

2016 Annual Drinking Water Quality Report

Pendleton Public Works

System # 0410006

Developed June 30, 2017



We are pleased to present to you this year's Annual Quality Water Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

Our water source is Anderson Regional Joint Water Systems, Hartwell Lake Filter Plant which 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 **2016**, the plant treated 6.2 billion gallons of water. The plant is operated by highly trained, state certified operators.

Anderson Regional Joint Water System's Source Water Assessment Plan is available for your review at <http://www.scdhec.gov/environment/water/srcwtr.htm>. If you do not have internet access, please contact South Carolina Department of Health and Environmental Control, Bureau of Water in Columbia, South Carolina at (803) 898-4300 to make arrangements to review this document.

If you have any questions about this report or concerning your water utility, please contact Matthew Fleahman at (864) 646-9073. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings held the first Monday of every month at 7pm at 310 Greenville Street, Pendleton, South Carolina 29670.

Pendleton Public Works routinely monitors for constituents in your drinking water according to Federal and State laws. The table shows the results of our monitoring for the period **January 1 – December 31, 2016**. As water travels over land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances.

All drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

I'm pleased to report that our drinking water is safe and meets Federal and State requirements.

For your information, we have provided some definitions to help you better understand the table.

Non-Detects (ND) – laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) – one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter (ug/l) – one part per billion corresponds to one minute in 2,000 years or a single penny in \$10,000,000.

Action Level (AL) – the concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

Treatment Technique (TT) – a treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level (MCL) – the "maximum allowed" MCL is 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 treatment technology.

Maximum Contaminant Level Goal (MCLG) – the "goal" MCLG is 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.

Maximum Residual Disinfection 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.

Anderson Regional Joint Water System

Contaminant	Date Tested	Unit	MCL	MCLG	Average or Level	Range	Major Source	Violation
Microbiological Contaminants								
Total Coliform	2016	0	0	0			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 is a warning of potential problems	NO
E. Coli	2016	0	0	0			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
Inorganic Contaminants								
Lead**	2016	ppb	AL=15	0	90 th % =0.009	ND-0.013	Corrosion of household plumbing. Erosion of natural deposits.	NO
Copper	2016	ppm	AL=1.3	1.3	90 th % = 0.14	0.012-0.14	Corrosion of household plumbing. Erosion of natural deposits.	NO
Turbidity	2016	NTU	0.5	<0.10	0.04	0.03-0.6	Soil runoff.	NO
Fluoride	2016	mg/L	4	4	0.42	0.3-0.52	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories	NO
Nitrate	2016	mg/L	10	10	0.24	0.24mg/L	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	NO
Volatile Organic Contaminants								
TTHMs (Total Trihalomethanes)	2016	ppb	80	No goal for total	RAA=17	15.7-19.4	By-product of drinking water chlorination	NO
HAA (Haloacetic Acids)	2016	ppb	60	No goal for total	RAA=14	13.1-14.8	By-product of drinking water chlorination	NO
Chlorine	2016	ppm	4	MRDLG=4	RAA=1.57	1.52-1.65	Water additives used to control microbes	NO

TOC Test Results 2014							
Contaminant	Violation Y/N	Level Detected % removal required	Avg Source Water TOC mg/L	Range	Sample Frequency	MCL	Likely source of contamination
Total Organic Carbon	N	41% <u>removal</u> *35% required	1.58 mg/L	1.15-2.30 mg/L removal	Monthly	TT Step 1	Naturally present in the environment

*For source water's TOC level of >2.0 mg/L, 35% removal is required.

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Contaminant	Date Tested	GOAL (MCLG)	Action Level (AL)	Detected Level	Units	Major Source	Violation
1. Copper	2016	1.3	1.3	90%=0.42	PPM	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems.	NO
2. Lead**	2016	0	15	90%=6.9	PPB	Corrosion of household plumbing systems; Erosion of natural deposits.	NO

Table Footnotes:

1. This data is from the most recent test period and shows the 90th percentile result. No samples taken had copper at a level greater than the action level of 1.3 mg/L.
2. This data is from the most recent test period and shows the 90th percentile results. One sample out of 20 had lead at a greater level than the action level of 15 ug/L.

Disinfectants & Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Likely Source of Contamination	Violation
Haloacetic Acids (HAA5)	2016	23	11.8-23.9	No goal for the total	60	PPB	By-product of drinking water disinfection.	NO
Total Trihalomethanes (TTHM)	2016	45	11.8-45.4	No goal for the total	80	PPB	By-product of drinking water disinfection.	NO

Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.

No total coliforms were found in any distribution samples in **2016**.

During **2016**, Anderson Regional Joint Water System was 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 effects 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.

****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. Anderson Regional Joint Water System and Pendleton Public Works are 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 Safe Drinking Water Hotline 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.

As you can see by the tables, our system had **NO** violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water is safe at these levels.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or manmade. These substances can be microbes, inorganic or organic chemicals or radioactive substances. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

MCLs are set at very stringent levels. To understand the possible 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.

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, persons 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 provider. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline 1-800-426-4791.

Thank you for allowing us to continue to provide your family with clean, quality water this year. In order to maintain a safe and dependable drinking water supply, we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.

Please call our office at 864-646-9073, if you have any questions.

We at Pendleton Public Works work around the clock to provide quality water to every tap. We ask that all customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.