

# National Primary Drinking Water Regulation Compliance

We'll be happy to answer any questions about Electric City Utilities/City of Anderson and our water quality. Call the office at (864) 231-5230.

Water Quality Data for community water systems is available at [water.epa.gov/drink/index.cfm](http://water.epa.gov/drink/index.cfm).

We are members of the American Water Works Association (AWWA), the Water Environmental Association of South Carolina (WEASC), and the South Carolina Rural Water Association (SCRWA)

Electric City Utilities/City of Anderson

[www.cityofandersonsc.com](http://www.cityofandersonsc.com)



**Informe contiene informacion importante sobre la calidad del agua en su comunidad. Traduzcalo o hable con alguien que lo entienda bien.**

# Consumer Confidence Report

Electric City Utilities/City of Anderson  
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Anderson, SC 29625  
(864) 231-5230



## SOURCE WATER ASSESSMENT AND PROTECTION PLANS

Source Water Assessment and Protection Plans (SWAP) were completed for all public water systems in South Carolina in May, 2003. SWAPs identify potential sources of contamination to drinking water supplies. The SC Department of Health and Environmental Control has completed the plans for all SC public water systems. A copy of this assessment report can be obtained by contacting the Bureau of Water in Columbia, South Carolina at (803) 898-4300.

### **Contaminants that may be present in source water include:**

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 storm 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, storm water runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.

Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

## COMPLIANCE MONITORING REGULATION 2018

ARJWS Water Treatment Plant's finished water was monitored for compliance sampling in 2018 by SCDHEC. No concerning detections were noted.

The following is a list of contaminants that were tested for, but not detected, in the drinking water:

Arsenic, Cadmium, Chromium, Mercury, Nickel, Nitrate, Nitrite, Selenium, Hexachlorocyclopentadiene, Propachlor, Hexachlorobenzene, Lindane, Heptachlor, Aldrin, Alachlor, Heptachlor Epoxide, Chlordane, Metolachlor, Butachlor, Dieldrin, Endrin, Methoxychlor, Toxaphene, Simazine, Atrazine, Metribuzin, DBCP, EDB, 2,4,5- TP, PCP, Methylene Chloride, Di-2-(Ethylhexyl) Adipate, Di-2-(Ethylhexyl) Phthalate, Aldicarb(sulfoxide), Aldicarb(sulfone), Oxamyl (Vydate), Methomyl, 3-Hydroxycarbofuran, Aldicarb, Carbofuran, Carbaryl(Sevin), Dalapon, Dicamba, 2,4-D, Glyphosate, Silvex, Dinoseb, Picloram, , Benzo(a)Pyrene, p-Isopropyltoluene, Chloromethane, Dichlorodifluoromethane, Bromomethane, Chloroethane, , Hexachlorobutadiene, Naphthalene, 1,2,3- Trichlorobenzene, Cis-1,2-Dichloroethene, Dibromomethane, Antimony, Diquat, 1,1-Dichloropropene, 1,2-Dichloropropane, 1,3-Dichloropropene, 1,2,3-Trichloropropane, 1,3-Dichloropropane, 1,2,4-Trimethylbenzene, 1,2,4-Trichlorobenzene, n-Butylbenzene, Beryllium, 1,3,5-Trimethylbenzene, Tert-Butylbenzene, Sec-Butylbenzene, Bromochloromethane, Xylenes(total), 2-Chlorotoluene, 4-Chlorotoluene, 1,2-Dichlorobenzene,1,3-Dichlorobenzene, 1,4-Dichlorobenzene Vinyl Chloride, 1,1-Dichloroethylene, 1,1-Dichloroethane, Trans-1,2-Dichloroethene, 1,2-Dichloroethane, 1,1,1-Trichloroethane, Thallium, Carbon Tetrachloride, Trans 1,3-Dichloropropene, Trichloroethylene, 1,1,2-Trichloroethane, Tetrachloroethane, 1,1,1,2- Tetrachloroethane, 1,1,2,2-Tetrachloroethane, Chlorobenzene, Benzene, Toluene, Ethylbenzene, Bromobenzene, Isopropylbenzene, Styrene, MTBE n-Propylbenzene, Barium, and Trichlorofluoromethane.

