# **Coal Ash Quarterly Report**

General Statute (G.S.) 130A-309.204(a) **Statutory Authority:** 

**Due Date:** April 1, 2022

Receiving Entities: Environmental Review Commission

**Submitting Entity:** 

NC Department of Environmental Quality

# Department of Environmental Quality Quarterly Report April 1, 2022

# **Regulatory Background**

This report is submitted to meet the requirements of General Statute 130A–309.204, which requires the Department of Environmental Quality (DEQ) to submit quarterly reporting on operations, activities, programs and progress relating to coal combustion residuals surface impoundments. Specifically, General Statute (G.S.) 130A–309.204(a) states:

The Department shall submit quarterly written reports to the Environmental Review Commission on its operations, activities, programs, and progress with respect to its obligations under this Part concerning all coal combustion residuals surface impoundments. At a minimum, the report shall include information concerning the status of assessment, corrective action, prioritization, and closure for each coal combustion residuals surface impoundment and information on costs connected therewith. The report shall include an executive summary of each annual Groundwater Protection and Restoration Report submitted to the Department by the operator of any coal combustion residuals surface impoundments pursuant to G.S. 130A-309.211(d) and a summary of all groundwater sampling, protection, and restoration activities related to the impoundment for the preceding year. The report shall also include an executive summary of each annual Surface Water Protection and Restoration Report submitted to the Department by the operator of any coal combustion residuals surface impoundments pursuant to G.S. 130A-309.212(e) and a summary of all surface water sampling, protection, and restoration activities related to the impoundment for the preceding year, including the status of the identification, assessment, and correction of unpermitted discharges from coal combustion residuals surface impoundments to the surface waters of the State. The Department shall supplement the written reports required by this subsection with additional written and oral reports as may be requested by the Environmental Review Commission. The Department shall submit the written reports required by this subsection whether or not the General Assembly is in session at the time the report is due.

#### **Report Structure**

This report is broken down by the N.C. Department of Environmental Quality Divisions of Water Resources, Waste Management, and Energy, Mineral, and Land Resources. The information provided is either on—going or has occurred since the submittal of the previous quarterly report.

#### Acronyms

The following acronyms may be used in the sections below:

- A/M Approval with Modifications
- BTVs Background Threshold Values
- CAP Corrective Action Plan
- CCR Coal Combustion Residuals
- CCP Coal Combustion Products
- COAR Certificate of Approval to Repair

- COC Certificate of Coverage
- COFA Certificate of Final Approval
- CQA Construction Quality Assurance
- CSA Comprehensive Site Assessment
- DEQ North Carolina Department of Environmental Quality
- DORS Distribution of Residual Solids
- DWM Division of Waste Management
- DWR Division of Water Resources
- EAP Emergency Action Plan
- EMC Environmental Management Commission
- EOR Engineer of Record
- ESC or E&SC Erosion and Sediment Control Plan
- FGD Flue–gas Desulfurization
- NOD Notice of Deficiency
- NOI Notice of Intent
- NOI Notice of Inspection (DEMLR)
- NOV Notice of Violation
- NPDES National Pollution Discharge Elimination System
- PTC Permit to Construct
- PTO Permit to Operate
- SOC Special Order by Consent
- UIC Underground Injection Control
- WQMP Water Quality Monitoring Plan

#### DIVISION OF WATER RESOURCES

**Duke Energy facilities with Surface Impoundments**. Division of Water Resources regulates Surface Impoundments in accordance with the Coal Ash Management Act (CAMA) as well as the General Statute 143–215, Control of Sources of Water Pollution; Permits Required and State Administrative Code 15A NCAC 2L Classification and Water Quality Standards Applicable to Groundwaters of the State.

#### **General Status of Surface Impoundments:**

The following are general status notes for all facilities, except where stated.

#### Corrective Action Status

Individual site-specific status notes included in the next section.

#### Prioritization and Closure Status [G.S. 130A–309.213]

Currently, all facilities are ranked as high, intermediate, or low priority.

- Facilities classified as high–risk per Session Law 2014–122 Senate Bill 729 Section 3.(b) are:
  - Asheville Steam Station
  - o Dan River Combined Cycle Station
  - o Riverbend Steam Station
  - o L. V. Sutton Energy Complex

High–risk impoundments are required to be closed no later than December 31, 2019. Proposed plans were submitted by December 31, 2016.

- Facilities classified as intermediate—risk per Session Law 2016–95 House Bill 630 Section 3.(a) are:
  - o H. F. Lee Energy Complex
  - o Cape Fear Steam Electric Plant
  - o W. H. Weatherspoon Power Plant

These three facilities and the Buck Combined Cycle Station have also been selected by Duke Energy for beneficiation under G.S. 130A–309.216. Per G.S. 130A–309.216(c), sites selected for ash beneficiation projects shall be closed no later than December 31, 2029.

- Facilities classified as low risk per G.S. 130A–309.213 are:
  - o Allen Steam Station
  - o Belews Creek Steam Station
  - Buck Combined Cycle Station
  - o James E. Rogers Energy Complex (formerly Cliffside Steam Station)
  - Marshall Steam Station

- o Mayo Steam Electric Plant
- o Roxboro Steam Electric Plant

On November 13, 2018, DEQ deemed that these facilities are low risk based on criteria under G.S. 130A–309.213(d)(1).

