

Fact Sheet

NPDES Permit No. NC0003433

Permit Writer/Email Contact Bing Bai, bing.bai@ncdenr.gov:

Date: December 21, 2018

Division/Branch: NC Division of Water Resources/NPDES Complex Permitting

Fact Sheet Template: Version 09Jan2017

Permitting Action:

- Renewal
- Renewal with Expansion
- New Discharge
- Modification (Fact Sheet should be tailored to mod request)

Note: A complete application should include the following:

- For New Dischargers, EPA Form 2A or 2D requirements, Engineering Alternatives Analysis, Fee
- For Existing Dischargers (POTW), EPA Form 2A, 3 effluent pollutant scans, 4 2nd species WET tests.
- For Existing Dischargers (Non-POTW), EPA Form 2C with correct analytical requirements based on industry category.

Complete applicable sections below. If not applicable, enter NA.

1. Basic Facility Information

Facility Information	
Applicant/Facility Name:	Duke Energy Progress LLC – Cape Fear Steam Electric Plant
Applicant Address:	500 CP&L Road, Moncure, NC 27599
Facility Address:	500 CP&L Road, Moncure, NC 27599
Permitted Flow:	Outfall 007 – 0.73 MGD Daily Maximum Outfall 008 – 0.72 MGD Daily Maximum Outfall 009 – 0.005 MGD Daily Maximum
Facility Type/Waste:	100% Industrial (Ash basin clean up, remediation)
Facility Class:	Grade I Physical Chemical WPCS
County:	Chatham
Region	Raleigh

Briefly describe the proposed permitting action and facility background: Duke Energy Progress LLC (Permittee) has requested for a permit modification for relocation of Outfall 008, and submitted a modification request on October 3, 2018. The NPDES permit renewal for this facility was issued on August 30, 2018 with an effective date of October 1, 2018. A proposed new location for Outfall 008 is added to the permit in this modification (Table 2), and no limit or monitoring requirement will be changed.

Table 2. Outfall 008 Location

Existing NPDES Permit	Proposed New Location
Latitude: 35°35'37.7" N Longitude: 79°3'4.6" W	Latitude: 35°35'29.54" N Longitude: 79°3'3.85" W

2. Receiving Waterbody Information:

Receiving Stream	Index	7Q10s (cfs)	QA (cfs)	IWC (7Q10s)
Outfall 007 – Unnamed tributary to Cape Fear River	18-(1)	0	0	100%
Outfalls 008 – Cape Fear River	18-(1)	65	3,170	1.7%
Outfall 009 – Cape Fear River	18-(1)	65	3,170	0.012%
Outfall 008A – Cape Fear River				
Outfalls 001 & 005– Internal Outfalls				
Stream Classification:	WS-IV	Regional Office:	Raleigh	
303(d) Listed?:	No	USGS Topo Quad:	E22SE Moncure, NC	
HUC No.:	03030002	Permit Writer:	Bing Bai	
Subbasin:	03-06-07	Date:	August 22, 2018	
Cape Fear River Stream Statistics – 2016				
Drainage (mi ²):	-			
Summer – 7Q10 (cfs):	65 ¹			
Winter – 7Q10 (cfs):	89 ¹			
30Q2 (cfs):	150 ¹			
QA (cfs):	3,170 ¹			

1. Based on USGS recommendation and data

3. Instream Monitoring

Instream monitoring may be required in certain situations, for example: 1) to verify model predictions when model results for instream DO are within 1 mg/l of instream standard at full permitted flow; 2) to verify model predictions for outfall diffuser; 3) to provide data for future TMDL; 4) based on other instream concerns. Instream monitoring may be conducted by the Permittee, and there are also Monitoring Coalitions established in several basins that conduct instream sampling for the Permittee (in which case instream monitoring is waived in the permit as long as coalition membership is maintained).

If applicable, summarize what instream monitoring will be proposed for this permit action: The current permit requires instream monitoring for total arsenic, total selenium, total mercury, total chromium, dissolved lead, dissolved cadmium, dissolved copper, dissolved zinc, total bromide, total hardness (as CaCO₃), temperature, turbidity, and total dissolved solids (TDS) at locations specified in Table 4:

Table 4. Instream Sampling Locations in Existing NPDES Permit

Instream Sample Description	Location
Upstream Outfall 008	0.9 miles upstream from Outfall 008 in Cape Fear River
Downstream Outfall 008	Approximately 250 meters downstream from Outfall 008 in Cape Fear River

This permit modification keeps same instream monitoring requirements except for downstream sampling location, which will be relocated to 250 meters from proposed new location of Outfall 008. Updated instream sampling location descriptions are shown in Table 5.

Table 5. Updated Instream Sampling Locations Description

Instream Sample Description	Location
Upstream Outfall 008	0.9 miles upstream from Outfall 008A in Cape Fear River
Downstream Outfall 008	Approximately 250 meters downstream from Outfall 008 in Cape Fear River

Is this facility a member of a Monitoring Coalition with waived instream monitoring (Y/N): **NO**

Name of Monitoring Coalition: **NA**

4. Antidegradation Review (New/Expanding Discharge):

The objective of an antidegradation review is to ensure that a new or increased pollutant loading will not degrade water quality. Permitting actions for new or expanding discharges require an antidegradation review in accordance with 15A NCAC 2B.0201. Each applicant for a new/expanding NPDES permit must document an effort to consider non-discharge alternatives per 15A NCAC 2H.0105(c)(2). In all cases, existing instream water uses and the level of water quality necessary to protect the existing use is maintained and protected.

If applicable, describe the results of the antidegradation review, including the Engineering Alternatives Analysis (EAA) and any water quality modeling results: **NA**

5. Antibacksliding Review:

Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR 122.44(l) prohibit backsliding of effluent limitations in NPDES permits. These provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed (e.g., based on new information, increases in production may warrant less stringent TBEL limits, or WQBELs may be less stringent based on updated RPA or dilution).

Are any effluent limitations less stringent than previous permit (YES/NO): **NO**

If YES, confirm that antibacksliding provisions are not violated: **NA**

6. Summary of Proposed Permitting Actions:

A proposed location for Outfall 008 is added to the permit. The Permittee is required to notify the Division at least two weeks prior to the commencement of discharge from the proposed new location. The map and instream monitoring locations description will be updated accordingly. All limits and monitoring requirements in the existing permit stay unchanged. Accordingly, downstream monitoring location will be relocated to be 250 meters downstream from proposed new location for Outfall 008.

7. Public Notice Schedule:

Permit to Public Notice: 10/18/2018

Per 15A NCAC 2H .0109 & .0111, The Division will receive comments for a period of 30 days following the publication date of the public notice. Any request for a public hearing shall be submitted to the Director within the 30 days comment period indicating the interest of the party filing such request and the reasons why a hearing is warranted.

8. Fact Sheet Addendum (if applicable):

Were there any changes made since the Draft Permit was public noticed (Yes/No): Yes

If Yes, list changes and their basis below:

- a. Downstream sampling location was moved from 250 meters downstream of Outfall 008A to 250 meters downstream of Outfall 008 to more accurately measure the discharge from Outfall 008. This change was requested by SELC, and Duke Energy agreed to sample at new downstream sampling location.
- b. Section A. (9.), Part C was omitted from the draft permit modification (public noticed on October 17, 2018) by mistake and will be restored to the final permit modification. Section A. (9.) stays unchanged as in the existing permit issued on August 30, 2018.

9. Fact Sheet Attachments (if applicable): NA