Also during 2018 we were monitored for \*PCBs/Toxaphene. No detections were noted.

\*Polychlorinated biphenyls (PCBs) are man-made chemicals that belong to a family of chemicals known as chlorinated hydrocarbons. PCBs were manufactured in the U.S. from 1929 until 1979, when their manufacture was banned due to concerns about their persistence, bioaccumulation, and potential for adverse effect on human health and the environment. Because PCBs are chemically stable with a high boiling point, and non-flammable with excellent electrical insulating properties, PCBs were used in hundreds of industrial and commercial applications including electrical, heat transfer and hydraulic equipment; as plasticizers in paints, plastics and rubber products (including caulk) and in many other industrial applications.

Toxaphene, a synthetic organic chemical, is an amber, waxy organic solid with a piney odor. It was used as an insecticide for cotton and vegetables, and on livestock and poultry. In 1982, most of its uses were banned and in 1990, all uses were banned in the United States. EPA regulates toxaphene in drinking water to protect public health. Toxaphene may cause health problems if present in public or private water supplies in amounts greater than the drinking water standard set by EPA.

## REQUIRED ADDITIONAL HEALTH INFORMATION

To ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) prescribes limits on the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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. The MCL's are set at very stringent levels. 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. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800) 426-4791 or on the web at [water.epa.gov/drink/hotline/index.cfm](http://water.epa.gov/drink/hotline/index.cfm).

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. Such individuals 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 EPA Safe Drinking Water Hotline (800) 426-4791.

The sources of drinking water (both tap water and bottled water) includes 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 radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Electric City Utilities / City of Anderson  
Anderson, SC PWSID# SC0410012  
**2018 Annual Water-Quality Report**  
Developed February, 2019

Electric City Utilities, a division of the City of Anderson, is committed to providing residents with a safe and reliable supply of high-quality drinking water. We test our water using sophisticated equipment and advanced procedures. This annual “Consumer Confidence Report,” required by the Safe Drinking Water Act (SDWA), tells you where your water comes from, what our tests show about it, and other things you should know about drinking water. Anderson City Council, the governing board of Electric City Utilities, meets the second and fourth Monday of each month at 6:00 pm at City Hall.



**Electric City Utilities’ drinking water meets or surpasses all Federal and State drinking water standards.**

**Water Source**

Electric City Utilities’ water is supplied by the Anderson Regional Joint Water System, Hartwell Lake Filter Plant. The Anderson Regional Joint Water System, Hartwell Lake Filter Plant is supplied by surface water from the U.S. Army Corps of Engineers’ Hartwell Lake Reservoir,

lying along the border of Upstate South Carolina and Georgia. The plant operates 24 hours per day, every day of the year. During 2018, the plant treated 6.4 billion gallons of water. The plant is operated by highly trained, state certified operators.

**An Explanation of the Water-Quality Data Table**

The table shows the results of the water analyses. This report is based upon tests conducted in the year 2018 by Anderson Regional Joint Water System’s Hartwell Lake Filter Plant. In addition to continuous monitoring of some water quality parameters, the operators perform over 200 laboratory tests daily. The data presented in this report is from the most recent testing done in accordance with State and Federal regulations. Every regulated contaminant that we detected in the water, even in the most minute traces, is listed here. The table contains the name of each substance, the highest level allowed by regulation (MCL), the ideal goals for public health, the amount detected, the usual sources of such contamination, footnotes explaining our findings, and a key to units of measurement. Definitions of MCL and MCLG are important.

Terms used in the Table of Detected Contaminants and other parts of this report are defined here.

**Maximum Contaminant Level (MCL):** 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.

**Maximum Contaminant Level Goal (MCLG):** 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.

**Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

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

**Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is not known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

**Total Organic Carbon (TOC):** The measure of the total amount of organic matter within a water solution. For drinking water purposes, it is an indicator of overall water quality prior to and after treatment.