Low-risk impoundments are required to be closed no later than December 31, 2029. A proposed closure plan for low-risk impoundments must be submitted no later than December 31, 2019. Intermediate-risk impoundments are required to be closed no later than December 31, 2024. A proposed closure plan for intermediate-risk impoundments was submitted by December 31, 2019. The closure dates have been superseded by the Consent Order that was signed February 5, 2020.

#### Consent Order

On February 5, 2020, a Consent Order was signed between Duke Energy, Plaintiff-Intervenors, and DEQ. The Consent Order required site-specific actions that supersede all other agreements, general statutes, and laws and only affects the Allen Steam Station, Belews Creek Steam Station, James E. Rogers Energy Complex (Cliffside Steam Station), Marshall Steam Station, Mayo Steam Electric Plant, and the Roxboro Steam Electric Plant. The Consent Order can be found on the DEQ website at:

# https://deq.nc.gov/media/15176/download

#### Beneficial Reuse [G. S.130A–309.216]

Per G.S. 130A–309.216, Duke Energy was required to identify, at a minimum, three sites for beneficial reuse. Along with the Cape Fear Steam Electric Plant, H.F. Lee Energy Complex, and the W. H. Weatherspoon Power Plan, the Buck Combined Cycle Station was additionally selected for beneficial reuse. G.S. 130A–309.216(c) states that sites selected for beneficiation projects must close by December 31, 2029.

#### General Costs [G.S. 130–309.214(m)]

Costs are required to be included with the site closure plans and corrective action plans.

- Closure plans for the high–risk impoundments were submitted in January 2017 but were deemed incomplete by the DEQ. These plans included general cost estimates and were labeled confidential.
- Cost estimates are included in the Updated CAPs.

# **Site Specific Actions for Surface Impoundments**

The following site–specific actions and status notes have occurred since the submittal of the previous quarterly report.

#### All Facilities

• DWR is currently in the process of developing a surface water evaluation for all sites. The results will be submitted to Duke Energy and will be used in their development of surface water assessment plans.

#### Allen Steam Station

- Assessment and Corrective Action Status
  - o Duke is continuing to implement the approved corrective actions.
  - February 23, 2022 DEQ approved a compliance boundary modification from October 19, 2019 as Duke requested a formal approval.
  - o February 21, 2022 DEQ submits a general response to Duke's CAP comments.
- Closure Status
  - o Closure is on-going.
- NPDES permit NC0004979
  - No update this quarter.

#### Asheville Steam Electric Plant

- Assessment and Corrective Action Status
  - February 23, 2022 DEQ approved a compliance boundary modification from February 10, 2021 as Duke requested a formal approval.
  - February 4, 2022 Duke submits request to discontinue geochemical modeling based on data from all other sites suggesting that the processes of natural attenuation are relatively the same at each site.
    - February 14, 2022 DWR approved the request with the caveat that geochemical modeling may be required on a case-by-case basis.
  - December 21, 2021 Duke submits responding comments on DEQ's updated CSA comments.
    - February 15, 2022 DWR responds via email.
- Closure Status
  - Excavation of the 1964 Basin is in progress.
  - o Excavation of the 1982 Basin is complete.
- NPDES permit NC0000396
  - o February 4, 2022 Major modification issued.
- SOC S17–010
  - No update this quarter.

#### Belews Creek Steam Station

- Assessment and Corrective Action Status
  - o February 23, 2022 DEQ approved a compliance boundary modification from March 11, 2020 as Duke requested a formal approval.
  - February 4, 2022 Duke submits request to discontinue geochemical modeling based on data from all other sites suggesting that the processes of natural attenuation are relatively the same at each site.
    - February 14, 2022 DWR approved the request with the caveat that geochemical modeling may be required on a case-by-case basis.
  - February 3, 2022 Duke submits responding comments on DEQ's comments on the CSA for the Coal Pile/Gypsum Pad.
    - February 7, 2022 DWR sends response to Duke.
  - October 28, 2021 Duke submits response to Updated CAP Comment letter.
    - February 21, 2022 DEQ submits a response to Duke's comments.
- Closure Status
  - o Closure is on-going.
- NPDES permit NC0024406
  - No update this quarter

#### **Buck Combined Cycle Station**

- Assessment and Corrective Action Status
  - o February 23, 2022 DEQ approved a compliance boundary modification from October 22, 2020 as Duke requested a formal approval.
  - o February 4, 2022 Duke submits request to discontinue geochemical modeling based on data from all other sites suggesting that the processes of natural attenuation are relatively the same at each site.
    - February 14, 2022 DWR approved the request with the caveat that geochemical modeling may be required on a case-by-case basis.
- Closure Status
  - o Closure is on-going.
- NPDES Permit NC0004774
  - No update this quarter.
- SOC S18-004
  - No update this quarter.

#### Cape Fear Steam Electric Plant

- Assessment and Corrective Action Status
  - o February 4, 2022 Duke submits request to discontinue geochemical modeling based on data from all other sites suggesting that the processes of natural attenuation are relatively the same at each site.
    - February 14, 2022 DWR approved the request with the caveat that geochemical modeling may be required on a case-by-case basis.

- December 21, 2021 Duke submits responding comments on DEQ's updated CSA comments.
  - February 16, 2022 DWR responds via email.
- Closure Status
  - o Closure is on-going.
- NPDES permit NC0003433
  - No update this quarter.
- SOC S19-001
  - No update this quarter.

