

LOWCOUNTRY REGIONAL WATER SYSTEM 2016 Annual Drinking Water Quality Report For the period of January 1st to December 31st, 2016

This report is intended to provide you with important information about yur drinking water and the efforts made by the Lowcountry Regional Water System (LRWS) to provide safe drinking water.

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

If you have any questions about this report or concerning your water utility, please contact **Caskill Hudson at 803-943-1006.**

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 board meetings. They are held **the forth Tuesday of each month at 4pm in the conference room at the Hampton County Administration Building.**

Our Source Water Protection Assessment Plan is available at

<u>www.scdhec.gov/HomeAndEnvironment/Water/SourceWaterProtection/mindex.htm</u> if you do not have Internet access; please contact Caskell Hudson at 803-943-1006 to make arrangements to review this document.

Mandatory Statements:

The following statements are required by the U.S. Environmental Agency (EPA) and the S.C. Department of Health and Environmental Control (DHEC) to appear in this Annual Water Report, regardless of the results of water quality monitoring. These statements must appear in all Annual Water Quality Report for all publically regulated drinking water providers in the United States.

Source of Drinking Water:

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reserviours, springs and wells. As water travels over the surface of the land or through the ground it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminates that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, which 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 run off, 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 run off, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also, come from gas stations, urban runoff, and septic tanks. **Radioactive contaminants,** which can be naturally-occurring or be the results of oil and gas production and mining activities.

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.**

In order to insure that tap water is safe to drink, EPA prescribes regulations which limit the amount certain contaminates in water provide by the public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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).**

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. LRWS 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.

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.**

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 ground water. *Our wells draw directly or indirectly from the Floridian Aquifer through sub aquifers.* All wells are treated with Chlorine gas or Sodium Hypochlorite solution for disinfection purposes. All chemical dosing is strictly regulated by the EPA and South Carolina Department of Health and Environmental Control (DHEC).

Definitions: The following tables contain scientific terms and measures, some of which may require explanation. 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 for the Water Quality Test Results: Parts per million (ppm) or Milligrams per liter (mg/l) – Or one ounce in 7,350 gallons of water.

Parts per billion (ppb) or Micrograms per liter – Or one ounce in 7,350,000 gallons of water.

NA: Not applicable.

ND: Not Detected.

Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples. *Treatment Technique* (TT) - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level Goal or MCLG – The level of a contaminant in drinking water below there is no known or expected risk to health, MCLGs allow for a margin of safety.

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 available treatment technology.

Maximum Residual Disinfectant 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.

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.

Lead and Copper

Definitions:

Action Level: 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 safety.

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Lead and		Violation	90 th	Unit	Action	Sites over	Likely Source of	f Contamination	
Copper	MCLG	Y/N	percentile	Measurement	Level	action			
						level			
Copper	1.3	Ν	0.66	ppm	1.3	0	Corrosion of ho	usehold plumbing	
Sampled 2016							systems; erosion	n of natural deposits;	
							leaching from w	ing from wood preservatives	
Lead	0	Ν	13.0	ppb	15	1	Corrosion of ho	usehold plumbing	
Sampled 2016							systems; erosion	n of natural deposits;	
Regulated Cont	taminants	8							
Disinfectant	s and	Highest	Range of	f Units	MCLG	MCI	2 Violation	Likely Source of	
Disinfection by-	products	Level	Level				Y/N	Contamination	
-	-	Detected	l Detected	1					
Chlorine	e	HQA=	Range	ppm	4.0	4.0	N	Water additive used to	
Collection Dat	e: 2016	0.87	0.13 -1.2	8				control microbes	
Haloacetic Acids	(HAAS)*	1.0	0-1.72	ppb	No goal fo	or 60	N	By-product of drinking	
Collection Dat	e: 2015				the total			water disinfection.	
Total Trihalomethanes		2.0	0-3.90	ppb	No goal fo	or 80	N	By-product of drinking	
(TTHM)*					the total			water disinfection.	
Collection Dat	e: 2016								

*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.

Inorganic Contaminates	Highest Level Detected	Range of Level Detected	Units	MCLG	MCL	Violation Y/N	Likely Source of Contamination
Fluoride Collection Date:2016	0.45	0.45-0.45	ppm	4	4.0	N	Erosion of natural deposits which promotes strong teeth; Discharges from fertilizier and aluminum factories

Water Quality Test Results for Town of Gifford System # 2510009

Regulated Contaminants

Disinfectants and	Highest	Range of	Units	MCLG	MCL	Violation	Likely Source of
Disinfection by-	Level	Level				Y/N	Contamination
products	Detected	Detected					
Chlorine	HQA=	Range	ppm	4.0	4.0	Ν	Water additive used to
Collection Date: 2016	0.86	0.05 -1.45					control microbes
Total Trihalomethanes	5	Range	ppb	80	No goal for	Ν	By-product of drinking
(TTHM)*		3.2-5.0			the total		water disinfection.
Collection Date 2014							

Lead and Copper	MCLG	Violation Y/N	90 th percentile	Unit Measurement	Action Level	Sites over action level	Likely Source of Contamination
Copper Sampled 2015	1.3	N	0.023	ppm	1.3	0	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

*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.

