# Department of Environmental Quality Quarterly Report April 1, 2020

## **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
- 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
- EMC Environmental Management Commission
- FGD Flue-gas Desulfurization
- NOD Notice of Deficiency
- NOI Notice of Intent
- NOV Notice of Violation
- NPDES National Pollution Discharge Elimination System
- PTC Permit to Construct
- PTO Permit to Operate
- SOC Special Order by Consent

#### **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
  - 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 facilities 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
  - 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 must be submitted no later than December 31, 2019.

## Litigation of Closure Methodology for Low Risk Facilities

The following is a timeline summary of recent events related to litigation of the closure methodology for the low risk impoundments:

- April 1, 2019 DEQ directed Duke to fully excavate all the ash basins.
- April 26, 2019 Duke Energy filed Petitions for Contested Case Hearing in the Office of Administrative Hearings challenging DEQ's decision for closure method.
- December 31, 2019 Duke Energy, DEQ, and several community environmental groups entered into a Settlement Agreement ending the appeal litigation.
- January 31, 2020 A Consent Order incorporating the terms of the Settlement Agreement was filed with Wake County Superior Court.
  - The Consent Order mandated that all nine impoundments at the low risk facilities be excavated and the CCR be placed in on-site landfills.

#### 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.
- Updated corrective action plans have yet to be submitted for several facilities. Once corrective action plans are approved, then a final cost estimate can be determined.

#### **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

- Assessment and Corrective Action Status
  - December 31, 2019 DEQ approves Duke Energy deferring the 2019 Annual Interim Monitoring Reports (normally due in April 2020) until the following year due to the submittal of either updated CAPs or CSAs for each facility.
  - O December 31, 2019 DEQ approves data cut-off dates for Duke Energy upcoming submittal of updated CAPs or CSAs for each facility.

## Allen Steam Station

- Assessment and Corrective Action Status
  - February 10, 2020 DEQ approves Duke Energy starting Pilot Tests for remedial actions.
  - February 10, 2020 DEQ provides comments on the Surface Water Evaluation Report submitted by Duke Energy.
  - o December 31, 2019 Duke Energy submits updated CAP.
  - October 17, 2019 DEQ establishes updated BTVs for the facility.
  - May 9, 2019 DEQ revised previous correspondence and reestablished dates for Duke Energy to submit the following with regards to CSAs and CAPs:
    - March 31, 2020 Updated CAP for the impoundments and other primary and secondary sources (coal pile, retired ash basin and landfill, structural fills, and dry ash storage areas).
    - March 31, 2020 CSA for other primary and secondary sources (gypsum pad).

#### Closure Status

- o February 27, 2020 DEQ holds public hearing for closure plan.
- O December 31, 2019 Duke Energy submitted a closure plan for the impoundments.
- o May 9, 2019 DEQ reestablished Closure Plans to be due December 31, 2019.
- O November 13, 2018 DEQ deemed that this facility is low risk based on criteria under G.S. 130A-309.213(d)(1). Therefore, the impoundments are required to be closed no later than December 31, 2029. A proposed closure plan must be submitted no later than December 31, 2019.
- NPDES permit NC0004979
  - o November 13, 2019 Major modification application received.
  - o August 1, 2018 Permit became effective.
- SOC S17-009
  - o April 12, 2018 SOC was signed by the EMC.

#### Asheville Steam Electric Plant

- Assessment and Corrective Action Status
  - October 30, 2019 DEQ approves Duke Energy's request to abandon several monitoring wells.

- April 5, 2019 DEQ reestablished dates for Duke Energy to submit the following with regards to CSAs and CAPs:
  - June 1, 2020 Updated CSA for impoundments and other primary and secondary sources (coal pile).
  - March 1, 2021 Updated CAP for impoundments and other primary and secondary sources.

#### Closure Status

- o Excavation of the 1964 Basin is in progress.
- o Excavation of the 1982 Basin is complete.
- NPDES permit NC0000396
  - o May 24, 2019 Major modification was issued and became effective July 1, 2019.
  - o December 1, 2018 Permit became effective.
- SOC S17-010
  - o October 10, 2018 SOC was signed by the EMC.

## Belews Creek Steam Station

- Assessment and Corrective Action Status
  - o February 10, 2020 DEQ approves Duke Energy starting Pilot Tests for remedial actions.
  - February 10, 2020 DEQ provides comments on the Surface Water Evaluation Report submitted by Duke Energy.
  - o December 31, 2019 Duke Energy submits updated CAP.
  - October 17, 2019 DEQ establishes updated BTVs for the facility.
  - May 9, 2019 DEQ revised previous correspondence and reestablished dates for Duke Energy to submit the following with regards to CSAs and CAPs:
    - March 31, 2020 Updated CAP for impoundments and other primary and secondary sources (Pine Hall Road landfill).
    - March 31, 2020 CSA for other primary and secondary sources (structural fill and coal pile).

#### • Closure Status

- o February 18, 2020 DEQ holds public hearing for closure plan.
- o December 31, 2019 Duke Energy submits closure plan.
- May 9, 2019 DEQ revised previous correspondence and reestablished Closure Plan to be due December 31, 2019.
- O November 13, 2018 DEQ deemed that this facility is low risk based on criteria under G.S. 130A-309.213(d)(1). Therefore, the impoundments are required to be closed no later than December 31, 2029. A proposed closure plan must be submitted no later than December 31, 2019.
- NPDES permit NC0024406
  - o March 25, 2019 Permit became effective.
- SOC S18-004
  - o July 12, 2018 SOC was signed by the EMC.
- SOC S18-009

o March 21, 2019 – SOC was signed by the Division Director.

# **Buck Combined Cycle Station**

- Assessment and Corrective Action Status
  - April 5, 2019 DEQ reestablished dates for Duke Energy to submit the following with regards to CSAs and CAPs:
    - October 1, 2020 Updated CSA for impoundments and other primary and secondary sources (coal pile).
    - July 1, 2021 Updated CAP for impoundments and other primary and secondary sources.

#### • Closure Status

- O 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.
- o February 24, 2020 DEQ holds public hearing for closure plan.
- o December 31, 2019 Duke Energy submits closure plan.
- November 13, 2018 DEQ deemed that this facility is low risk based on criteria under G.S. 130A-309.213(d)(1). However, since Duke Energy selected this site for beneficial reuse, this site does not have to close until December 31, 2029.
- NPDES Permit NC0004774
  - o August 21, 2019 Major modification application received.
  - o November 1, 2018 Permit became effective.
- SOC S18-004
  - o July 12, 2018 SOC was signed by the EMC.