#### James E. Rogers Energy Complex (Formerly Cliffside Steam Station)

- Assessment and Corrective Action Status
  - February 23, 2022 DEQ approved a compliance boundary modification from July 22, 2019 as Duke requested a formal approval.
  - October 28, 2021 Duke submits response to Updated CAP Comment letter.
    - February 21, 2022 DEQ submits a general response to Duke's CAP comments.
- Closure Status
  - o January 24, 2022 Duke submits visual verification, Polarized Light Microscopy results, from the Ash Storage Area at the Rogers Energy Complex.
    - DEQ is currently reviewing.
  - o Closure is on-going.
  - Excavation of the Inactive Units 1–4 is complete.
- NPDES permit NC0005088
  - June 11, 2021 Major permit modification issued. Modification became effective July 1, 2021.

#### Dan River Combined Cycle Station

- Assessment and Corrective Action Status
  - o February 21, 2022 DEQ submits a general response to Duke's CAP comments.
- Closure Status
  - Duke is in post-closure monitoring.
  - Excavation is complete.
- NPDES permit NC0003468
  - No update this quarter.

# H. F. Lee Energy Complex

- Assessment and Corrective Action Status
  - February 23, 2022 DEQ approved a compliance boundary modification from October 16, 2020 as Duke requested a formal approval.
  - o February 4, 2022 Duke submits request to discontinue geochemical modeling based on data from all other sites suggesting that the processes of natural attenuation are relatively the same at each site.

- February 14, 2022 DWR approved the request with the caveat that geochemical modeling may be required on a case-by-case basis.
- December 21, 2021 Duke submits responding comments on DEQ's updated CSA comments.
  - February 2, 2022 DWR submitted a response via email.
- Closure Status
  - o Closure is on-going.
- NPDES permit NC0003417
  - o December 10, 2021 Major modification issued.
- SOC S18–006
  - No update this quarter.

#### Marshall Steam Station

- Assessment and Corrective Action Status
  - February 23, 2022 DEQ approved a compliance boundary modification from July 26, 2021 as Duke requested a formal approval.
  - o February 21, 2022 DEQ submits a general response to Duke's CAP comments.
  - o February 11, 2022 Duke submits formal groundwater optimization plan for the site.
    - DWR is currently reviewing.
- Closure Status
  - o Closure is on-going.
- NPDES permit NC0004987
  - May 8, 2021 Major permit modification was issued. Permit became effective June 1, 2021.

#### Mayo Steam Electric Plant

- Assessment and Corrective Action Status
  - February 23, 2022 DEQ approved a compliance boundary modification from September 17, 2019 as Duke requested a formal approval.
  - o October 28, 2021 Duke submits response to Updated CAP Comment letter.
    - February 21, 2022 DEQ submits a response to Duke's comments.
- Closure Status
  - o Closure is on-going.
- NPDES permit NC0038377
  - No update this quarter.
- SOC S18–005
  - No update this quarter.

#### Riverbend Steam Station

- Assessment and Corrective Action Status
  - o February 21, 2022 DEQ submits a general response to Duke's CAP comments.
- Closure Status
  - o Duke is in post-closure monitoring.
  - o Excavation is complete.
- NPDES permit NC0004961
  - No update this quarter.

#### Roxboro Steam Electric Plant

- Assessment and Corrective Action Status
  - No updates this quarter.
- Closure Status
  - February 7, 2022 Duke submits request for approval of excavation grades for the Eastern Extension Impoundment.
  - o Closure is on-going.
- NPDES permit NC0003425
  - No update this quarter.

# L. V. Sutton Energy Complex

- Assessment and Corrective Action Status
  - o February 21, 2022 DEQ submits a general response to Duke's CAP comments.
- Closure Status
  - O Duke is in post-closure monitoring.
  - o Excavation of the 1971 Basin is complete.
  - o Excavation of the 1984 Basin is complete.
- NPDES permit NC0001422
  - No update this quarter.

#### W. H. Weatherspoon Power Plant

- Assessment and Corrective Action Status
  - February 4, 2022 Duke submits request to discontinue geochemical modeling based on data from all other sites suggesting that the processes of natural attenuation are relatively the same at each site.
    - February 14, 2022 DWR approved the request with the caveat that geochemical modeling may be required on a case-by-case basis.
  - December 21, 2021 Duke submits responding comments on DEQ's updated CSA comments.
    - February 2, 2022 DWR submitted a response via email.
- Closure Status
  - o Closure is on-going.
- NPDES permit NC0005363

- No update this quarter.
- SOC S19-006
  - No updates this quarter.

# **Annual Groundwater Protection and Restoration Report Summary**

The Annual Groundwater Protection and Restoration Reports have been uploaded to the <u>DEQ</u> <u>website</u>. Since the reports are very concise, they do not lend themselves to being summarized. The report summarizes all groundwater sampling, protection, and restoration activities related to the impoundment for the preceding year.

# **Annual Surface Water Protection and Restoration Report Summary**

The Annual Surface Water Protection and Restoration Reports have been uploaded to the <u>DEQ</u> <u>website</u>. Since the reports are very concise, they do not lend themselves to being summarized. The report summarizes all groundwater sampling, protection, and restoration activities related to the impoundment for the preceding year.