**KEY TO TABLE**

AL = Action Level	NTU = Nephelometric Turbidity Units
BDL = Below Detectible Level	pci/l = Picocuries per Liter (a measure of radioactivity)
MCL = Maximum Contaminant Level	ppm = Parts per Million, or milligrams per liter (mg/l) (this compares to one penny in \$10,000)
MCLG = Maximum Contaminant Level Goal	ppb = Parts per Billion, or micrograms per liter (ug/l) (this compares to one penny in \$10,000,000)
MFL = Million Fibers per Liter	ppt = Parts per Trillion, or nano-
mrem/year = Millirems per Year —(a measure of radiation absorbed by the body)	ND = Non-Detectable
MRDL = Maximum Residual Disinfectant Level	RAA = Running Annual Average Level
MRDLG = Maximum Residual Disinfectant Level Goal	TT = Treatment Technique

**SECONDARY STANDARDS**

These tests indicate results that may affect the appearance, odors, and tastes in the drinking water.

Constituent	Annual Average	MCL
pH	7.35	6.5-8.5
Alkalinity	13.70 mg/L	N/A
Chlorine	1.60 mg/L	4.0 mg/L
Hardness	15.93 mg/L	N/A
Iron	BDL	0.30 mg/L
Manganese	BDL	0.05 mg/L
Sodium	7.2 mg/L	N/A
Sulfate	11.50 mg/L	250 mg/L

**TABLE OF DETECTED CONTAMINANTS**

REGULATED CONTAMINANTS	Date	Unit	MCL	MCLG	Results	Range	Likely Source of Contamination	Violation
Total Coliform	2018	0	0	0	0	N/A	Coliforms are bacteria that are naturally present in the environment & are used as an indicator that other potentially-harmful bacteria may be present. If coliforms were found in more samples than allowed this was a warning of potential problems.	NO
E. Coli	2018	0	0	0	0	N/A	Fecal coliforms & E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely-compromised immune systems.	NO
Fluoride	2018	mg/L	4	4	0.51	0.00-0.55	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.	NO
Nitrate	2018	mg/L	10	10	0.14	.14	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	NO
Turbidity	2018	NTU	0.5	<0.10	0.04	0.02-0.04	Soil Runoff	NO

LEAD AND COPPER	Date	Unit	AL	mg/L	90th Percentile	# Over AL	Likely Source of Contamination	Violation
Lead*	2016	pp	.015	0	0.0008	0	Corrosion of household plumbing. Erosion of natural deposits.	NO
Copper	2016	ppm	1.3	1.3	0.18	0	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.	NO

VOLATILE ORGANIC CONTAMINANTS	Date	Unit	MCL	MCLG	Average or Level	Range	Likely Source of Contamination	Violation
TTHM (Total Trihalomethanes)	2018	ppb	80	No Goal for Total	RAA = 15		By-product of drinking water chlorination.	NO
HAA5 (Haloacetic Acids)	2018	ppb	60	No Goal for Total	RAA = 7		By-product of drinking water chlorination.	NO
Chlorine	2018	ppm	4	MRDLG=4	RAA = 1.60	1.43-1.75	Water additives used to control microbes.	NO

\*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. Electric City Utilities/City of Anderson 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 EPA Safe Drinking Water Hotline (800-426-4791) or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

The above table shows only the contaminants that had detections. Electric City Utilities had no violations. In summary, we are pleased to report that your drinking water meets or exceeds all Federal and State requirements.

**TOC TEST RESULTS 2018**

Analysis	Sample Frequency	MCL**	Results*	Average Source TOC	Source TOC Range	Major Sources	Violation
Total Organic Carbon	Monthly	Treatment Technique (TT) required if target not met through Step 1 criterion	36% Removal	1.69 mg/L	1.34—2.17 mg/L	Naturally present in the environment.	No

\*For source water TOC level of >2.0 mg/L, 35% removal is required. For source water TOC Level of <2.0 mg/L, and Alternative Criteria 1 is used. Lake Hartwell routinely meets this Alternate Criteria, as source water TOC is typically below 2.0 mg/L.

\*\*If removal levels are under 35%, and source water TOC exceeds 2.0 mg/L, the TT criterion for TOC under Step 1 is required. The Step 1 criterion is defined by the EPA regulation R.61-58.13.F.