#### Cape Fear Steam Electric Plant

- Assessment and Corrective Action Status
  - April 5, 2019 DEQ reestablished dates for Duke Energy to submit the following with regards to CSAs and CAPs:
    - September 1, 2020 Updated CSA for impoundments and other primary and secondary sources (former coal pile storage areas).
    - July 1, 2021 Updated CAP for impoundments and other primary and secondary sources.

#### Closure Status

- Per G.S. 130A-309.216, Duke Energy was required to identify, at a minimum, three sites for beneficial reuse. The Cape Fear Steam Electric Plant was selected for beneficial reuse. G.S. 130A-309.216(c) states that sites selected for beneficiation projects must close by December 31, 2029.
- o February 12, 2020 DEQ holds public hearing for closure plan.
- o December 31, 2019 Duke Energy submits closure plan.
- NPDES permit NC0003433

o December 21, 2018 – Major modification was issued and became effective February 1, 2019.

# • SOC number unassigned

 No longer associated with SOC S18-006. Negotiations are underway for a separate SOC.

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

- Assessment and Corrective Action Status
  - February 10, 2020 DEQ approves Duke Energy starting Pilot Tests for remedial actions.
  - February 10, 2020 DEQ provides comments on the Surface Water Evaluation Report submitted by Duke Energy.
  - o December 31, 2019 Duke Energy submits updated CAP.
  - o December 20, 2019 DEQ approves Duke Energy request to add monitoring wells to Coal Pile Assessment Plan.
  - October 17, 2019 DEQ establishes updated BTVs for the facility.
  - May 9, 2019 DEQ revised previous correspondence and reestablished dates for Duke Energy to submit the following with regards to CSAs and CAPs:
    - March 31, 2020 Updated CAP for impoundments and other primary and secondary sources (ash storage areas, new source area east of Unit 6 and west of Suck Creek).
    - March 31, 2020 CSA for other primary and secondary sources (raw coal piles north of Unit 6, switchyard ash disposal area, and gypsum pile).

#### Closure Status

- o February 25, 2020 DEQ holds public hearing for closure plan.
- o December 31, 2019 Duke Energy submits closure plan.
- May 9, 2019 DEQ revised previous correspondence and reestablished Closure Plan to be due December 31, 2019.
- November 13, 2018 DEQ deemed that this facility is low risk based on criteria under G.S. 130A-309.213(d)(1). Therefore, the impoundments are required to be closed no later than December 31, 2029. A proposed closure plan must be submitted no later than December 31, 2019.
- o Inactive Units 1-4 are completely excavated. On August 10, 2018, DEQ approved the visual verification of CCR removal.
- NPDES permit NC0005088
  - o September 1, 2018 Permit became effective.
- SOC S17-009
  - o April 12, 2018 SOC was signed by the EMC.

## Dan River Combined Cycle Station

- Assessment and Corrective Action Status
  - February 10, 2020 DEQ provides comments on the Surface Water Evaluation Report submitted by Duke Energy.

- April 5, 2019 DEQ reestablished dates for Duke Energy to submit the following with regards to CSAs and CAPs:
  - July 1, 2020 Updated CAP for impoundments and other primary and secondary sources (former coal yard).

#### Closure Status

- September 5, 2019 Duke Energy submits excavation report. DEQ to respond.
- o July 31, 2019 DEQ approved the visual verification of CCR removal.
- o Excavation is complete.
- NPDES permit NC0003468
  - o February 1, 2019 Permit became effective.

## H. F. Lee Energy Complex

- Assessment and Corrective Action Status
  - February 10, 2020 DEQ provides comments on the Surface Water Evaluation Report submitted by Duke Energy.
  - O September 11, 2019 DEQ approves the coal pile assessment work plan.
  - O August 22, 2019 Duke Energy submits coal pile assessment work plan.
  - April 5, 2019 DEQ reestablished dates for Duke Energy to submit the following with regards to CSAs and CAPs:
    - October 1, 2020 Updated CSA for impoundments and other primary and secondary sources (coal staging area, coal pile area, and lay of land area).
    - July 1, 2021 Updated CAP for impoundments and other primary and secondary sources.

#### • Closure Status

- o February 11, 2020 DEQ holds public hearing for closure plan.
- Per G.S. 130A-309.216, Duke Energy was required to identify, at a minimum, three sites for beneficial reuse. The H. F. Lee Energy Complex was selected for beneficial reuse. G.S. 130A-309.216(c) states that sites selected for beneficiation projects must close by December 31, 2029.
- o December 31, 2019 Duke Energy submits closure plan.
- NPDES permit NC0003417
  - o November 12, 2019 Major modification application was received.
  - o July 1, 2019 Permit became effective.
- SOC S18-006
  - o January 10, 2019 SOC was signed by the EMC.

## Marshall Steam Station

- Assessment and Corrective Action Status
  - o February 10, 2020 DEQ approves Duke Energy starting Pilot Tests for remedial actions.
  - o February 10, 2020 DEQ provides comments on the Surface Water Evaluation Report submitted by Duke Energy.
  - o December 31, 2019 Duke Energy submits updated CAP.

- October 17, 2019 DEQ establishes updated BTVs for the facility.
- October 4, 2019 DEQ approves the additional area assessment work plan and data gap work plan.
- O September 18, 2019 Duke Energy submits data gap work plan.
- O September 17, 2019 Duke Energy submits additional area assessment work plan.
- May 9, 2019 DEQ revised previous correspondence and reestablished dates for Duke Energy to submit the following with regards to CSAs and CAPs:
  - March 31, 2020 Updated CAP for impoundments and other primary and secondary sources (coal pile and gypsum pile).

## Closure Status

- o February 26, 2020 DEQ holds public hearing for closure plan.
- o December 31, 2019 Duke Energy submits closure plan.
- December 13, 2019 DEQ approves the visual verification for the West Finger Pond.
- August 23, 2019 Received CCR visual verification report for Marshall West Finger Pond. DEQ to respond.
- May 9, 2019 DEQ revised previous correspondence and reestablishes Closure Plan to be due December 31, 2019.
- O November 13, 2018 DEQ deemed that this facility is low risk based on criteria under G.S. 130A-309.213(d)(1). Therefore, the impoundments are required to be closed no later than December 31, 2029. A proposed closure plan must be submitted no later than December 31, 2019.