#### DIVISION OF WASTE MANAGEMENT

#### **Landfills At Duke Energy Coal Ash Facilities**

#### Allen Steam Station – Gaston County (current coal fired)

- Excavation Plan
  - o December 17, 2021 Annual revised/updated Excavation Plan submitted.
- Annual Site Inspection
  - o No update this quarter.
- 3612–INDUS–2008: Retired Ash Basin Landfill (open, double–lined, landfill constructed on top of retired ash basin)
  - No update this quarter.
- 3619-INDUS-2021: North Starter Landfill
  - No update this quarter.
- 3620-INDUS-20XX: South Starter Landfill
  - o February 16, 2022 DEQ issued concurrence to begin tree removal.
- 3621-INDUS-20XX: Basin Landfill
  - o No update this quarter.

# <u>Asheville Steam Electric Plant – Buncombe County</u> (retired coal–fired plant, converted to combined cycle turbine)

- Excavation Plan
  - o December 17, 2021 Annual revised/updated Excavation Plan submitted.
- Annual Site Inspection
  - o No update this quarter.
- 1119–INDUS–2020
  - o No update this quarter.

#### Belews Creek Steam Station – Stokes County (current coal fired)

- Excavation Plan
  - o December 17, 2021 Annual revised/updated Excavation Plan submitted.
- Annual Site Inspection
  - o No update this quarter.
- 8503–INDUS–1984: Pine Hall Road Landfill (closed, unlined composite cap system)
  - No update this quarter.
  - Groundwater Assessment
    - No update this quarter.
- 8504–INDUS–2007: Craig Road Landfill (open, lined)
  - No update this quarter.
  - Groundwater Assessment
    - No update this quarter.
- 8505–INDUS–2008: Flue Gas Desulfurization (FGD) Landfill (open, lined)
  - o No update this quarter.
  - o Groundwater Assessment
    - No update this quarter.
- 8506-INDUS-2021: Basin Landfill

No update this quarter.

<u>Dan River Steam Station – Rockingham County</u> (retired coal–fired plant, converted to combined cycle turbine)

- 7906–INDUS–2016: CCR Landfill (open, lined)
  - o No update this quarter.

# Mayo Steam Electric Plant – Person County (current coal fired)

- Excavation Plan
  - o December 17, 2021 Annual revised/updated Excavation Plan submitted.
- Annual Site Inspection
  - o March 23, 2022 First quarterly (Q1 2022) site visit scheduled.
- 7305–INDUS–2012: CCR Landfill (open, double lined)
  - No update this quarter.
  - o Groundwater Assessment
    - No update this quarter.
- 7307-INDUS-2021: Basin Landfill
  - No update this quarter.

# Marshall Steam Station - Catawba County (current coal fired)

- Excavation Plan
  - o December 17, 2021 Annual revised/updated Excavation Plan submitted.
- Stability Features
  - o November 26, 2021 Revised Conceptual Design of Stability Features submitted.
- Annual Site Inspection
  - No update this quarter.
- 1804–INDUS–1983: Dry Ash Landfill (closed, unlined Phase 2 composite cap system)
  - o Phase 1 excavation underway.
  - Groundwater Assessment
    - No update this quarter.
- 1809–INDUS: FGD Landfill (closed, lined)
  - No update this quarter.
  - o Groundwater Assessment
    - No update this quarter.
- 1812–INDUS–2008: Industrial Landfill #1 (open, double–lined)
  - o March 4, 2022 Site visit scheduled to see liner being installed in Cell 5.
  - Leachate basin construction underway.
  - o Continued operation of landfill Phase 1, Cells 1 4.
- MAR-152: Storm Water Reroute Project
  - o Project complete.

# Rogers Energy Complex – Rutherford County (current coal fired)

- Excavation Plan
  - o December 17, 2021 Annual revised/updated Excavation Plan submitted.
- Annual Site Inspection
  - o No update this quarter.
- 8106–INDUS–2009: CCR Landfill (open, lined)
  - No update this quarter.

# Roxboro Steam Electric Plant – Person County (current coal fired)

- Excavation Plan
  - o December 17, 2021 Annual revised/updated Excavation Plan submitted.
- Annual Site Inspection
  - o March 23, 2022 First quarterly (Q1 2022) site visit scheduled.
  - o September 30, 2021 Virtual records review.
  - October 12, 2021 Onsite inspection.
- Stability Feature
  - o December 10, 2021 90% Draft DMM Wall Design Report (stability feature) submitted.
  - December 15, 2021 Virtual meeting with Duke to discuss 90% DMM Wall Design Report.
- 7302–INDUS–2021: Proposed new onsite landfill expansion (double lined, partially on top of excavated ash basin)
  - o September 30, 2021 Virtual pre-construction meeting.

# <u>Sutton Steam Electric Plant – New Hanover County (retired coal-fired plant, converted to combined cycle turbine)</u>

- 6512–INDUS–2016: CCR Landfill (closed, double lined)
  - No update this quarter.

#### **Landfills Not On Duke Energy Facilities**

<u>Halifax County Industrial Landfill – Halifax County</u> Westmoreland Partners, Roanoke Valley Energy Plant (retired coal–fired plant, plant closed)

- 4204–INDUS–1994: Halifax County Coal Ash Landfill (open/inactive, lined)
  - No update this quarter.

# **Duke Energy Facilities Without Landfills**

<u>Buck Steam Station – Rowan County</u> (retired coal–fired plant, converted to combined cycle turbine)

- January 28, 2022 Tax certification site visit.
- Excavation Plan
  - o December 17, 2021 Annual revised/updated Excavation Plan submitted.
- Continued operation of STAR plant.

