

2017 WATER QUALITY REPORT

EDGEFIELD COUNTY WATER & SEWER AUTHORITY SYSTEM NUMBER 1920001

Edgefield County Water and Sewer Authority (ECW&SA) is pleased to present its 2017 Drinking Water Quality Report. This report is intended to provide you with important information about your drinking water and the efforts made by ECW&SA to continue providing safe drinking water. The source of drinking water used by ECW&SA is surface water. The Savannah River serves as ECW&SA's only raw water source.

The Board of Directors of the Edgefield County Water and Sewer Authority meet the 4th Monday of each month at 5:30 p.m. in the Administrative Building located at 100 Waterworks Road – Edgefield, SC 29824.

Any questions please write Edgefield County Water and Sewer Authority P.O. Box 416 Edgefield, S.C. 29824 or call 803-637-3011 or 803-279-1503 or 803-279-8489. You can also visit our website: www.ecwsa.com

You can view this Water Quality Report on-line at http://ecwsa.com/site/ecwsa_forms/WaterQualityReport.pdf

The South Carolina Department of Health and Environmental Control have conducted Source Water Assessments on the Savannah River. The documents can be requested through FOI website at:

<http://www.scdhec.gov/HomeAndEnvironment/Water/SourceWaterProtection/>

In order to ensure that tap water is safe to drink, EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. 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 the water poses a health risk. 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.

The sources of drinking water (both tap 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 radioactive materials, and can pick up substances from the presence of animals or human activity.

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 of particular risk of 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* are available from the Safe Drinking Water Hotline at 1-800-426-4791.

If present, elevated lead levels 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. The Edgefield County Water and Sewer Authority 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 drinking 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 or at <http://www.epa.gov/safewater/lead>

Below you will find many terms and abbreviations, which you may not be familiar. The following definitions may help you better understand these terms.

Maximum Contaminant Level Goal or MCLG: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's all for a margin of safety.

Maximum Contaminant Level or 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 residual disinfectant level goal or MRDLG: 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.

Maximum residual disinfectant level or 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.

ppm: milligrams per liter or parts per million – or one ounce in 7,350 gallons of water.

ppb: micrograms per liter or parts per billion – or one ounce in 7,350,000 gallons of water.

na: not applicable.

Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.

Nephelometric Turbidity Unit (NTU): A measure of the clarity of water. It is a good indicator of the effectiveness of the filtration system.

Non-Detect (ND): Laboratory analysis indicates that the constituent is not present.

Bacteriological Analysis - Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present. Samples are collected from 27 representative sites throughout the water distribution system monthly and analyzed for total coliform bacteria. The EPA requires that at least 95% of the samples test negative. ECW&SA achieved 100% compliance because no coliform bacteria were detected in any of the samples analyzed in 2017.

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

Picocuries per Liter (pCi/L): A measure of radioactivity in water.

Treatment Techniques (TT): A required process intended to reduce the level of a contaminant in drinking Water.

RAA: Is the running annual average based on the most recent quarterly averages.

Contaminants that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, 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 water 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 storm water 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 come from gas stations also, 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.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90 th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2017	1.3	1.3	0.200	0	ppm	No	Erosion of natural deposits; leaking from wood preservatives; corrosion of household plumbing systems
Lead	2017	0	15	1.700	1	ppb	No	Corrosion of household plumbing systems; erosion of natural deposits

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Sources of Contamination
Chlorine	2017	1 LRAA	1 - 1	MRDLG = 4	MRDL = 4	ppm	No	Water additive used to control microbes
Haloacetic Acids (HAA5)*	2017	65 LRAA	19.7-136	No goal for the total	60	ppb	Yes ¹	By-Product of drinking water chlorination
Total Trihalomethanes (TTHM)*	2017	60 LRAA	26.5-94.5	No goal for the total	80	ppb	No	By- Product of drinking water chlorination

Note 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.

¹This violation occurred in an isolated section of our system and has since been corrected.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Sources of Contamination
Fluoride	2017	0.56	0.56 – 0.56	4	4.0	ppm	No	Erosion of natural deposits, water additive which promotes strong teeth, discharge from fertilizer and aluminum factories
Nitrate (measured as Nitrogen)	2017	0.12	0.12 – 0.12	10	10	ppm	No	Runoff from fertilizer use, leaking from septic tanks, sewage, erosion of natural deposits.
Sodium	2017	4.3	4.3 - 4.3	NA	NA	ppm	No	Erosion of natural deposits
Turbidity	Limit (Treatment Technique)		Level Detected	Violation		Likely Sources of Contamination		
Highest single measurement	1 NTU		0.3 NTU	No		Soil runoff		
Lowest monthly % meeting limit	0.3 NTU		100%	No		Soil runoff		

Total Organic Carbon

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.

Based on the above test results we are pleased to report Edgefield County Water and Sewer Authority's drinking water met all SCDHEC & EPA standards & regulations during 2017.