# • NPDES permit NC0004987

o May 1, 2018 – Permit became effective.

#### • SOC S17-009

o April 12, 2018 – SOC was signed by the EMC.

## Mayo Steam Electric Plant

- Assessment and Corrective Action Status
  - o February 10, 2020 DEQ approves Duke Energy starting Pilot Tests for remedial actions.
  - February 10, 2020 DEQ provides comments on the Surface Water Evaluation Report submitted by Duke Energy.
  - o December 31, 2019 Duke Energy submits updated CAP.
  - December 10, 2019 DEQ approves additional area assessment work plan for the Coal Pile.
  - November 26, 2019 DEQ approves abandoning monitoring wells affected by sloughing and requests assessment of feasibility for replacement of these wells. Duke Energy to respond.
  - November 12, 2019 DEQ approves Duke Energy's request to submit the results of the coal pile assessment in a separate document other than the CAP and CSA due on March 31, 2020. The proposed due date for the assessment will be provided by Duke Energy.
  - October 17, 2019 DEQ establishes updated BTVs for the facility.

- October 10, 2019 Duke Energy submits request to provide the results of the coal pile assessment in a separate document other than the CAP and CSA due on March 31, 2020.
- October 3, 2019 Duke Energy submits request to abandon several wells in the area of sloughing within the basin. On November 13, 2019, DEQ performed a site visit to evaluate the request.
- September 24, 2019 Duke Energy submits an additional area assessment work plan for the coal pile. On November 13, 2019, DEQ performed a site visit to evaluate the work plan. DEQ to respond.
- May 9, 2019 DEQ revised previous correspondence and reestablished dates for Duke Energy to submit the following with regards to CSAs and CAPs:
  - March 31, 2020 Updated CAP for impoundments and other primary and secondary sources (active coal storage pile areas).
  - March 31, 2020 CSA for other primary and secondary sources (gypsum pad and low-volume wastewater pond).

#### • Closure Status

- o February 10, 2020 DEQ holds public hearing for closure plan.
- o December 31, 2019 Duke Energy submits closure plan.
- May 9, 2019 DEQ revised previous correspondence and reestablished Closure Plan to be due December 31, 2019.
- O November 13, 2018 DEQ deemed that this facility is low risk based on criteria under G.S. 130A-309.213(d)(1). Therefore, the impoundments are required to be closed no later than December 31, 2029. A proposed closure plan must be submitted no later than December 31, 2019.
- NPDES permit NC0038377
  - o August 1, 2018 Permit became effective.
- SOC S18-005
  - o August 15, 2018 SOC was signed by the EMC.

#### Riverbend Steam Station

- Assessment and Corrective Action Status
  - February 10, 2020 DEQ provides comments on the Surface Water Evaluation Report submitted by Duke Energy.
  - July 25, 2019 DWR submits comments to Duke Energy regarding their CCR Visual Verification Report for impoundment.
  - o April 5, 2019 DEQ reestablishes dates for Duke Energy to submit the following with regards to CSAs and CAPs:
    - May 1, 2020 Updated CAP for impoundments and other primary and secondary sources (coal yard).

#### • Closure Status

- o December 6, 2019 DEQ sends Closure Certification letter for the basin.
- October 9, 2019 Duke Energy submits request for closure certification of the Basin. DEQ to respond.
- o Excavation is complete.

- NPDES permit NC0004961
  - o August 27, 2019 Renewal application received.
  - O December 1, 2016 Permit became effective.
- SOC S16-005
  - o November 10, 2016 SOC was signed by the Division Director.

#### Roxboro Steam Electric Plant

- Assessment and Corrective Action Status
  - February 10, 2020 DEQ approves Duke Energy starting Pilot Tests for remedial actions.
  - February 10, 2020 DEQ provides comments on the Surface Water Evaluation Report submitted by Duke Energy.
  - o December 31, 2019 Duke Energy submits updated CAP.
  - October 17, 2019 DEQ establishes updated BTVs for the facility.
  - May 9, 2019 DEQ revises previous correspondence and reestablishes dates for Duke Energy to submit the following with regards to CSAs and CAPs:
    - March 31, 2020 Updated CAP for impoundments and other primary and secondary sources (east and west ash basins extensions and discharge canals).
    - March 31, 2020 CSA for other primary and secondary sources (coal storage area).

#### • Closure Status

- o February 19, 2020 DEQ holds public hearing for closure plan.
- o December 31, 2019 Duke Energy submits closure plan.
- May 9, 2019 DEQ revised previous correspondence and reestablished Closure Plan to be due December 31, 2019.
- O November 13, 2018 DEQ deemed that this facility is low risk based on criteria under G.S. 130A-309.213(d)(1). Therefore, the impoundments are required to be closed no later than December 31, 2029. A proposed closure plan must be submitted no later than December 31, 2019.
- NPDES permit NC0003425
  - o Currently in draft and waiting for submission to be re-public noticed.
- SOC S18-005
  - o August 15, 2018 SOC was signed by the EMC.

## L. V. Sutton Energy Complex

- Assessment and Corrective Action Status
  - o May 20, 2019 Received Interim Action Effectiveness Monitoring Report
  - April 5, 2019 DEQ reestablished dates for Duke Energy to submit the following with regards to CSAs and CAPs:
    - May 1, 2020 Updated CAP for impoundments and other primary and secondary sources (former ash disposal area, former process area, and former coal stockpile area).

#### • Closure Status

- o December 13, 2019 DEQ sends Closure Certification letter for the 1984 basin.
- August 28, 2019 Duke Energy submits request for closure certification for the 1971 Basin. DEQ to respond.
- August 27, 2019 Duke Energy submits CCR visual verification report for the 1984 Basin. DEQ to respond.
- o Excavation of the 1971 Basin is complete.
- o Excavation of the 1984 Basin is complete.
- NPDES permit NC0001422
  - October 1, 2017 Permit became effective.

## W. H. Weatherspoon Power Plant

- Assessment and Corrective Action Status
  - April 5, 2019 DEQ reestablished dates for Duke Energy to submit the following with regards to CSAs and CAPs:
    - Updated CSA for impoundments and other primary and secondary sources (coal storage area and cooling pond) – June 1, 2020
    - March 1, 2021 Updated CAP for impoundments and other primary and secondary sources.