<u>Cape Fear Steam Electric Plant – Chatham County</u> (retired coal–fired plant, no electricity production)

- Excavation Plan
  - o December 17, 2021 Annual revised/updated Excavation Plan submitted.
- Continued operation of STAR plant.

<u>H.F. Lee Steam Electric Plant – Wayne County</u> (retired coal–fired plant, converted to combined cycle turbine)

- January 6, 2022 Tax certification site visit.
- Excavation Plan
  - o December 17, 2021 Annual revised/updated Excavation Plan submitted.
- Continued operation of STAR plant.

<u>Riverbend Steam Station – Gaston County</u> (retired coal–fired facility, no electricity)

• No update this quarter.

Weatherspoon Steam Electric Plant – Robeson County (retired coal–fired facility, no electricity)

- Excavation Plan
  - o December 17, 2021 Annual revised/updated Excavation Plan submitted.
- Continued excavation of CCR and trucked to concrete factory in South Carolina.

#### **Coal Combustion Product (CCP) Structural Fills**

The Section regulates large structural fills (greater than 8,000 tons per acre or 80,000 tons per project) in accordance with CAMA and small existing structural fills in accordance with 15A NCAC 13B .1713.

Greater Asheville Regional Airport Authority (GARAA), 1117-STRUC-2020, Buncombe County

• No update this quarter.

Brickhaven No. 2, Mine Track "A," 1910–STRUC–2015 – Chatham County

• No update this quarter.

Colon Mine Site – Lee County, 5306–STRUC–2015

• No update this quarter.

Inventory of structural fills greater than 10,000 cy, per Session Law 2014 122: <a href="http://deq.nc.gov/about/divisions/waste-management/solid-waste-section/coal-combustion-byproducts">http://deq.nc.gov/about/divisions/waste-management/solid-waste-section/coal-combustion-byproducts</a>.

#### **Groundwater Assessment and Corrective Action**

Roxboro Steam Station Gypsum Storage Pad (CCB0003)

• No update this quarter.

Belews Creek Steam Station Structural Fill (CCB0070)

• No update this quarter.

# Swift Creek in Nash County (CCB0057)

• No update this quarter.

# Arthur's Creek/Henry Long Property in Northampton County (CCB0064)

• No update this quarter.

# **Historic Ash Management Area**

# <u>6806–INDUS– Eno Power Plant – Historic Coal Ash Storage Area</u>

• No update this quarter.

#### **DIVISION OF ENERGY, MINERAL, AND LAND RESOURCES**

**Duke and other Company facilities with dams, construction development, industrial activities, and mining operations-** The North Carolina Division of Energy, Mineral, and Land Resources regulates industrial coal combustion residual landfills in accordance with CAMA as well as the State Dam Safety Law (NCGS 143-215.23), the Sedimentation Pollution Control Act (NCGS 113A-50), the Mining Act (NCGS 74-46), and the State Stormwater Program under the authority of multiple Session Laws along with their associated Administrative Code.

#### Allen Steam Station

- Dam Safety
  - No update this quarter.
- Erosion and Sediment Control and Construction Storm Water
  - No update this quarter.
- NPDES Storm Water
  - o NCS000546
    - 12/2021 Draft permit submitted for public notice but was not actually noticed until 1/26/22 due to payment issues with the newspaper.

# **Asheville Steam Electric Plant**

- Dam Safety
  - o BUNCO-088 (ASHEVILLE LAKE JULIAN DAM)
    - 5/25/21 Received submittal for the repair of the existing dam in order to improve the north abutment ditch to contain surface flows for BUNCO-088 Scope 9.
      - 1/3/22 COFA to Repair issued
  - o BUNCO-097 (ASHEVILLE 1964 ASH BASIN DAM)
    - 9/2/21 Received submittal for the decommissioning of the dam Scope 8
       Addendum 1.
      - 1/7/22 COFA to Breach issued.
- Erosion and Sediment Control and Construction Storm Water
  - No update this quarter.
- NPDES Storm Water
  - o NCS000575
    - No update this quarter.

#### **Belews Creek Steam Station**

- Dam Safety
  - o STOKE-121 (BELEWS CREEK RETENTION BASIN DAM)
    - No update this quarter.
  - o ROCKI-236 (BELEWS LAKE DAM)
    - 2/25/22 COFA for Repair issued.
- Erosion and Sediment Control and Construction Storm Water

- No update this quarter.
- NPDES Storm Water
  - o NCS000573
    - 1/31/22 Modification expired.

# **Buck Combined Cycle Station**

- Dam Safety
  - o ROWAN-079 (BUCK RETENTION BASIN DAM)
    - 2/22/22 Additional information for jurisdictional determination revision received.
- Erosion and Sediment Control and Construction Storm Water
  - No update this quarter.
- NPDES Storm Water
  - o NCG130090
    - 3/18/19 COC issued and expires 5/31/23.
  - o NCS000554
    - 7/20/18 Permit issued. Effective 8/1/18. Expires 7/31/23.
  - o NCS000556
    - Withdrawn. Revised application received and assigned new permit number (NCS000578).
  - o NCS000578
    - 7/20/18 Permit issued. Effective 8/1/18. Expires 7/31/23.

