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# CITY OF LIBERTY



206 West Front Street • P.O. Box 716  
Liberty, South Carolina 29657  
Telephone: 864-843-3177 Fax: 864-843-9400

POLICE CHIEF  
Adam Gilstrap

PUBLIC  
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Tim Moore

RECREATION  
Tony Boiter

June 18, 2018

SC DHEC  
Attention Megan Johnson:  
2600 BULL ST  
COLUMBIA, SC 29201  
Fax: #803-898-3795

The City of Liberty Water Department

Liberty water Department has made its customers aware of the 2017 CCR Report by posting in Pickens County Courier, City Web Page, noted on Monthly water bills and the report is available and posted in City Hall bulletin board.

Thank You,

A handwritten signature in cursive script that reads "Gloria Turner".

Public Works  
City of Liberty

This is Distribution Certification Letter  
For the Liberty Water System #3910003

**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>, 2017. 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 know or expected risk to health. MCLGs allow for a margin of safety.

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

CONTANIMAN T	DETECTED LEVEL	RANGE OF DETECTION	GOAL (MCLG)	HIGHEST LEVELALLOWE D (MCL)	UNIT OF MEASURE	VIOLATIO Y/N	YEAR	POSSIBLE SOURCE
Copper	1.3	0.038	1.3	0	PPM	N	2015	Erosion of natural deposits: Leaching from wood preservatives: Corrosion of household plumbing.

ORGANIC COMPOUNDS	UNIT	MCL	(MCLG)	RANGE	LRAA	YEAR	POSSIBLE SOURCE
Trihalomethanes	ppb	80	0	6 -10	9.5	2017	By-products of disinfection
Halooacetic Acids	ppb	60	0	7.4 - 15	13.3	2017	By-products of disinfection

### 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 you 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 2017 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.

**INTEGRATED WATER QUALITY RESULTS**

Parameter	Units	MCL	Results	Possible Sources	Violation
Total Coliform	% positive per month	Less than 5%	0.66 % 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 = 0.04	Soil runoff	NO
Storage Plant	NTU	< 0.3	Maximum = 0.09; Average = 0.05	Soil runoff	NO
Aditus Plant	NTU	NA	Average = 0.15	Turbidity is a measure of water clarity and a good indicator that the treatment process is removing dry particles	NO
Distribution System	NTU	NA			NO

**LEAD CORROSION TESTS**

Parameter	Units	Action Level (AU)	90th Percentile Value	Sample Sites Exceeding Action Level	Possible Sources	Violation
Data is from Summer 2015						
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

**FINDINGS WATER SECONDARY STANDARDS**

Parameter	Units	MCL	Range	Average	Possible Sources
Chloride	ppm	250	3.4 - 6.0	4.6	Soil runoff
Color	color	15	ND - 5	ND	Naturally occurring
Iron	ppb	300	ND	ND	Soil runoff, pipe material
Manganese	ppb	50	ND	ND	Soil runoff
pH	SU	6.5 - 8.5	7.0 - 8.7	7.6	Controlled at treatment plant
Solids (Total Dissolved)	ppm	500	20 - 46	33	Soil runoff
Zinc	ppm	5	ND	ND	Drinking water additive
Sulfate	ppm	250	3.4 - 5.5	4.4	Drinking water additive
Aluminum	ppm	0.05 - 0.20	ND	ND	Drinking water additive
Silver	ppm	0.10	ND	ND	Some home water treatment filters mining operations

**PRIMARY DRINKING WATER STANDARDS AND ACTION LIMITS**

Parameter	Unit	MCL	MCLG	Range	Highest Level Detected	Possible Sources	Violation
<b>INORGANIC COMPOUNDS</b>							
Fluoride	ppm	4	4	NA	0.52	Drinking water additive	NO
Stovall Plant (DHEC Data)				NA	0.62	Fluoride added during treatment to prevent tooth decay	NO
Adkins Plant (DHEC Data)				0.43 - 0.79	Avg = 0.64		NO
Distribution System (GW Data)							
Nitrate/Nitrite (as nitrogen)	ppm	10	10	NA	<0.020	Erosion of natural deposits; fertilizer runoff, By-products of nitrification	NO
Stovall Plant (DHEC Data)				NA	0.054		NO
Adkins Plant (DHEC Data)				0.03 - 0.27	Avg = 0.08		
Distribution System (GW Data)							
<b>ORGANIC COMPOUNDS</b>							
Total Trihalomethanes	ppb	80	0	5.1 - 16.9	LRAA 11.8	By-products of disinfection	NO
Total Haloacetic Acids	ppb	60	0	6.1 - 19.8	14.9	By-products of disinfection	NO
TOC (Total Organic Carbon)				Percent Removal	Range	Occurs naturally in the environment	NO
Stovall Plant (samples collected monthly)		TT	N/A	29% (35% required)	13 - 44%		NO
Adkins Plant (samples collected monthly)		TT	N/A	17% (35% required)	1 - 38%		NO
<b>DISINFECTANTS (Distribution System)</b>							
Chloramine	ppm	MRDL 4	MRDLG 4	0.67 - 3.00	Avg = 2.32	Water Disinfectant	NO

Due to low raw water TOC levels, Adkins and Stovall plants are in compliance

**FINISHED/WATER/ADDITIONAL PARAMETERS**

Parameter	Units	Range	Average
Hardness (as CaCO3)	ppm	3.0 - 6.0	4.6
Calcium	ppm	0.8 - 1.5	1.1
Magnesium	ppm	0.35 - 0.61	0.47
Sodium	ppm	5.4 - 8.5	7.1
Potassium	ppm	0.60 - 0.83	0.71
Total Ammonia	ppm	0.35 - 0.75	0.53
Free Ammonia	ppm	0.02 - 0.28	0.07
Total Phosphate	ppm	0.49 - 1.17	0.91

# of Samples	> 29,000 samples
# of Analyses	> 60,000 tests
Miles of Pipeline	> 2,900 miles of pipeline
Crypto & Giardia	0 Cyst found in 2017.

Note: Does not include fire lines and hydrant leads.