#### Closure Status

- o February 13, 2020 DEQ holds public hearing for closure plan.
- o Per G.S. 130A-309.216, Duke Energy was required to identify, at a minimum, three sites for beneficial reuse. The W. H. Weatherspoon Power Plant was selected for beneficial reuse. G.S. 130A-309.216(c) states that sites selected for beneficiation projects must close by December 31, 2029.
- o December 31, 2019 Duke Energy submits closure plan.
- NPDES permit NC0005363
  - o November 1, 2018 Permit became effective.
- SOC number unassigned
  - No longer associated with SOC S18-006. Negotiations are underway for a separate SOC.

## **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

#### <u>Allen Steam Station – Gaston County (current coal fired)</u>

- **3612-INDUS-2008**: Retired Ash Basin Landfill (open, double-lined, landfill constructed on top of retired ash basin)
  - o Permit renewal received by the Division on June 10, 2019.
  - o Inspected January 23, 2019.
- Duke submitted Final Closure Plan December 31, 2020.
  - o All impoundment ash to be excavated and placed in onsite lined landfill.

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

- 8503-INDUS-1984: Pine Hall Road Landfill (closed, unlined composite cap system)
  - O Currently assessing the limits of the unlined/earthen capped area of the landfill (flat area), for extent and stability.
  - o Inspected March 19, 2019.
  - o Groundwater Assessment
    - No updates at this time March 1, 2020
- 8504-INDUS-2007: Craig Road Landfill (open, lined)
  - o Division approval of storm water drainage modifications on May 17, 2019.
  - o Storm water drainage modifications received by the Division on May 2, 2019.
  - o Inspected March 19, 2019.
  - o Groundwater Assessment
    - No updates at this time March 1, 2020
- 8505-INDUS-2008: Flue Gas Desulfurization (FGD) Landfill (open, lined)
  - o Inspected March 19, 2019.
  - o Division approval of access road modifications on September 25, 2019.
  - o Division approval of leachate line modifications on October 29, 2019.
  - Groundwater Assessment
    - No updates at this time March 1, 2020
- Duke submitted Final Closure Plan December 31, 2020.
  - o All impoundment ash to be excavated and placed in onsite lined landfill

<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 Inspected October 24, 2019.
  - Coal ash disposal complete, landfill has been covered with intermediate cover material, final closure underway.

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

- 7305-INDUS-2012: CCR Landfill (open, double lined)
  - o Inspected September 25, 2019.
  - o Groundwater Assessment
    - No updates at this time March 1, 2020

- o Third Party Review submitted in response to NOV October 16, 2019.
- o Third Party Recommendations, Proposed Timeline submitted November 6, 2019.
- o Leachate Release Assessment Update submitted February 4, 2020.
- Duke submitted Final Closure Plan December 31, 2020.
  - o All impoundment ash to be excavated and placed in onsite lined landfill.

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

- 1804-INDUS-1983: Dry Ash Landfill (closed, unlined Phase 2 composite cap system)
  - o Inspected June 27, 2019.
  - o Groundwater Assessment
    - No updates at this time March 1, 2020
- 1809-INDUS: FGD Landfill (closed, lined)
  - o Closure CQA report, Post-closure plan and WQMP received April 1, 2019.
    - Permit for Closure has not been issued.
  - o Inspected June 27, 2019.
  - o Groundwater Assessment
    - No updates at this time March 1, 2020
- 1812-INDUS-2008: Industrial Landfill #1 (open, double-lined)
  - o Inspected June 27, 2019.
- Structural Fill CCB0031
  - o Storm water rerouting project (MAR-145) is complete,
    - Rerouting of the leachate force main from the Industrial Landfill at the crossing under the Surface Water Channel was Division-approved in April 2019 and completed in July 2019.
    - The Surface Water Channel was completed in July 2019; the West (and only) Temporary Surface Water Pond was put into operation in August 2019.
  - o Inspected June 27, 2019.
  - Erosion event November 4, 2019
    - Incident report submitted November 6 and 12, 2019.
    - DWM site visit November 12, 2019.
    - Repairs complete November 11, 2019.
- Duke submitted Final Closure Plan December 31, 2020.
  - All impoundment ash to be excavated except ash beneath structural fill CCB0031 and Dry Ash Landfill Phase 2 and placed in onsite lined landfill.

## <u>Rogers Energy Complex – Rutherford County (current coal fired)</u>

- 8106-INDUS-2009: CCR Landfill (open, lined)
  - o PTC Application for Phase 3 & 4 submitted March 11, 2019 (included Water Quality Monitoring Plan and Operations Plan).
  - PTC application Determination of Completeness submitted to facility on June 4, 2019, deemed complete.
  - o Design hydrogeologic technical review letter sent August 14, 2019.
  - o Inspected January 22, 2019.
  - o Permit to Construct Phases 3 and 4 issued January 22, 2020.
- Duke submitted Final Closure Plan December 31, 2020.

o All impoundment ash to be excavated and placed in onsite lined landfill

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

- 7302-INDUS-1988: CCR Landfill (open, lined, constructed partially on top of retired ash basin)
  - o Inspected September 25, 2019.
- Duke submitted Final Closure Plan December 31, 2020
  - All impoundment ash to be excavated except ash beneath existing/operating landfill
    7302 and placed in onsite lined landfill.

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

- 6512-INDUS-2016: CCR Landfill (open, lined)
  - o Approval of closure turf field test pad on July 18, 2019.
  - o Closure turf field test pad location report received on July 10, 2019.
  - o Thirty-day follow-up report on release received on July 1, 2019.
  - o Inspection of Site as response to coal ash release off of liner on June 28, 2019.
  - o Operations plan change to contingency plan approved on June 27, 2019.
  - o Change to approved plans received on June 10, 2019.
  - o Inspection on January 22, 2020.
  - Leakage Rate Exceedance Repair Documentation Report approved on May 3, 2019.

#### 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)
  - o Change to approved plans on August 6, 2019 and approval on August 7, 2019.
  - Ash Monofill and Area 1 Construction/Demolition Landfill closure meeting on June 28, 4, May 7, and August 26, 2019.
  - o Inspection on November 13, 2019.
  - o Coal Ash disposal complete, monofill closure underway.
  - Operations Plan modification to closure plan approved on August 7, 2019.
  - o Permit for Closure issued February 24, 2020.