# **Cape Fear Steam Electric Plant**

- Dam Safety
  - o CHATH-022 (Buckhorn Lake Dam)
    - 11/11/21 Received as-built submittal for Lowering crest of the existing earthen embankment to improve dam & abutment stability for CHATH-022 Scope 3.
      - 02/22/22 Additional information for As Built received.
  - o CHATH-075 (CAPE FEAR 1956 ASH BASIN DAM)
    - No update this quarter.
  - o CHATH-076 (CAPE FEAR 1963 ASH BASIN DAM)
    - No update this quarter.
  - o CHATH-077 (CAPE FEAR 1970 ASH BASIN DAM)
    - No update this quarter.
- Erosion and Sediment Control and Construction Storm Water
  - o CHATH-2021-005 (Cape Fear 1956 Basin Haul Road Widening)
    - No update this quarter.
  - o CHATH-2020-005 (Cape Fear 1956 Ash Basin New Aux Spillway Overflow)
    - No update this quarter.
  - o CHATH-2019-009 (Cape Fear CCP 1985 Basin Haul Road Design Plan)
    - No update this quarter.

- o CHATH-2019-005 (Beneficial Ash Storage Facility)
  - No update this quarter.
- NPDES Storm Water
  - o NCS000574
    - No update this quarter.

# James E. Rogers Energy Complex (Formerly Cliffside Steam Station)

- Dam Safety
  - No update this quarter.
- Erosion and Sediment Control and Construction Storm Water
  - No update this quarter.
- NPDES Storm Water
  - o NCS000571
    - 2/23/22 Draft permit submitted for public notice (awaiting affidavit)

#### **Dan River Combined Cycle Station**

- Dam Safety
  - o ROCKI-239 (LOW HEAD DIVERSION DAM).
    - No update this quarter.
- Erosion and Sediment Control and Construction Storm Water
  - o ROCKI-2016-003
    - No update this quarter.
  - o ROCKI-2018-012
    - No update this quarter.
- NPDES Storm Water
  - o NCS000572:
    - No update this quarter.

#### **H.F. Lee Energy Complex**

- Dam Safety
  - o WAYNE-009 (HF LEE COOLING LAKE DAM)
    - 2/9/22 Received submittal for Vegetation Removal and Modifications to the Cooling Pond Dam to remedy a seep located on the southwestern end of the dam for WAYNE-009 Scope 8.
      - 2/18/22 Revision Request issued.
  - o WAYNE-022 (HF LEE ACTIVE ASH BASIN DAM)
    - No update this quarter.
  - o WAYNE-032 (HF LEE INACTIVE ASH BASIN #2 DAM)
    - 8/13/21 Received submittal for the installation of steel sheet pile walls around the interior crest of the basin for WAYNE-032 Scope 7.
      - 1/6/22 As-Built Inspection performed

- Erosion and Sediment Control and Construction Storm Water
  - o WAYNE-2022-003
    - 1/19/22 Duke Energy Lee Substation Security Upgrade revised.
- NPDES Storm Water
  - o NCG130094
    - No update this quarter.
  - o NCG200529
    - 5/11/2020 COC issued and expires 5/31/24.

# **Marshall Steam Station**

- Dam Safety
  - o No update this quarter.
- Erosion and Sediment Control and Construction Storm Water
  - No update this quarter.
- NPDES Storm Water
  - o NCS000548
    - 3/29/21 Permit renewal issued. Effective 4/1/21. Expires 3/31/26.
  - o NCS000579
    - No update this quarter.

# **Mayo Steam Electric Plant**

- Dam Safety
  - No update this quarter.
- Erosion and Sediment Control and Construction Storm Water
  - o PERSO-2013-001
    - 2/3/22 Mayo Monofill Operational Area/ Revised Plan.
- NPDES Storm Water
  - o NCS000580
    - 1/4/22 Permit renewal application received.
  - o NCG120101
    - 7/1/21 COC issued and expires 6/30/26.

# **Riverbend Steam Station**

- Dam Safety
  - No update this quarter.
- Erosion and Sediment Control and Construction Storm Water
  - No update this quarter.
- NPDES Storm Water
  - o NCS000549
    - No update this quarter.

#### **Roxboro Steam Electric Plant**

- Dam Safety
  - o PERSO-033 (EAST ASH BASIN DAM)
    - 1/25/22 Received request to change the EOR for Phases 4 & 5 Land Fill.
      - 2/23/22 EOR change approval issued.
- Erosion and Sediment Control and Construction Storm Water
  - o No update this quarter.
- NPDES Storm Water
  - o NCS000581:
    - No update this quarter.

# L. V. Sutton Energy Complex

- Dam Safety
  - No update this quarter.
- Erosion and Sediment Control and Construction Storm Water
  - No update this quarter.
- NPDES Storm Water
  - No update this quarter.

# Brickhaven No 2. Tract "A"

- Dam Safety
  - No update this quarter.
- Erosion and Sediment Control
  - No update this quarter.
- Mining
  - No update this quarter.
- NPDES Storm Water
  - o NCG020354
    - 7/1/21 COC issued and expires 6/30/25 (facility name in BIMS matches this facility, but permit issued to Green Meadow LLC, not Duke Energy).

