

## 2014 Water Quality Report Lugoff-Elgin Water Authority System # SC2820001

We're pleased to provide you with this year's Water Quality Report. We want to keep you informed about the water and services we have delivered to you over the past year. Our goal is to provide to you a safe and dependable supply of drinking water. We are committed to ensuring the quality of your water. The source of our water is treated surface water from Lake Wateree. If you have any questions about this report or concerning your water utility, or if you do not have internet access, please contact Superintendent of Water Treatment Mr. Randy Bowers at 803-438-2247. We want you, our neighbors and valued customers, to be informed about your water utility. Feel free to attend any of our regularly scheduled meetings on the first Thursday of each month at 5:30 pm at the Authority's main office at 88 Boulware Road in Lugoff. Our Source Water Assessment Plan is available for your review through the SCDHEC website [www.scdhec.gov/HomeAndEnvironment/Water/SourceWaterProtection](http://www.scdhec.gov/HomeAndEnvironment/Water/SourceWaterProtection).

This report shows our water quality and what it means. The Lugoff-Elgin Water Authority routinely monitors for constituents in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st to December 31st, 2014. As water travels over the land or underground, it can pick up substances or contaminants such as microbes and chemicals. All drinking water, including bottled drinking 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.

In this table you will find the following terms and abbreviations:

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

**Action Level Goal (ALG)** – The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

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

**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 or one ounce in 7,350 gallons of water.

**Parts per billion (ppb) or Micrograms per liter** - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000 or one ounce in 7,350,000 gallons of water.

**na** – Not applicable

**Maximum Contaminant Level** - 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 available treatment technology. 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.

**Maximum Contaminant Level Goal** - 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 Disinfectant Level (MRDL)** – The highest level of drinking water 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 no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**Nephelometric Turbidity Unit (NTU)** – Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**Non-Detects (ND)** - Laboratory analysis indicates that the constituent is not present.

**Running Annual Average (RAA)** – Highest result of quarterly averages.

**Total Organic Carbon (TOC) Removal** – The percent removal must be at least 1 or the system is in violation.

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

Este informe contiene informacion muy importante sobre el agua que usted bebe. Traduzcalo o hable con alguien que lo entienda bien.

## Regulated Contaminants

Disinfectants & Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	2014	2	2 – 2	MRDLG = 4	MRDL = 4	ppm	NO	Additive to control microbes
Haloacetic Acids (HAA5)	2014	34	6.03 - 46.1	No Goal for Total	60	ppb	NO	By-product of chlorination

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

Haloacetic Acids (HAA5)*	2014	34	6.03 - 46.1	No Goal for Total	60	ppb	NO	By-product of chlorination
Total Trihalomethanes (TTHM)	2014	43	20.81 - 60.08	No Goal for Total	80	ppb	NO	By-product of chlorination

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

Total Trihalomethanes (TTHM)*	2014	43	20.81 - 60.08	No Goal for Total	80	ppb	NO	By-product of chlorination
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<b>Inorganic Contaminants</b>	<b>Collection Date</b>	<b>Highest Level Detected</b>	<b>Range of Levels Detected</b>	<b>MCLG</b>	<b>MCL</b>	<b>Units</b>	<b>Violation</b>	<b>Likely Source of Contamination</b>
Fluoride	2014	1.0	0.97 – 0.97	4	4.0	ppm	NO	Erosion of natural deposits; Additive promoting strong teeth; Discharge from fertilizer & Aluminum factories.
Nitrate (measured As Nitrogen)	2014	0.36	0.36-0.36	10	10	ppm	NO	Fertilizer use run-off; Septic tank leaching; Sewage; Erosion of natural deposits.

#### **Lead and Copper**

<b>Lead and Copper</b>	<b>Collection Date</b>	<b>MCLG</b>	<b>Action Level (AL)</b>	<b>90th Percentile</b>	<b>Units</b>	<b># Sites Over Action Level</b>	<b>Violation</b>	<b>Likely Source of Contamination</b>
Copper	2011	1.3	1.3	0.28	ppm	0	NO	Corrosion of household plumbing Systems; Erosion of natural deposits; Leaching from wood preservatives.

#### **Radioactive Contaminants**

<b>Combined Radium 226/228</b>	<b>Collection Date</b>	<b>Highest Level Detected</b>	<b>Range of Detected Levels</b>	<b>MCLG</b>	<b>MCL</b>	<b>Units</b>	<b>Violation</b>	<b>Likely contamination source</b>
	8/22/2012	4.6	4.6-4.6	0	5	pCi/L	NO	Erosion of Natural Deposits

#### **Microbiological Contaminants**

<b>Contaminant \</b>	<b>Level Detected</b>	<b>MCLG</b>	<b>MCL</b>	<b>Unit</b>	<b>Violation</b>	<b>Likely source of conatmination</b>
Total Coliform Bacteria	None Detected	0	Presence in 5% of monthly samples		NO	Naturally present in environment
Total Coliform and <i>E.coli</i>	None Detected	0	A routine sample & repeat are total coliform Positive and one Is also fecal Coliform positive or <i>E.coli</i> positive		NO	Human and Animal fecal Waste
Total Organic Carbon	1.20 Ratio Meets Requirements	>1	TT		NO	Naturally present in the environment.
Turbidity	100% < 0.10 100% < 0.30	95% < 0.3 Ntu AL 1.0	TT	Ntu	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.

As you can see by the table, our system had no violations in 2014. 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 and radioactive substances. All 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.

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 material and components associated with service lines and home plumbing. The Lugoff-Elgin Water 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>.

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. 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 and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

**Additional Information:** The Lugoff-Elgin Water Authority is a Special Purpose District (SPD). We're one of nearly 500 SPD's established by the General Assembly. Our organization receives NO tax millage and is fully self-supporting.

**Award Winning:** The South Carolina Department of Health and Environmental Control (SCDHEC) awarded Lugoff-Elgin's water treatment plant an Area Wide Optimization Program Award (AWOP) for its outstanding results in water treatment in 2013.

The Authority accepts **Visa and MasterCard** for payments. You can also sign up for **bank draft**. Contact Customer Service at 803-438-2991 for additional information.

The Board of Directors meets the first Thursday of each month at 5:30 pm at the Authority's main office at 88 Boulware Road in Lugoff. Sometimes the date is changed due to holidays or other circumstances. Call the office to confirm the meeting date.

If you have a disagreement over the interpretation of policies or your bill that you have been unable to resolve with the staff, you may ask the Board to consider an appeal. You should **FIRST** bring any concern over a bill or policy to the attention of the staff for resolution.