Water Quality Test Results for Hampton County Industrial Park #2570908

Regulated Contaminants

Disinfectants and	Highest	Range of	Units	MCLG	MCL	Violation	Likely Source of Contamination
Disinfection by-	Level	Level				Y/N	
products	Detected	Detected					
Chlorine	HQA=	Range	ppm	4.0	4.0	Ν	Water additive used to control
Collection Date 2016	1.07	0.11 -1.07					microbes
Inorganic Contaminates	Highest	Range of	Units	MCLG	MCL	Violation	Likely Source of Contamination
	Level	Level				Y/N	
	Detected	Detected					
Fluoride	0.31	0.31-0.31	ppm	4	4.0	Ν	Erosion of natural deposits which
Collection Date: 2016							promotes strong teeth; Discharges
							from fertilizier and aluminum
							factories

Violations Table

Lead and Copper Rule

The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and Copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.

Violation type	Violation begin	Violation end	Violation Explanation
Follow-up or Routine Tap M/R (LCR)	10/01/2013	2016	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Water Quality Test Results for Town of Hampton System # 2510001

Lead and Copp	er									
Definitions:										
		tration of a	contaminant	t which, if	excee	eded, tri	gger	s tre	eatment o	r other requirements which a water
system must follo					• .					
			of a contamin	ant in drir	ıking	water b	elov	v wł	nich there	is no known or expected risk to health.
ALGs allow for a	margin s									
Lead and		Violation	90 th	Unit		Action		Si	tes over	Likely Source of Contamination
Copper	MCLG	Y/N	percentile	Measuren	nent	Level		i	action	
									level	
Copper	1.3	Ν	0.029	ppm		1.3 0		0	Corrosion of household plumbing	
Sampled 2016										systems; erosion of natural deposits;
										leaching from wood preservatives
Lead	0	Ν	3.00	ppb		15			1	Corrosion of household plumbing
Sampled 2016										systems; erosion of natural deposits;
Regulated Contai	ninates									
Disinfectants		Highest	Range of	Units	Μ	CLG	M	CL	Violatio	n Likely Source of Contamination
Disinfection I	oy-	Level	Level						Y/N	
products	•	Detected	Detected							
Chlorine		HQA=	Range	ppm		4.0	4.	0	Ν	Water additive used to control
Collection Date	2016	0.28	0.11 -0.35							microbes
Inorganic Contar	ninates	Highest	Range of	Units	М	CLG	M	CL	Violatio	n Likely Source of Contamination
5		Level	Level						Y/N	-
		Detected	Detected							
Fluoride		0.60	0.48-0.60	ppm		4	4.	0	Ν	Erosion of natural deposits which
Collection Date:	2016		-							promotes strong teeth; Discharges
										from fertilizier and aluminum
										factories

Water Quality Test Results for Town of Varnville System # 2510005

Lead and Copper

Definitions:

Action Level: 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 safety.

Lead and Copper	MCLG	Violation Y/N	90 th percentile	Unit Measurement	Action Level	Sites over action	Likely Source of Contamination									
						level										
Copper Sampled 2014	1.3	N	0.10	ppm	1.3	0	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives									
Regulated Conta	minates				Regulated Contaminates											

_ L	0							
	Disinfectants and	Highest	Range of	Units	MCLG	MCL	Violation	Likely Source of Contamination
	Disinfection by-	Level	Level				Y/N	
	products	Detected	Detected					
	Chlorine	HQA=	Range	ppm	4.0	4.0	Ν	Water additive used to control
	Collection Date 2016	0.17	0.07 -0.29					microbes
	Total Trihalomethanes	1.00	0 - 2.22	ppb	No goal	80	Ν	By-product of drinking water
	(TTHM)*				for the			disinfection.
	Collection Date: 2016				total			

*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.

Inorganic Contaminates	Highest	Range of	Units	MCLG	MCL	Violation	Likely Source of Contamination
	Level	Level				Y/N	
	Detected	Detected					
Fluoride Collection Date: 2016	1.20	0.49-1.20	ppm	4	4.0	Ν	Erosion of natural deposits which promotes strong teeth; Discharges from fertilizier and aluminum factories

Water Quality Test Results for Town of Yemassee System # 2510006

Lead and Copper Definitions:

Action Level: 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 safety.

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Lead and		Violation	90 th	Unit	Action	Sites over	Likely S	Source of	f Contamination	
Copper	MCLG	Y/N	percentile	Measurement	Level	action				
						level				
Copper	1.3	Ν	0.03	ppm	1.3	0	•		usehold plumbing	
Sampled 2015									of natural deposits;	
1									ood preservatives	
Regulated Con	taminant	S								
Disinfectant	s and	Highest	Range o	f Units	MCLG	MCI	L Vi	iolation	Likely Source of	
Disinfection by-	products	Level	Level					Y/N	Contamination	
	-	Detected	l Detected	1						
Chlorin	e	HQA=	Range	ppm	4.0	4.0		Ν	Water additive used to	
Collection Dat	e: 2016	0.27	0.07 -0.4	5					control microbes	
Total Trihalomethanes		4.00	4.22-4.2	2 ppb	No goal fo	or 80		Ν	By-product of drinking	
(TTHM)*					the total				water disinfection.	
Collection Dat	e: 2016									

*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.

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.

Copies of our Annual Drinking Water Report are available at the **Lowcountry Regional Water System Office at 513 Elm St. Hampton, SC** during normal working hours, Monday – Friday 8am -5pm. Or online at www.lowcountrywater.com