

A source water assessment of the Central Water System was conducted in 2019 by the Virginia Department of Health. The water sources were determined to be highly susceptible to contamination using the criteria developed by the State in its approved Source Water Assessment Program. The report is available by contacting the Authority as noted elsewhere in this drinking water quality report.

CITY OF LYNCHBURG - (CCUSA East System)

The City of Lynchburg is the source of water for the CCUSA East System. A source water assessment of the City of Lynchburg's system was conducted in 2002 by the Virginia Department of Health. The water sources were determined to be highly susceptible to contamination using the criteria developed by the State in its approved Source Water Assessment Program. The report is available by contacting the City of Lynchburg at 525 Taylor Street, Lynchburg, VA 24504, phone: (434) 847-1322.

DISINFECTION BYPRODUCTS

What are disinfection byproducts and what do they have to do with my water? The surface water supply is exposed to plants and their byproducts; however, groundwater sources may or may not contain these containments. Plants contain organic carbon, and the organic carbon is picked up by the water supply. When this carbon comes in contact with chlorine, used for disinfection, some chemical byproducts are created. The regulated byproducts are trihalomethane(s) (TTHM) and haloacetic acids (HAA5). Some people who drink water containing trihalomethanes and haloacetic acids more than the MCL over many years could experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer, although there is no documented evidence that this has occurred. The regulated locational four quarter running annual average (LRAA) for TTHM and HAA5 is 80 µg/l and 60 µg/l, respectively.

DEFINITIONS

- **AL** *Action Level*; The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- MCL Maximum Contaminant Level; The highest level of a contaminant that is allowed in drinking water.
- **MCLG** *Maximum Contaminant Level Goal*; The level of contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.
- MRDL Maximum Residual Disinfectant Level; The highest level of a disinfectant allowed in drinking water.
- **MRDLG** Maximum Residual Disinfectant Level Goal; The level of a drinking water disinfection below which there is no known or expected risk to health.
- n/a Not Applicable.
- ND Non-detects; Laboratory analysis indicated that the Contaminant is not present.
- NTU Nephelometric Turbidity Units.
- pCi/L Picocuries per liter; is the measurement of a natural rate of decay of a radioactive containment.
- **ppb** (μ g/I) Part *per billion*; (or micrograms per liter) (μ g/I) is equivalent to one penny in \$10,000,000.
- ppm Parts per million; One part per million (or milligrams per liter) is equivalent to one penny in \$10,000.
- SMCL Secondary Maximum Contaminant Level; Limits on non-health contaminants.
- TT Treatment Technique; is a required process intended to reduce the level of a contaminant in drinking water.
- **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.
- < Less Than.

OTTER RIVER WATER TREATMENT PLANT - 2024

•	/ I I LIV		/ 11/EV 11411	_1411	LANT - ZUZT		
Contaminant/ Unit of MCLG Measurement		AL	90 th Percentile Value Violation number of sites exceeding AL		Typical Source of Contamination		
Copper, ppm	1.3	1.3	0.023 ppm None above AL Range < 0.02 to 0.051	NO	Corrosion of household plumbing systems, erosion of natural deposits, leaching from wood preservatives.		
Lead, ppb	0	15	9.9 ppb None above AL Range < 2 to 14.5	NO	Corrosion of household plumbing systems and erosion of natural deposits.		
Contaminant/ Unit of Measurement	MCLG	MCL	MCL Highest Level violat		Typical Source of Contamination		
Fluoride, ppm	4	4	0.75 (average) 0.55 -0.98(range)	NO	Erosion of natural deposits; Water additives which promotes strong teeth; Discharge from fertilizer and aluminum factories		
Nitrate + Nitrite (as Nitrogen), ppm	10	10	0.36 ppm	NO	Runoff from fertilizer use. Leaching from septic tanks, sewage. Erosion of natural deposits		
Turbidity, NTU	n/a	TT 1.0 Max 0.3 or less in 95% of monthly samples	0.05 (highest level) 100% < 0.3	NO	Soil runoff		
Chlorine, ppm	MRDLG = 4	MRDL = 4	0.92 (highest quarter) 0.17–1.49 (range)	NO	Water additive to control microbes.		
Total Organic Carbon, (TOC)	n/a	TT Ratio ≥ 1.0	1.03 (Avg. removal ratio) 0.53 -1.43(range)	NO	Naturally present in the environment		
Trihalomethanes (TTHM), ppb	n/a	80	44 (highest running average) 16–77 (range)	NO	By-products of drinking water disinfection.		
Haloacetic Acids (HAA), ppb	n/a	60	45 (highest running average) 12 – 50 (range)	NO	By-products of drinking water disinfection.		
Gross Alpha, pCi/L (2023)	0	15	< 0.35	NO	Erosion of natural deposits		
Gross Beta, pCi/L (2023)	0	50	2	NO	Erosion of natural and man made deposits		
Radium-228, pCi/L (2023)	0	5	1.3	NO	Erosion of natural deposits		
Barium, mg/L	2	2	0.019	NO	Discharge of drilling wastes: discharge from metal refineries: erosion of natural deposits.		

Unregulated Substances – Sodium 10 mg/L – Typical Sources are natural deposits and road salt.

