



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

October 29, 2019

**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  
3rd 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 3rd Quarter of 2019.

As discussed with your staff in a meeting on September 13, 2019, a sampling event in August by our contractor was determined to be invalid due to the samples being taken from a stagnant pool caused by beaver activity in contradiction of our seep sampling standard operating procedure (SOP). Subsequently, the beaver dam was removed and a sample compliant with the SOP requirements was taken on September 25, 2019. This sample exceeded the hardness interim action level. This situation is under evaluation. In accordance with section 2.c.1, Duke Energy will begin monthly sampling in October and will submit a report re-assessing S-01.

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,

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 3rd 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	9/25/2019			6.1	< 500	0.787	222	< 5	< 1	2370	< 0.1	1.46	1.09	< 0.2	0.258	3.58	< 1	0.02	5.1	95	170	556	316	19	739	
Instream Lake Norman Holdsclaw Creek Arm	8/8/2019			7.5	< 100	**0.556	20	< 5	< 1	< 50	< 0.1	< 1	1.01	< 0.2	< 0.2	< 1	< 1	0.25	< 0.1	2.4	3.4	44 ***	15.7	24	51	
Instream Lake Norman Holdsclaw Creek Arm	8/28/2019			7.3	NA ****	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	49	NA	25	52.5
Upstream Catawba River Lake Norman	8/8/2019			7.5	< 100	< 0.5	10	< 5	< 1	63	< 0.1	< 1	2.56	< 0.2	< 0.2	< 1	< 1	0.15	< 0.1	3	5	59	15.9	24	51	
Downstream Catawba River Lake Norman	8/8/2019			7	< 100	< 0.5	11	< 5	< 1	64	0.138	< 1	3	< 0.2	< 0.2	< 1	< 1	0.16	< 0.1	3	5.1	47	16.4	30	52	
Downstream Catawba River Lake Norman 2	8/8/2019			7.4	< 100	< 0.5	9	< 5	< 1	59	< 0.1	< 1	2.22	< 0.2	< 0.2	< 1	< 1	0.11	< 0.1	3	4.9	56	15.5	30	51	

\*Annual Monitoring Only  
\*\*Duplicate was gathered at this location and the respective values averaged  
\*\*\* TDS on 8/8/19 exceeded the holding time. Was resampled on 8/28/19  
\*\*\*\*NA stands for Not Analyzed