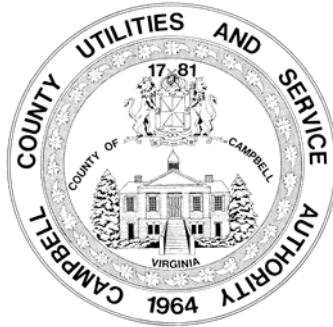


CAMPBELL COUNTY UTILITIES AND SERVICE AUTHORITY



2007 WATER QUALITY REPORT

http://www.co.campbell.va.us/campbell_county_utilities.htm

The Campbell County Utilities and Service Authority (CCUSA) presents the 2007 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 for calendar year 2007. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water. It is with great pleasure that CCUSA reports that it has exceeded all water quality requirements.

If you have questions about this report or would like to learn more about your water, please call our office at (434) 239-8654, Monday through Friday during regular office hours (8:30 A.M. - 5:00 P.M.). The Authority Board meets the fourth Tuesday of each month, 6:30 P.M., at the Authority office (20644 Timberlake Road).

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, 2007 to December 31, 2007 unless otherwise noted. As water travels over the land or underground, it can pick up substances such as microbes, inorganic or organic chemicals, and radioactive materials. Although all the substances 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, we feel it is important that you know exactly what was detected and how much each substance was present in the water.

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.

In order to ensure that tap water is safe to drink, USEPA prescribes regulations which limit the amount 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 the same protection for public health.

Under a program developed by VDH, detailed source water assessments have been completed for all of the Authority's water sources. Information concerning the assessments are included in this report.

OUR COMMITMENT TO QUALITY

Campbell County Utilities and Service Authority 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, minimum rates and compliance with all regulatory requirements.

CCUSA employs 22 people and has an annual operating budget of \$5.7 million to serve approximately 22,000 customers. The CCUSA is proud of its history of quality service. This level of 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 in 2007 to assure compliance with all water quality standards. As a testament to the quality of water service, the American Water Works Association awarded the Chief Water Plant Operator, Frank Davis, the Operator of the Year Award for 2007.

The cost to customers 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, capital improvement funds from Campbell County, and developer contributions are utilized to support capital projects. To insure 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. New drinking water standards currently are 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 \$3.70 per 100 cubic feet (or 748 gallons) and the sewer rate is \$4.15 per 100 cubic feet. A rate increase is proposed July 1, 2008 for \$3.80 per 100 cubic feet of water and \$4.45 per 100 cubic feet of sewer.

To insure 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. The water in a hose setting in the sun light heats up and creates bad taste and odor problems in the water. This condition can cause several problems. If the faucet is left on, the heated water can back-siphon into your house plumbing. This will create a bad taste in your house water. As the hose heats up, it expands which can cause it to burst (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. Once a call is placed to the service, the utility companies will identify their respective underground utility. Please be aware that utilities typically will not mark privately-owned underground lines such as irrigation or sprinkler systems, private water and sewer lines (this includes water well lines) or power lines to other buildings located on the property. 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.

Concerns have been raised involving individuals using Public Utility Easements (P.U.E.) and public right-of-ways to install private owned water or sewer service lines. The intended use of these P.U.E.'s and right-of-ways are for publicly owned utilities facilities. Connections can be accessed at the utility's connection point only. No privately owned utility can be installed across these easements or properties without the proper permissions and/or permits in place. Once you have installed private utilities in these areas, you now must comply with all the regulations associated with Virginia Underground Utility Protection Laws. Public Right-of-Way is considered as the Virginia Department of Highway's Right-of-Way. All work conducted in this Right-of-Way is done by special permits. All utilities must comply with the rules and regulations associated with the State's highway system. If you have utilities in such areas and are not sure of your rights, please refer to your legal representative for advice.

SOURCE WATER ASSESSMENT REPORT(S) – (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) – SWAR

A source water assessment of the Central Water System was conducted in 2003 by the Virginia Department of Health. The water sources were determined to be of 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.

CONCORD VILLAGE WELL SYSTEM – SWAR

A source water assessment of the Concord Village Well 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 Authority as noted elsewhere in this drinking water quality report.

CARSON / LEXINGTON PARK WELL SYSTEM – SWAR

A source water assessment of the Carson/Lexington Park Well 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 Authority as noted elsewhere in this drinking water quality report.

