



Duke Energy  
Marshall Steam Station  
8329 East NC Hwy 150  
Terrell, NC 28682  
828-478-7700

January 29, 2020

ELECTRONIC SUBMITTAL  
Ms. Linda Culpepper, Director  
North Carolina Division of Water Resources  
E-mail Address: desocdata@ncdenr.gov

Subject: Duke Energy Carolinas, LLC.  
Marshall Steam Station  
EMC SOC WQ S17-009  
4th Quarter 2019 - Monitoring Data Results

Dear Ms. Culpepper:

In accordance with paragraph 2. e. 3) of the NC Environmental Management Commission Special Order by Consent, EMC SOC WQ S17-009, Duke Energy Carolinas, LLC. (Duke) is hereby submitting the monitoring results for the 4th Quarter of 2019.

As reported for the 3rd quarter the sample collected at S-01 on September 25, 2019 exceeded the hardness interim action level (IAL). This exceedance was determined to be largely due to a moderate drought condition. Sampling on a monthly basis began as required by the SOC for S-01. In October and December, the hardness values were in compliance with the IAL. However, November's results slightly exceeded the IAL.

If you have any questions, please contact Robert Wylie at 704-382-4669.

*I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the Information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.*

Sincerely,

A handwritten signature in blue ink that reads "Rick Roper".

Rick Roper  
General Manager III  
Marshall Steam Station

Duke Energy Carolinas, LLC - Marshall Steam Station  
 Special Order by Consent - SOC No. S17-009  
 Monitoring Report for 4th Quarter of 2019

SAMPLING LOCATION	Date Sampled	TSS*	Oil and Grease*	pH	Fluoride	Mercury	Barium	Zinc	Arsenic	Boron	Cadmium	Chromium	Copper	Thallium	Lead	Nickel	Selenium	Nitrate/Nitrite as N	Bromides	Sulfates	Chlorides	TDS	Total Hardness	Temperature	Conductivity	
		-	-	-	-	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	-	-	-	-	-	Total	-	-	
		mg/L	mg/L	SU	ug/L	ng/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	°C	umho/cm
S-01	10/25/2019			5.9	< 500	11.2 **	84	< 5	< 1	2050	< 0.1	4.29	< 1	< 0.2	0.521	2.54	1.33	0.02	3.4	120	130	537	122	14	769	

\*Annual Monitoring Only  
 \*\*Duplicate was gathered at this location and the respective values averaged

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		-	-	-	-	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	-	-	-	-	-	Total	-	-	
		mg/L	mg/L	SU	ug/L	ng/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	°C	umho/cm
S-01	11/22/2019			6.2	< 500	< 0.5 **	127	< 5	< 1	1670	< 0.1	< 1	< 1	< 0.2	< 0.2	2.28	1.19	0.02	2.6	100	97	401	205	12	648	

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SAMPLING LOCATION	Date Sampled	TSS*	Oil and Grease*	pH	Fluoride	Mercury	Barium	Zinc	Arsenic	Boron	Cadmium	Chromium	Copper	Thallium	Lead	Nickel	Selenium	Nitrate/Nitrite as N	Bromides	Sulfates	Chlorides	TDS	Total Hardness	Temperature	Conductivity
		-	-	-	-	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	-	-	-	-	-	Total	-	-
		mg/L	mg/L	SU	ug/L	ng/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	°C
S-01	12/5/2019			6.4	< 500	0.735	113	< 5	< 1	1210	< 0.1	< 1	< 1	< 0.2	< 0.2	2.13	1.08	0.03	1.7	73	63	263	169	10	418
Instream Lake Norman Holdsclaw Creek Arm	12/5/2019			7.5	< 100	**0.563	16	< 5	< 1	54	< 0.1	< 1	1.31	< 0.2	< 0.2	< 1	< 1	0.28	< 0.1	3	4.8	40	17.6	13	55
Upstream Catawba River Lake Norman	12/5/2019			7.4	< 100	< 0.5	15	< 5	< 1	84	< 0.1	< 1	2.53	< 0.2	< 0.2	< 1	< 1	0.27	< 0.1	3.3	5.8	42	19.2	14	59
Downstream Catawba River Lake Norman	12/5/2019			7.3	< 100	< 0.5	14	< 5	< 1	85	< 0.1	< 1	2.64	< 0.2	< 0.2	< 1	< 1	0.27	< 0.1	3.4	5.8	47	19.3	15	59
Downstream Catawba River Lake Norman 2	12/5/2019			7.2	< 100	< 0.5	15	< 5	< 1	117	< 0.1	< 1	3.69	< 0.2	< 0.2	< 1	< 1	0.28	< 0.1	3.8	6.9	56	21.6	18	64

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