# **DUKE ENERGY FACILITIES WITHOUT LANDFILLS**

<u>Asheville Steam Electric Plant - Buncombe County</u> (Duke Energy submitted plans to convert to combined cycle turbine to the N.C. Utilities Commission for approval in 2015. Plant to be converted December 31, 2019).

- 1119-INUDS-2020 (proposed)
  - o Zoning permit submitted on July 30, 2019.
  - o Site Suitability submitted April 3, 2019.
  - o Site Suitability comment letter sent April 26, 2019.

- Facility's first response on July 15, 2019 and second response on September 13, 2019.
- o Site Suitability Approval issued on September 13, 2019.
- o PTC application submitted on June 17, 2019.
- o Water Quality Monitoring Plan submitted on June 14, 2019.
- o Stockpiled soil sampling analytical data submitted on June 28, 2019.
  - Response on July 17, 2019.
- PTC application Determination of Completeness submitted to facility on July 12, 2019, deemed incomplete.
- o PTC application Determination of Completeness submitted to facility on September 13, 2019, deemed complete.
- Stockpiled Soil Sampling Work Plan received on May 31, 2019 and revision on June 19, 2019.
  - Approved on June 20, 2019.
- o Ash Transportation Information Plan revision received on May 22, 2019.
- o Design hydrogeologic technical review letter sent August 16, 2019.
  - Facility response submitted September 11, 2019.
  - DWM design hydro approval sent October 7, 2019.
- o Engineering technical review letter sent September 13, 2019.
  - Facility response submitted October 18, 2019.
- o Revised PTC Application, Rev 1 submitted October 31, 2019.
- o Revised Operations Plan, Rev 1 submitted October 31, 2019.
- o Revised Water Quality Monitoring Plan, Rev 2 submitted October 31, 2019.
- o Public Notice issued November 10, 2019.
- o Public Hearing scheduled December 19, 2019.
- o Public Comment period ends January 10, 2020.
- o Permit to Construct and Permit to Operate issued February 7, 2020.
- o Pre-construction meeting scheduled for March 3, 2020.

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

- Duke submitted Final Closure Plan December 31, 2020All impoundment ash to be excavated and beneficiated through the STAR plant process.
  - o All impoundment ash to be excavated and beneficiated through the STAR plant process.

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

- Duke submitted Final Closure Plan December 31, 2020All impoundment ash to be excavated and beneficiated through the STAR plant process.
  - o All impoundment ash to be excavated and beneficiated through the STAR plant process.

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

- Duke submitted Final Closure Plan December 31, 2020All impoundment ash to be excavated and beneficiated through the STAR plant process.
  - All impoundment ash to be excavated and beneficiated through the STAR plant process.

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

- Response to comments on CCR visual removal report submitted on July 30, 2019.
- Confirmation of Excavation Requirements submitted to facility on July 25, 2019.
- Ash basin closure soil sampling metals analysis submitted on July 19, 2019.

## <u>Weatherspoon Steam Electric Plant – Robeson County</u> (retired coal-fired facility, no electricity)

 Ash continues to be excavated and trucked to two concrete processing plants 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 structural fills in accordance with 15A NCAC 13B .1700.

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

- Partial closure notification of sub cell 2a, 5b, and 6a submitted on July 3, 2019.
- Partial closure notification for sub cell 6C submitted on September 10, 2019.
- Surface water and groundwater assessment request letter to facility on June 21, 2019.
- Assessment Work Plan submitted August 16, 2019.
- DWM Approval of Work Plan September 16, 2019.
- Assessment Schedule of Work submitted September 30, 2019;
  - o DWM concurrence on October 4, 2019.
- Inspected January 23, 2020.
- Assessment Work Plan Progress Report submitted January 15, 2020.

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

• No updates at this time – March 1, 2020.

## Inventory of structural fills greater than 10,000 cy, per Session Law 2014 122:

http://deq.nc.gov/about/divisions/waste-management/solid-waste-section/coal-combustion-byproducts.

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

#### Roxboro Steam Station Gypsum Storage Pad (CCB0003)

- No updates at this time March 1, 2020.
- Groundwater Assessment
  - o No updates at this time March 1, 2020.

# Belews Creek Steam Station Structural Fill (CCB0070)

- No updates at this time March 1, 2020.
- Groundwater Assessment
  - o Approval of structural fill additional assessment work plan on June 17, 2019.

# Swift Creek in Nash County (CCB0057)

• No updates at this time – March 1, 2020.

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

• DWM site inspection on July 11, 2019.

# HISTORIC ASH MANAGEMENT AREA

# 6806-INDUS- Eno Power Plant – historic coal ash storage area

- Facility submitted a revised Site Actions Plan on July 31, 2019.
- DWM issued approval of revised Site Actions Plan on August 7, 2019.

#### 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
  - Nothing to report at this time.
- Erosion and Sediment Control and Construction Storm Water
  - Nothing to report at this time.
- NPDES Storm Water
  - Nothing to report at this time.

#### **Asheville Steam Electric Plant**

- Dam Safety
  - o BUNCO-088
    - 02/06/20 Received submittal for repairing a spillway outlet pipe by installation of a cured-in-place lining to correct infiltration for BUNCO-088 (Lake Julian Dam) Scope 8.
    - 08/13/19 Received revised submittal for repairing a concrete ditch leading to the main spillway for BUNCO-088 (Lake Julian Dam) Scope 7 Addendum 1.
      - 08/20/19 Certificate of Approval to Repair issued.
      - 12/10/19 As-Built submittal received.
    - 10/22/18 Received submittal for repairing the spillway's identified areas of deterioration for BUNCO-088 (Lake Julian Dam) Scope 6.
      - 10/26/18 Certificate of Approval to Repair issued.
      - 12/10/19 As-Built submittal received.
  - o BUNCO-097
    - 03/19/19 Received submittal for the decommissioning of BUNCO-097 (1964 Ash Basin Dam) Scope 8.
      - 01/29/20 Response to Revision Request received.
      - 01/03/20 Revision Request issued.
      - 11/21/19 Response to Revision Request received.
      - 07/26/19 Revision Request issued.
  - o BUNCO-504
    - 11/21/19 Received submittal for a jurisdictional determination of BUNCO-504 (North Stormwater Pond Dam).

- 12/13/19 Jurisdictional Determination & Hazard Classification issued.
- o BUNCO-505
  - 11/21/19 Received submittal for a jurisdictional determination of BUNCO-505 (South Stormwater Pond Dam).
    - 12/13/19 Jurisdictional Determination & Hazard Classification issued.
- Erosion and Sediment Control and Construction Storm Water
  - o Nothing to report at this time.
- NPDES Storm Water
  - Nothing to report at this time.

