

**Annual Drinking Water Quality Report  
City of Liberty  
System #3910003**

We're 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. We buy our Water from Greenville Atkins Plant on Lake Keowee.

I am pleased to report that our drinking water is safe and meets federal and state requirements. If you have any questions about this report or concerning your water utility, please contact Public Works at 864-843-3177 option#2. 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. They are held on the second Monday of each month at 6:00 PM at City Hall, 206 West Front Street, Liberty, SC. Or, stop by City Hall at any time.

The City of Liberty routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2016. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

*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*-one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

*Picocuries per liter (pCi/L)*-picocuries per liter is a measure of the radioactivity in water.

*Action Level* – is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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

*Maximum Contaminant Level-(mandatory language)* 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.

*Maximum Contaminant Level Goal-(mandatory language)* 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.

(3910003 LIBERTY CITY OF (PURCHASE FROM GREENVILLE WTR AND EASLEY CENTRAL))

CONTANIMANT	DETECTED LEVEL	RANGE OF DETECTION	GOAL (MCLG)	HIGHEST LEVEL ALLOWED (MCL)	UNIT OF MEASURE	VIOLATIO Y/N	YEAR	POSSIBLE SOURCE
Copper	1.3	0.029	1.3	0	PPM	N	2014	Erosion of natural deposits:Leaching from wood preservatives: Corrosion of household plumbing.

## NEW LEAD AND COPPER LANGUAGE REQUIRED

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. City of Liberty 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>.

In 2016 the City of Liberty Water System did not have any violations for exceeding MCL's for total coliform.

Coliforms are naturally present in the environment and not a health threat in itself.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. 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.

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.

**Nitrates:** As a precaution we always notify physicians and health care providers in this area if there is ever a higher than normal level of nitrates in the water supply.

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).

Please call our office if you have questions.

**MICROBIAL & PHYSICAL CHARACTERISTICS - DATA FROM 2016**

Parameter	Units	MCL	Results	Possible Sources	Violation
Total Coliform	% positive per month	Less than 5%	0.33 % Maximum	Common in the environment; human and animal waste	NO
Turbidity	NTU	95% of samples < 0.3	100% of plant samples are below MCL Maximum = 0.07; Average = 0.05	Soil runoff	NO
Stoval Plant	NTU	< 0.3	Maximum = 0.07; Average = 0.05	Soil runoff	NO
Adkins Plant	NTU	NA	Average = 0.14	Soil runoff	NO
Distribution System	NTU	NA	Average = 0.14	Soil runoff	NO

Removing tiny particles

**LEAD & COPPER RULE - DATA FROM THE SUMMER OF 2015**

Parameter	Units	Action Level (AL)	90th Percentile Value	Sample Sites Exceeding	Possible Sources	Violation
Lead - Customer's plumbing	ppb	15	0.0	0	Corrosion of household plumbing	NO
Copper - Customer's plumbing	ppm	1.3	0.051	0	Corrosion of household plumbing	NO

**FINISHED WATER SECONDARY STANDARDS - DATA FROM 2016**

Parameter	Units	MCL	Range	Average	Possible Sources
Chloride	ppm	250	3.1 - 8.2	4.9	Soil runoff
Color	color	15	ND - 5	ND	Naturally occurring
Iron	ppb	300	ND	ND	Soil runoff, pipe material
Manganese	ppb	50	ND - 20	ND	Soil runoff
pH	SU	6.5 - 8.5	6.8 - 8.5	7.5	Controlled at treatment plant
Solids (Total Dissolved)	ppm	500	32 - 54	44	Soil runoff
Zinc	ppm	5	ND	ND	Drinking water additive
Sulfate	ppm	250	3.7 - 5.7	4.7	Drinking water additive
Aluminum	ppm	0.05 - 0.20	ND - 0.10	ND	Drinking water additive
Silver	ppm	0.10	ND	ND	Some home water treatment filters mining operations

**MICROBIAL & PHYSICAL CHARACTERISTICS - DATA FROM 2016**

Parameter	Units	MCL	Results	Possible Sources	Violation
Total Coliform	% positive per month	Less than 5%	0.33 % Maximum	Possible Sources Common in the environment; human and animal waste	NO
Turbidity Stovall Plant Adkins Plant Distribution System	NTU NTU NTU	95% of samples < 0.3 < 0.3 N/A	100% of plant samples are below MCL. Maximum = 0.07; Average = 0.05 Maximum = 0.07; Average = 0.05 Average = 0.14	Soil runoff Soil runoff <small>Turbidity is a measure of water clarity and a good indicator that the treatment process is removing very particles</small>	NO NO NA

**LEAD & COPPER RULE - DATA FROM THE SUMMER OF 2015**

Parameter	Units	Action Level (AL)	90th Percentile Value	Sample Sites Exceeding Action Level	Possible Sources	Violation
Lead - Customer's plumbing	ppb	15	0.0	0	Corrosion of household plumbing.	NO
Copper - Customer's plumbing	ppm	1.3	0.051	0	Corrosion of household plumbing	NO

**FINISHED WATER SECONDARY STANDARDS - DATA FROM 2016**

Parameter	Units	MCL	Range	Average	Possible Sources
Chloride	ppm	250	3.1 - 8.2	4.9	Soil runoff
Color	color	15	ND - 5	ND	Naturally occurring
Iron	ppb	300	ND	ND	Soil runoff, pipe material
Manganese	ppb	50	ND - 20	ND	Soil runoff
pH	SU	6.5 - 8.5	6.8 - 8.5	7.5	Controlled at treatment plant
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Zinc	ppm	5	ND	ND	Drinking water additive
Sulfate	ppm	250	3.7 - 5.7	4.7	Drinking water additive
Aluminum	ppm	0.05 - 0.20	ND - 0.10	ND	Drinking water additive
Silver	ppm	0.10	ND	ND	Some home water treatment filters milking operations