#### **Colon Mine Permit 53-05**

- Dam Safety
  - No update this quarter.
- Erosion and Sediment Control
  - o PERSO-2022-007 (Capital Power Roxboro Decommissioning)
    - 1/25/22 Plan received.
      - 2/25/22 COFA
  - PERSO-2022-006 (Roxboro Sluice Line Corridor Erosion & Sediment Control Plan)
    - 12/8/21 Plan received.
      - 2/25/22 COFA

- o PERSO-2022-009 (Roxboro Borrow Area 8)
  - 2/23/22 Plan received and currently under review.
- Mining
  - O 7/26/21 This permit has been modified to remove the use of Coal Combustion Byproducts (CCBs) structural fill as part of the reclamation plan and to essentially restore the permit to reflect the mining and reclamation plans as contained in the December 12, 2014 permit renewal.
- NPDES Storm Water
  - o NCG020854:
    - 7/1/21 COC issued and expires 6/30/25 (facility name in BIMS matches this facility, but permit issued to Green Meadow LLC, not Duke Energy).

#### W. H. Weatherspoon Power Plant

- Dam Safety
  - o ROBES-009 (WEATHERSPOON 1979 ASH BASIN DAM)
    - No update this quarter.
- Erosion and Sediment Control and Construction Storm Water
  - o No update this quarter.
- NPDES Storm Water
  - o No update this quarter.

# **Dam Status**

Plant Name	NAME	NC STATE- ID	DAM STATUS
Allen Steam Station	Allen Active Ash Basin Dam	GASTO-061	ACTIVE
Allen Steam Station	Allen Inactive Ash Basin Dam	GASTO-016	INACTIVE
Allen Steam Station	Allen Retention Basin Dam	GASTO-324	ACTIVE
Asheville Steam Electric Plant	Lake Julian Dam	BUNCO-088	ACTIVE
Asheville Steam Electric Plant	Asheville 1982 Ash Pond Dam	BUNCO-089	DECOMISSIONED
Asheville Steam Electric Plant	Asheville 1964 Ash Pond Dam	BUNCO-097	ON-GOING DECOMISSION
Asheville Steam Electric Plant	Asheville Lined Retention Basin Dam	BUNCO-101	ON-GOING DECOMISSION
Asheville Steam Electric Plant	North Stormwater Pond Dam	BUNCO-504	ON-GOING CONSTRUCTION
Asheville Steam Electric Plant	South Stormwater Pond Dam	BUNCO-505	ON-GOING CONSTRUCTION
Belews Creek Steam Station	Belews Creek Active Ash Basin Dam	STOKE-116	ACTIVE

Belews Creek Steam Station	Belews Lake Dam	ROCKI-236	ACTIVE
Belews Creek Steam Station	Belews Lake Saddle Dike #1 Dam	STOKE-117	ACTIVE
Belews Creek Steam Station		STOKE-118	ACTIVE
Belews Creek Steam Station	Belews Lake Saddle Dike #3 Dam	STOKE-119	ACTIVE
Belews Creek Steam Station	Belews Lake Saddle Dike #4 Dam	ROCKI-235	ACTIVE
Belews Creek Steam Station	Belews Creek Chemical Pond Dam	STOKE-115	ACTIVE
Belews Creek Steam Station	Dam		ACTIVE
Belews Creek Steam Station	Belews Creek Holding Basin Dam		ACTIVE
Belews Creek Steam Station	Belews Creek South Coal Pile Dam		ACTIVE
Belews Creek Steam Station	Dam		ACTIVE
Cycle Station	Buck Main Ash Basin Dam	ROWAN-047	ACTIVE
Buck Combined Cycle Station		ROWAN-068	ACTIVE
Cycle Station	Buck Basin #1 to Basin #2 Dam		ACTIVE
Cycle Station	Buck Basin #2 to Basin #3 Dam		ACTIVE
Cycle Station	Buck Ash Basin Divider Dam	ROWAN-071	ACTIVE
Cycle Station	Buck Fuel Containment Dam	ROWAN-072	DECOMISSIONED
Buck Combined Cycle Station			ACTIVE
Buck Combined Cycle Station	-	ROWAN-075	ACTIVE
Buck Combined Cycle Station	Buck Retention Basin Dam	ROWAN-079	ACTIVE
Cape Fear Steam Electric Plant	Buckhorn Lake Dam	CHATH-022	ACTIVE
Cape Fear Steam Electric Plant	Cape Fear 1956 Ash Pond Dam		INACTIVE
Cape Fear Steam Electric Plant	Cape Fear 1963 Ash Pond Dam		INACTIVE
Cape Fear Steam Electric Plant	Cape Fear 1970 Ash Pond Dam	CHATH-077	INACTIVE