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

- Dam Safety
  - o STOKE-117
    - 09/27/17 Received revised submittal to remove vegetation for STOKE-117 (Belews Creek Saddle Dike #1 Dam) Scope 3.
      - 11/13/19 Certificate of Final Approval to Repair issued.
      - 11/07/19 As-Built inspection performed.
      - 10/03/19 As-Built submittal received.
      - 05/24/19 Response to Revision Request received.
      - 03/26/19 Revision Request issued.
      - 02/19/19 As-Built inspection performed.
      - 12/20/18 As-Built submittal received.
      - 11/30/17 Certificate of Approval to Repair issued.
  - o STOKE-118
    - 07/11/19 Received submittal for the installation of three piezometers for STOKE-118 (Belews Creek Saddle Dike #2 Dam).
      - 11/13/19 Certificate of Final Approval to Install Instrumentation issued.
      - 11/07/19 As-Built inspection performed.
      - 10/07/19 As-Built submittal received.
      - 07/22/19 Certificate of Approval to Install Instrumentation issued.
- Erosion and Sediment Control and Construction Storm Water
  - Nothing to report at this time.
- NPDES Storm Water
  - Nothing to report at this time.

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

- Dam Safety
  - o ROWAN-047
    - 1/6/20 Partial inspection of dam performed for investigation of reported minor slough within the basin, near the toe contact of the Divider Dam (ROWAN-071).
  - o ROWAN-071
    - 1/6/20 Partial inspection of dam performed for investigation of reported minor slough near toe of dam.
    - 11/14/19 Certificate of Approval to Install Instrumentation issued
    - 10/17/19 Received submittal for the installation of 4 piezometers and 1 inclinometer for ROWAN-071 (Buck Ash Basin Divider Dam)
- Erosion and Sediment Control and Construction Storm Water
  - o ROWAN-2018-012
    - Inspection 11/21/2019 Closed
  - o ROWAN-2019-004
    - Inspection 11/21/2019 Closed
  - o ROWAN-2019-012
    - Inspection 11/21/2019 Compliant
  - o ROWAN-2019-013
    - Inspection 11/21/2019 Compliant
  - o ROWAN-2019-016
    - Inspection 11/21/2019 Compliant
- NPDES Storm Water
  - Nothing to report at this time.

# **Cape Fear Steam Electric Plant**

- Dam Safety
  - o CHATH-077
    - 01/27/20 Received revised submittal for the installation of an auxiliary overflow spillway for CHATH-077 (Cape Fear 1970 Ash Basin Dam) Scope 3.
    - 05/07/19 Received response to an NOD issued 03/19/19 for vegetation to be removed from CHATH-077 (Cape Fear 1970 Ash Basin Dam) Scope 2.
      - 11/20/19 Extension of Certificate of Approval to Repair issued.
      - 10/14/19 Received request for a one-year extension to remove vegetation from dams.
    - o CHATH-079
      - 01/16/20 Acceptance of Withdrawal Request issued.
      - 01/10/20 Received request for withdrawal to install a water treatment system pad electrical distribution line inside the dam for CHATH-079 (Cape Fear 1985 Ash Basin Dam).

#### o CHATH-075

- 01/10/20 Response to Revision Request received.
- 12/05/19 Revision Request issued.
- 10/29/19 Received submittal for the installation of an auxiliary overflow spillway for CHATH-075 (Cape Fear 1956 Ash Basin Dam) Scope 6.
- 05/07/19 Received response to an NOD issued 03/19/19 for vegetation to be removed from CHATH-075 (Cape Fear 1956 Ash Basin Dam) Scope 3.

#### o CHATH-079

- 10/03/19 Received revised submittal for the construction of an unpaved haul road for CHATH-079 (Cape Fear 1985 Ash Basin Dam) Scope 8.
  - 10/16/19 Certificate of Approval to Repair issued.
  - 01/17/20 Received change of EOR request.
  - 01/17/20 Change of EOR approval issued.

#### o CHATH-076

- 05/07/19 Received response to an NOD issued 03/19/19 for vegetation to be removed from CHATH-076 (Cape Fear 1963 Ash Basin Dam) Scope 2.
  - 11/20/19 Extension of Certificate of Approval to Repair issued.
  - 10/14/19 Received request for a one-year extension to remove vegetation from dams.
- Erosion and Sediment Control and Construction Storm Water
  - o Nothing to report at this time.
- NPDES Storm Water
  - o Nothing to report at this time.

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

- Dam Safety
  - o CLEVE-049
    - 11/25/19 Revision request.
    - 10/7/19 Drawdown rate increase request.
  - o CLEVE-050
    - 11/25/19 Revision request.
    - 10/14/19 Drawdown rate increase request.
    - 09/23/19 Received submittal to increase the dewatering rate of water within the basin to 1 foot per day for CLEVE-049 (Cliffside Active Ash Basin Downstream Dam).
      - 11/08/19 Certificate of Approval to Increase Dewatering Rate issued.
      - 10/29/19 Revised submittal received.
      - 10/07/19 Revision Request issued.
- Erosion and Sediment Control and Construction Storm Water
  - Nothing to report at this time.

- NPDES Storm Water
  - o Nothing to report at this time.

## **Dan River Combined Cycle Station**

- Dam Safety
  - o ROCKI-239
    - 01/09/19 Received submittal to install a cast in place concrete bulkhead to replace existing steel gates in spillway for ROCKI-239 (Dan River Low Head Diversion Dam) Scope 2.
      - 02/12/20 Certificate of Approval to Repair issued.
    - 01/08/19 Received submittal to install post-tensioned anchors to improve safety factors against overturning for ROCKI-239 (Dan River Low Head Diversion Dam) Scope 1.
      - 01/28/20 Certificate of Approval to Repair issued.
- Erosion and Sediment Control and Construction Storm Water
  - Nothing to report at this time.
- NPDES Storm Water
  - Nothing to report at this time.