Campbell County East System – 2024						
Contaminant/ Unit of Measurement	MCLG	AL	90 th Percentile Value (Range)	Violation	Typical Source of Contamination	
			number of sites exceeding AL		,,	
¹ Copper, ppm	1.3	1.3	< 0.02 ppm No sites above action level	NO	Corrosion of household plumbing systems, erosion of natural deposits, leaching from wood preservatives.	
¹Lead, ppb	0	15	< 2 ppb No sites above action level	NO	Corrosion of household plumbing systems, erosion of natural deposits.	
Contaminant/ Unit of Measurement	MCLG	MCL	Highest Level and Range	Violation	Typical Source of Contamination	
Chlorine, ppm	MRDLG = 4	MRDL = 4	1.51 (highest quarter) 0.58 – 1.57 (range)	NO	Water additive to control microbes.	
Trihalomethanes (TTHM), ppb	0	80	55 (highest average) 26 - 75 (range)	NO	Some people who drink water containing trihalomethanes in excess of the MCL over many years could experience problems with their liver, kidneys, or central nervous systems and may have increased risk of getting cancer. By-product of drinking water disinfection.	
Haloacetic Acids (HAA), ppb	0	60	46 (highest average) 27 – 47 (range)	NO	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer. By-product of drinking water disinfection.	

¹ Results from 2023 sampling period.

WHERE DOES MY WATER COME FROM?

CCUSA supplies water every day to more than 27,200 citizens in Campbell County. Approximately 1 billion gallons of water was delivered from these water supplies in 2024.

Central Water System - CCUSA owns and operates the Otter River Water Treatment Plant, which has a capacity of 4.18 MGD. The water supply for this facility is the Big Otter River. This service area contains approximately 95% of CCUSA's customer base. The service area includes the Timberlake area east to Route 29, the Route 29 corridor to Altavista, Route 24 west of Route 29 to Evington and Route 24 east to Concord and 460.

City of Lynchburg System - CCUSA has an agreement with the City of Lynchburg to purchase water for County residents located in areas where CCUSA water lines cannot provide service otherwise. These areas include the Vista Acres Subdivision, Mount Sterling Drive and Greenview Drive.

Campbell County East System – The Campbell County East System is directly supplied by the City of Lynchburg water system. Along with the contaminants identified in the City's table above, the Authority detected the additional contaminants noted in the above table for the East System. The area includes Old Rustburg Road area and Route 460 east from the City of Lynchburg and Mount Athos Road.

CONSECUTIVE SYSTEMS

Campbell County Utilities and Service Authority also serves water to approximately 266 customers of Appomattox County and the Town of Appomattox and is a backup supply to customers in the Town of Altavista. This water delivered to these customers is produced by the Otter River Filter Plant, located at 9625 Leesville Road, Evington, Virginia.

City of Lynchburg 2024 Raw data for Consecutive Systems for Spring 2025 CCR

	≤:	Level Detected						
	Violation	Water from	Water from					
Constituents/	ion	Abert Filtration	College Hill					
Unit of Measure		Plant	Filtration Plant	AL	MCLG	MCL	MDRL	Likely Source of Contamination
Inorganic Contaminan	ts							
Chlorine, ppm	NO	Range: 0.15 – 2.91					4	Water additive to
		Highest Average: 1.39						control microbes
Nitrate + Nitrite (as Nitrogen),	NO				10	10		Runoff from fertilizer use; leaching
ppm		0.12	0.14					from septic tanks; sewage; erosion of natural deposits
Fluoride, ppm	NO	Average: 0.68	Average: 0.67		4	4		Erosion of natural deposits; water
		Range: 0.07-0.87	Range: 0.10-0.81					additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Lead, ppb	NO	90th percentile valu	ie = 2	15	0			Corrosion of household plumbing
Results from 2024		0 samples above action limit Range: 0-4						systems, erosion of natural deposits
Copper, ppb	NO	90 th percentile value = 45		1300	1300			Corrosion of household plumbing
Results from 2021		O samples above action limit Range: 2-124						systems, erosion of natural deposits
Barium, ppm	NO	0.012	0		0	2		Discharge of drilling wastes; discharge from metal refineries;
Microbiological Contaminants								erosion of natural deposits
Turbidity, NTU	NO	0.10 (highest	0.08 (highest	I	N/A	TT		Soil runoff
		level)	level) 100% <0.3		.,,,,		_	
No single sample can be greater t	han 1 NT			ry month	must be less	than 0.3 NTL	J	L
Disinfection by-products								
Trihalomethanes	NO	Range: 18 -71		l	N/A	80		By-product of drinking water
(TTHM), ppb		Highest Average: 59			•			disinfection
Haloacetic Acids	NO	Range: 20-60			N/A	60		By-product of drinking water
(HAA), ppb		Highest Average: 4	49					disinfection
Radioactive Contaminants								
Gross beta pCi/L (Results from 2024)	NO	0.8	0		0	*50		Erosion of natural deposits
*EPA considers 50 pCi/L to	be the	level of concern	for beta particles	5				
Disinfection By-Product Precurso								
Total Organic Carbon % removal	NO	Range: 40-68 Lowest Average: 46	Range: 41-70 Lowest Average: 48		N/A	TT		Naturally present in the environment
Inregulated Substances Abert College Hill				Typical Source				
Sodium (mg/L)	7.2		7.2		Natural de	eposits and ro	oad salt	

Fluoridation

The CDC recognized Campbell County Utilities in 2024 with a fluoridation award for 2023 for a consistent and well managed fluoridation program.

Award of Excellence for Operations

The Virginia Department of Health, Office of Drinking Water, recognized Campbell County Utilities, its management, and operations, for excellence in water treatment plant performance with a 2024 Gold Award for meeting specific program standards.

Lead Service Line Inventory & UCMR5

The Authority completed and submitted an updated service line inventory to VDH on October 16, 2024. Unregulated Contaminate Monitoring Rule (UCMR5) testing was conducted in 2024 with no detections above reporting limits for PFAS compounds and lithium. Copies of this information and results of UCMR5 monitoring are available at our main office.