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Cape Fear Steam Electric Plant	Cape Fear 1978 Ash Pond Dam	CHATH-078	INACTIVE
Cape Fear Steam Electric Plant	Cape Fear 1985 Ash Pond Dam	CHATH-079	ACTIVE
Cape Fear Steam Electric Plant		CHATH-080	DECOMISSIONED
James E. Rogers Energy Complex (Cliffside Steam Station)	Cliffside River Dam	CLEVE-053	ACTIVE
James E. Rogers Energy Complex (Cliffside Steam Station)		RUTHE-070	INACTIVE
James E. Rogers Energy Complex (Cliffside Steam Station)		RUTHE-072	INACTIVE
James E. Rogers Energy Complex (Cliffside Steam Station)		CLEVE-050	INACTIVE
James E. Rogers Energy Complex (Cliffside Steam Station)		CLEVE-049	INACTIVE
James E. Rogers Energy Complex (Cliffside Steam Station)	(Formerly Inactive Ash Basin	CLEVE-047	ACTIVE
James E. Rogers Energy Complex (Cliffside Steam Station)	Cliffside Active Ash Basin Internal Dam	CLEVE-054	INACTIVE
Dan River Combined Cycle Station	Dan River Active Primary Ash Basin Dam	ROCKI-237	DECOMISSIONED
Dan River Combined Cycle Station	Dan River Active Secondary Ash Basin Dam	ROCKI-238	DECOMISSIONED
Dan River Combined Cycle Station	Dan River Service Water Settling Pond Dam	ROCKI-241	ACTIVE
Dan River Combined Cycle Station	Dan River Low Head Diversion Dam	ROCKI-239	ACTIVE
H.F. Lee Energy Complex	H.F. Lee Cooling Lake Dam	WAYNE-009	ACTIVE
H.F. Lee Energy Complex	H.F. Lee Active Ash Basin Dam	WAYNE-022	INACTIVE

H.F. Lee Energy Complex	H.F. Lee Inactive Ash Basin 1 Dam	WAYNE-031	INACTIVE
H.F. Lee Energy Complex	H.F. Lee Inactive Ash Basin 2 Dam	WAYNE-032	INACTIVE
H.F. Lee Energy Complex	H.F. Lee Inactive Ash Basin 3 Dam	WAYNE-033	INACTIVE
H.F. Lee Energy Complex	H.F. Lee Permanent Stormwater Pond Dam	WAYNE-036	ACTIVE
H.F. Lee Energy Complex	H.F. Lee Triangular Pond Dam	WAYNE-034	DECOMISSIONED
Marshall Steam Station	Marshall Active Ash Basin Dam	CATAW-054	INACTIVE
Marshall Steam Station	Marshall Retention Basin Dam	CATAW-076	ACTIVE
Marshall Steam Station	Marshall Holding Basin Dam	CATAW-075	ACTIVE
Marshall Steam Station	Marshall West Temporary SWP	CATAW-077	ACTIVE
Marshall Steam Station	Marshall East Temporary SWP	CATAW-078	DECOMISSIONED
Mayo Steam Electric Plant	Mayo Lake Dam	PERSO-034	ACTIVE
Mayo Steam Electric Plant	Mayo Active Ash Pond Dam	PERSO-035	INACTIVE
Mayo Steam Electric Plant	Mayo FGD Settling Pond Dam	PERSO-036	DECOMISSIONED
Mayo Steam Electric Plant	Mayo FGD Flush Pond Dam	PERSO-037	DECOMISSIONED
Mayo Steam Electric Plant	Mayo Coal Pile Dam	PERSO-046	ACTIVE
Mayo Steam Electric Plant	Mayo FGD Settling Basin Dam	PERSO-049	ACTIVE
Mayo Steam Electric Plant	Mayo Retention Basin Dam	PERSO-050	ACTIVE
Riverbend Steam Station	Riverbend Active Primary Ash Basin Dam	GASTO-097	DECOMISSIONED
Riverbend Steam Station	Riverbend Active Secondary Ash Basin Dam	GASTO-098	DECOMISSIONED
Riverbend Steam Station	Riverbend Intermediate Dam	GASTO-099	DECOMISSIONED
Riverbend Steam Station	Riverbend Fuel Containment Dam	GASTO-105	DECOMISSIONED
Roxboro Steam Electric Plant	Lake Hyco Dam	PERSO-002	ACTIVE
Roxboro Steam Electric Plant	Roxboro Afterbay Dam Reservoir	PERSO-013	ACTIVE

Roxboro	Steam	Roxboro West Ash Basin Dam	PERSO-038	ACTIVE
Electric Plant				
Roxboro	Steam	Roxboro West Ash Basin	PERSO-039	ACTIVE
Electric Plant		Rock Filter Dam		
Roxboro	Steam	Roxboro West FGD Settling	PERSO-040	DECOMISSIONED
Electric Plant		Pond Dam		
	Steam	Roxboro East FGD Settling	PERSO-041	DECOMISSIONED
Electric Plant		Pond Dam		
	Steam	Roxboro FGD Forward Flush	PERSO-042	DECOMISSIONED
Electric Plant		Pond Dam		
Roxboro	Steam	Roxboro East Ash Basin Dam	PERSO-033	ACTIVE
Electric Plant				
	Steam	Roxboro Intake Pond Dam	PERSO-043	ACTIVE
Electric Plant				
	Steam	Roxboro Retention Basin Dam	PERSO-048	ACTIVE
Electric Plant				
	Steam	Roxboro Holding Basin Dam	PERSO-047	ACTIVE
Electric Plant				
L. V. Sutton E	Energy	Sutton 1984 Ash Basin Dam	NEWHA-005	DECOMISSIONED
Complex				
L. V. Sutton E	Energy	Sutton 1971 (1983) Ash Basin	NEWHA-004	DECOMISSIONED
Complex		Dam		
L. V. Sutton E	Energy	Sutton 1972 Cooling Lake	NEWHA-003	ACTIVE
Complex		Dam		
W. H. Weather	rspoon	Weatherspoon Cooling Lake	ROBES-004	ACTIVE
Power Plant		Dam		
W. H. Weather	rspoon	Weatherspoon 1979 Ash Basin	ROBES-009	ACTIVE
Power Plant		Dam		