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

- Dam Safety
  - o WAYNE-009
    - 01/16/20 Received submittal for the removal of vegetation along spillway for WAYNE-009 (HF Lee Cooling Lake Dam) Scope 7
      - Thom Edgerton inspected Cooling pond related to flooding of inactive basins due to storm.
    - 08/16/19 Received revised submittal for the repair of a seep on the downstream toe of dam for WAYNE-009 (HF Lee Cooling Lake Dam) Scope 6.
      - 01/22/20 Certificate of Final Approval to Repair issued.
      - 01/21/20 As-Built submittal received.
      - 01/14/20 As-Built inspection performed.
      - 10/11/19 Revised NOD issued.
      - 09/11/19 Certificate of Approval to Repair issued.
  - o WAYNE-033
    - 11/21/19 Received submittal in response to an 09/30/19 NOD to remove specific vegetation from the southwest corner of WAYNE-033 (HF Lee Inactive Ash Basin #3 Dam).
      - 01/24/20 Certificate of Approval to Repair issued.
  - o WAYNE-031,032,033
    - 02/11/20 Storm-related flooding of inactive basins inspected inactive basins.

- 11/21/19 Scope 4 Removal of uprooted tree at basin #3 response received.
  - 01/24/20 Approved.
- Erosion and Sediment Control and Construction Storm Water
  - O WAYNE-2020-003
    - 01/13/20 Revision application to WAYNE-2020-003 HF Lee Haul Road received.
      - 01/27/20 Approved
  - o 02/18/20 Erosion and Sediment Control sites inspected:
    - WAYNE-2019-026 PNG Line 94 MAOP Reclaim WCCT
    - WAYNE-2016-010 Inactive Ash Basins 1, 2, & 3 Vegetation Removal
    - WAYNE-2019-011 Triangle Pond Decommissioning
    - WAYNE-2018-035 Construction of the Ash Beneficiation Plant
    - WAYNE-2019-016 Haul Road Bridges
    - WAYNE-2017-022 Seepage Collection
    - WAYNE-2019-032 Haul Road from the 1982 Basin
    - WAYNE-2020-003 Haul Road
- NPDES Storm Water
  - Nothing to report this quarter

## **Marshall Steam Station**

- Dam Safety
  - o CATAW-054
    - 02/06/20 Received submittal to increase dewatering rate of basin to 1 ft/day for CATAW-054 (Marshall Active Ash Basin Dam)
    - 01/30/20 Received revised submittal for the abandonment of a coal silo discharge pipe for CATAW-054 (Marshall Active Ash Basin Dam) Scope
    - 11/18/2019 Revision Request issued for Pipe Abandonment, Scope 9.
    - 01/30/2019 Revision Request Response submitted for Pipe Abandonment, Scope 9.
- Erosion and Sediment Control and Construction Storm Water
  - o CATAW-2017-019
    - Inspection 01/15/2019 Compliant
  - CATAW-2019-009
    - Inspection 01/15/2019 Closed
  - o CATAW-2019-019
    - Inspection 01/15/2019 Compliant
- NPDES Storm Water
  - Nothing to report at this time.

#### **Mayo Steam Electric Plant**

- Dam Safety
  - o PERSO-036
    - 10/22/19 Received submittal for the installation of 2 piezometers and 2 inclinometers for PERSO-036 (Mayo FGD Settling Pond Dam).
  - o PERSO-036 and PERSO-037
    - 01/23/20 Received revised submittal for the dam decommissioning of PERSO-036 (Mayo FGD Settling Pond Dam) Scope 2 and PERSO-037 (Mayo FGD Flush Pond Dam) Scope 2.
    - 10/22/19 Received submittal for the installation of temporary access ramps to allow for excavation of the dam's contents for PERSO-036 (Mayo FGD Settling Pond Dam) Scope 1 and PERSO-037 (Mayo FGD Flush Pond Dam) Scope 1.
      - 11/06/19 Certificate of Approval to Repair issued.
  - PERSO-049 and PERSO-050
    - 05/28/19 Received submittal for the installation of a fence grounding system running parallel with the top of dam for PERSO-049 (Mayo FGD Settling Basin Dam) Scope 2 and PERSO-050 (Mayo Retention Basin Dam) Scope 2.
      - 02/04/20 As-Built submittal received.
      - 07/24/19 Certificate of Approval to Repair issued.
- Erosion and Sediment Control and Construction Storm Water
  - o PERSO-2018-014
    - 01/30/19 Area A Closure Event No. 1/Leachate Transfer System c/o
  - o PERSO-2018-010
    - 01/30/20 Mayo Monofill Stockpile c/o
  - PERSO-2019-007
    - 01/30/20 Mayo Stormwater Redirect c/o
  - o PERSO-2017-003
    - 01/30/20 Process water redirect Mayo.
  - o PERSO-2018-018
    - 01/30/20 Mayo process water redirect plus 6.2 acres continued gc/no problems noted.
  - PERSO-2018-011
    - 01/30/20 Mayo Stormwater redirect/area 1 looks good, well vegetated/basin still present.
  - PERSO-2018-021
    - 01/30/20 Mayo Water redirect stockpile/area 4, no problems, continued to maintain
- NPDES Storm Water
  - Nothing to report at this time.

#### **Riverbend Steam Station**

- Dam Safety
  - o GASTO-098
    - 01/08/2020 Completion of Dewatered Secondary Ash Basin Dam, Courtesy Notification received.
- Erosion and Sediment Control and Construction Storm Water
  - o Nothing to report at this time.
- NPDES Storm Water
  - Nothing to report at this time.

## **Roxboro Steam Electric Plant**

- Dam Safety
  - o PERSO-002
    - 01/29/20 Received submittal for the upgrading of the emergency spillway by armoring with RCC and riprap for PERSO-002 (Lake Hyco Dam) Scope 4.
    - 01/16/20 Received request for withdrawal to remove vegetation from the emergency spillway for PERSO-002 (Lake Hyco Dam) Scope 2.
    - 01/16/19 Received response to an NOD issued 10/11/18 for cracks on the spillway to be repaired for PERSO-002 (Lake Hyco Dam) Scope 3.
      - 11/18/19 As-Built submittal received.
      - 08/05/19 Certificate of Approval to Repair issued.
      - 07/29/19 Received revised submittal.
      - 05/30/19 Revision Request issued.
  - o PERSO-033
    - 11/19/19 Received submittal for the investigation of a subsurface pipe near the toe of dam for PERSO-033 (Roxboro East Ash Basin Dam) Scope 4.
      - 01/23/20 Revision Request issued.
  - o PERSO-047 and PERSO-048
    - 06/25/19 Received submittal for the installation of a fence grounding system running parallel with the top of dam for PERSO-047 (Roxboro Holding Basin Dam) Scope 2 and PERSO-048 (Roxboro Retention Basin Dam) Scope 2.
      - 12/10/19 As-Built submittal received.
      - 07/24/19 Certificate of Approval to Repair issued.
- Erosion and Sediment Control and Construction Storm Water
  - o PERSO-2019-004
    - 01/30/20 Roxboro process water redirection.
  - o PERSO-2018-010
    - 01/30/20 Roxboro process water redirection Final Phase/ erosion noted, needed repair scouring adjacent to spillway.
  - o PERSO-2017-006

- 01/30/20 Emergency spillway vegetation removal/project not started.
- PERSO-2017-011
  - 01/30/20 Roxboro process water redirection Project, WWT and WR Phase/ noted erosion adjacent to rip rap slope, repair needed.
- o PERSO-2018-005
  - 01/30/20 Roxboro process redirection c/o.
- NPDES Storm Water
  - Nothing to report at this time.