CITY OF LYNCHBURG - SWAR

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 is exposed to plants and their byproducts; however, groundwater sources may or may not contain these contaminants. Plants contain organic carbon. 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). Studies have revealed that high concentrations of TTHM and HAA5 can cause liver and kidney disorders. The regulated annual average limit 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 contaminant.

ppb - *Part per billion*; (or micrograms per liter) 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 - 2007

Contaminant/ Unit of Measurement	MCLG	AL	90 th Percentile Value	Violation	Typical Source of Contamination
			number of sites exceeding AL		
² Copper, ppm	1.3	1.3	0.018 0 out of 30	NO	Corrosion of household plumbing systems, erosion of natural deposits, leaching from wood preservatives.
² Lead, ppb	0	15	11.0 0 out of 30	NO	Corrosion of household plumbing systems and erosion of natural deposits.
Contaminant/ Unit of Measurement	MCLG	MCL	Highest Level and Range	Violation	Typical Source of Contamination
Fluoride, ppm	4	4	1.008 (average) 0.79 - 1.16 (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	0.41	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Turbidity, NTU	n/a	TT	0.23 (highest level) 100% < 0.3	NO	Soil runoff
Chlorine, ppm	MRDLG = 4	MRDL = 4	1.87 (highest avg) 1.04 – 3.80 (range)	NO	Water additive to control microbes.
Total Organic Carbon, (TOC)	n/a	TT Ratio = 1.0	1.06 (Avg removal ratio) 1.00 - 1.65 (range)	NO	Naturally present in the environment
Trihalomethanes (TTHM), ppb	0	80	63 (highest average) 28 – 103 (range)	NO	By-products of drinking water disinfection.
Haloacetic Acids (HAA), ppb	0	60	29 (highest average) 4 – 52 (range)	NO	By-products of drinking water disinfection.
¹ Gross Alpha, pCi/L	0	15	0.7	NO	Erosion of natural deposits
¹ Radium-228, pCi/L	0	5	0.3	NO	Erosion of natural deposits

¹ Data from 2002. Next required sampling period in 2008. ² Data from 2006. Next required sampling period in 2009.

CARSON/LEXINGTON PARK/WINDSOR FOREST WELL SYSTEM – 2007

Contaminant/ Unit of Measurement	MCLG	AL	90 th Percentile Value	Violation	Typical Source of Contamination
			number of sites exceeding AL		
⁴ Copper, ppm	1.3	1.3	1.0 0 out of 10	NO	Corrosion of household plumbing systems, erosion of natural deposits, leaching from wood preservatives.
^{3,4} Lead, ppb	0	15	21 3 out of 10	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
Nitrate + Nitrite (as Nitrogen), ppm	10	10	0.75 (highest) 0.30 - 0.75 (range)	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Chlorine, ppm	MRDLG = 4	MDRL = 4	0.95 (highest avg) 0.20 – 2.83 (range)	NO	Water additive to control microbes.
² Trihalomethanes (TTHM), ppb	0	80	3 (highest) <1 – 3 (range)	NO	By-products of drinking water disinfection.
² Haloacetic Acids (HAA), ppb	0	60	1 (highest) <1 – 1 (range)	NO	By-products of drinking water disinfection.
¹ Gross Alpha, pCi/L	0	15	0.9 (highest) 0.0 – 0.9 (range)	NO	Erosion of natural deposits
¹ Radium-228, pCi/L	0	5	1.7 (highest) 0.5 – 1.7 (range)	NO	Erosion of natural deposits

¹ Data from 2003. Next required sample period has not been established.

² Data from 2007. Next required sample period in 2010.

³ **Lead** – Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

⁴ Data from 2006.

CONCORD VILLAGE WELL SYSTEM – 2007

Contaminant/ Unit of Measurement	MCLG	AL	90 th Percentile Value	Violation	Typical Source of Contamination
			number of sites exceeding AL		
Copper, ppm	1.3	1.3	1.4 2 out of 10	NO	Corrosion of household plumbing systems, erosion of natural deposits, leaching from wood preservatives.
Lead, ppb	0	15	ND 0 out of 10	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
Nitrate + Nitrite (as Nitrogen), ppm	10	10	0.61 n/a (range)	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Chlorine, ppm	MRDLG = 4	MDRL = 4	1.00 (highest avg) 0.42 – 1.68 (range)	NO	Water additive to control microbes.
Trihalomethanes (TTHM), ppb	0	80	1	NO	By-products of drinking water disinfection.
¹ Radium-228, pCi/L	0	5	0.3	NO	Erosion of natural deposits.

¹ Data from 2001. Next required sampling period 2010.

**2007 Contaminants for
Spring 2008 CCR**

*This information was
provided by the City of
Lynchburg*

Constituents/ Unit of Measure	Violation	Level Detected		AL	MCLG	MCL	MDRL	Likely Source of Contamination
		Abert	College Hill					
Inorganic Contaminants								
Chlorine, ppm	N O	Range 0-2.1 Highest Average 1.1		—	—	—	4	Water additive to control microbes
Nitrate + Nitrite (as Nitrogen), ppm	N O	0.10	0.11	—	10	10	—	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
Fluoride, ppm	N O	0.71 Average 0-1.1 range	0.90 Average 0-1.27 range	—	4	4	—	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Lead, ppb ⁴	N O	90 th percentile value=3 0 above action limit		15	0	—	—	Corrosion of household plumbing systems, erosion of natural deposits
Copper, ppb ⁴	N O	90 th percentile value=0.065 0 above action limit		1.3	1.3	—	—	Corrosion of household plumbing systems, erosion of natural deposits
Microbiological Contaminants								
Total coliform bacteria, Presence or absence	N O	1.2 % of monthly samples positive (highest monthly average)		—	0	5% of monthly samples positive	—	Naturally present in the environment
Turbidity, NTU	N O	0.10 100% <0.3	0.09 100% <0.3	—	n/a	TT	—	Soil runoff
No single sample can be greater than 1 NTU. At least 95% of the samples taken every month must be less than 0.3 NTU								
Volatile Organic Contaminants								
Trihalomethanes (TTHM), ppb	N O	41 Highest Avg. 18-116 Range	63 Highest Avg. 25-158 Range	—	0	80	—	By-product of drinking water disinfection
Haloacetic Acids (HAA), ppb	N O	31 Highest Avg. 5-71 Range	29 Highest Avg. 11-79 Range	—	0	60	—	By-product of drinking water disinfection
Range of results contains results from Initial Distribution System Evaluation (IDSE) which are not compliance samples.								
Radioactive Contaminants								
Gross Alpha, ¹ pCi/L	N O	0.7+/- 0.5	0.0 +/- 0.4	—	0	15	—	Erosion of natural deposits
Gross Beta, ¹ pCi/L	N O	0.5+/- 0.6	0.8+/- 0.6	—	0	50	—	Decay of natural and man-made deposits
Radium-228, ¹ pCi/L	N O	0.3+/- 0.8	0.6+/- 0.7	—	0	5	—	Erosion of natural deposits
Disinfection By-Product Precursors								
Total Organic Carbon (ppm) (TOC) Raw water, ppm	N O	Highest Avg.= 1.76 Range= 1.20-3.37	Highest Avg.= 1.97 Range= 1.22-3.62	—	N/A	TT	—	Naturally present in the environment
Total Organic Carbon (ppm) (TOC) Treated, water ppm	N O	Highest Avg.= 1.18 Range= 0.76-1.89	Highest Avg.= 1.16 Range= 0.68-2.26	—	N/A	TT	—	Naturally present in the environment
Unregulated Contaminants²								
Sulfate, ppm	N O	8.1	8.1	N/A	250 ³	—	—	Naturally present in the environment
Chloroform, ppb	N O	9.1	13	N/A	N/A	—	—	By-product of drinking water disinfection
Bromodichloromethane, ppb	N O	1.0	1.4	N/A	N/A	—	—	By-product of drinking water disinfection

¹Results from 2003

²Unregulated 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.

³Secondary contaminant level: non-enforceable guidelines regulating contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water

⁴Results from 2007

Campbell County East System – 2007

Contaminant/ Unit of Measurement	MCLG	AL	90 th Percentile Value	Violation	Typical Source of Contamination
			number of sites exceeding AL		
Copper, ppm	1.3	1.3	0.025 0 out of 5	NO	Corrosion of household plumbing systems, erosion of natural deposits, leaching from wood preservatives.
Lead, ppb	0	15	ND 0 out of 5	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	0.94 (highest avg) 0.31 – 0.99 (range)	NO	Water additive to control microbes.
Trihalomethanes (TTHM), ppb	0	80	68	NO	By-products of drinking water disinfection.
Haloacetic Acids (HAA), ppb	0	60	31	NO	By-products of drinking water disinfection.

WHERE DOES MY WATER COME FROM?

CCUSA supplies water every day to more than 20,000 citizens in Campbell County. Over 918 million gallons of water was delivered from these water supplies in 2007.

Central Water System - CCUSA owns and operates the ORWTP, which has a capacity of 3.0 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, Route 24 west of Route 29 to Evington and Route 24 east to Rustburg.

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,

Lexington Park Water System, Concord, VA - The Carson, Lexington Park and Windsor Forest Subdivisions located in the Concord area are served by three wells. In addition to the residential subdivisions, the Concord Elementary School is also provided service from this well system.

Concord Village, Concord, VA - Concord Village Subdivision, located off State Route 24 in the Concord area, is served by two wells.

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 had additional contaminants detected 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.