## L. V. Sutton Energy Complex

- Dam Safety
  - o NEWHA-003
    - 11/8/19 NOI sent.
    - 9/26/19 Sutton 1972 Cooling Lake Dam/NEWHA-003 inspection
  - o NEWHA-004 1971
    - 11/8/19 Ash pond dam inspection
  - o NEWHA-005
    - 11/8/19 Dam removed
- Erosion and Sediment Control and Construction Storm Water
  - o NEWHA-2019-025
    - 12/16/2019 Cooling Pond Repairs Compliance
  - o NEWHA-2016-025
    - 12/16/2019 Compliance
    - 12/16/2019 Sutton Plant Decommissioning/Demo Project Ph1 Compliance
- NPDES Storm Water
  - Nothing to report at this time

## W. H. Weatherspoon Power Plant

- Dam Safety
  - o ROBES-009
    - 02/04/20 Extension to Certificate of Approval to Repair issued.
    - 01/23/20 Received request for extension for the removal of vegetation for ROBES-009 (Weatherspoon 1979 Ash Basin Dam) Scope 6.
- Erosion and Sediment Control and Construction Storm Water
  - o Nothing to report at this time.
- NPDES Storm Water
  - Nothing to report at this time.

## STRUCTURAL FILLS

# Brickhaven No 2. Tract "A"

- Erosion and Sediment Control
  - o Nothing to report at this time.
- Mining
  - o Nothing to report at this time.
- NPDES Storm Water
  - o Nothing to report at this time.

# **Colon Mine Permit 53-05**

- Erosion and Sediment Control
  - o Nothing to report at this time.
- Mining
  - o Nothing to report at this time.
- NPDES Storm Water
  - o Nothing to report at this time.

# **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	ACTIVE
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	Belews Lake Saddle Dike #2 Dam	STOKE-118	ACTIVE

Belews Creek Steam	Belews Lake Saddle Dike #3	STOKE-119	ACTIVE
Station	Dam		
Belews Creek Steam	Belews Lake Saddle Dike #4	ROCKI-235	ACTIVE
Station	Dam		
Belews Creek Steam	Belews Creek Chemical Pond	STOKE-115	ACTIVE
Station	Dam		
Belews Creek Steam	Belews Creek Retention	STOKE-121	ACTIVE
Station	Basin Dam		
Belews Creek Steam	Belews Creek Holding Basin	STOKE-120	ACTIVE
Station	Dam		
Belews Creek Steam	Belews Creek South Coal Pile	STOKE-123	ACTIVE
Station	Dam		
Belews Creek Steam	Belews Creek North Coal Pile	STOKE-122	ACTIVE
Station	Dam		
Buck Combined	Buck Main Ash Basin Dam	ROWAN-047	ACTIVE
Cycle Station			
Buck Combined	Buck Ash Basin #1 Dam	ROWAN-068	ACTIVE
Cycle Station			
Buck Combined	Buck Basin #1 to Basin #2	ROWAN-069	ACTIVE
Cycle Station	Dam		
Buck Combined	Buck Basin #2 to Basin #3	ROWAN-070	ACTIVE
Cycle Station	Dam		
Buck Combined	Buck Ash Basin Divider Dam	ROWAN-071	ACTIVE
Cycle Station			
Buck Combined	Buck Fuel Containment Dam	ROWAN-072	DECOMISSIONED
Cycle Station			
Buck Combined	Buck Beneficial Ash Wet	ROWAN-076	ACTIVE
Cycle Station	Pond		
Buck Combined	Buck Beneficial Ash Dry	ROWAN-075	ACTIVE
Cycle Station	Pond		
Cape Fear Steam	Buckhorn Lake Dam	CHATH-022	ACTIVE
Electric Plant			
Cape Fear Steam	Cape Fear 1956 Ash Pond	CHATH-075	INACTIVE
Electric Plant	Dam		
Cape Fear Steam	Cape Fear 1963 Ash Pond	CHATH-076	INACTIVE
Electric Plant	Dam		
Cape Fear Steam	Cape Fear 1970 Ash Pond	CHATH-077	INACTIVE
Electric Plant	Dam		
Cape Fear Steam	Cape Fear 1978 Ash Pond	CHATH-078	INACTIVE
Electric Plant	Dam		
Cape Fear Steam	Cape Fear 1985 Ash Pond	CHATH-079	ACTIVE
Electric Plant	Dam		
Cape Fear Steam	Cape Fear Flood Control	CHATH-080	DECOMISSIONED
Electric Plant	Dam		
James E. Rogers	Cliffside River Dam	CLEVE-053	ACTIVE
Energy Complex			

(Cliffside Steam			
Station)	Cliffication of the control of the c	DUTUE 070	DIACTIVE
James E. Rogers	Cliffside Inactive Ash Basin	RUTHE-070	INACTIVE
Energy Complex	#5 Main Dam		
(Cliffside Steam Station)			
	Cliffside Inactive Ash Basin	RUTHE-072	INACTIVE
James E. Rogers	#5 Saddle Dam	KUTHE-0/2	INACTIVE
Energy Complex (Cliffside Steam	#3 Saddle Dalli		
Station)			
James E. Rogers	Cliffside Active Ash Basin	CLEVE-050	ACTIVE
Energy Complex	Upstream Dam	CLEVE-030	ACTIVE
(Cliffside Steam	Opsiteani Dani		
Station)			
James E. Rogers	Cliffside Active Ash Basin	CLEVE-049	ACTIVE
Energy Complex	Downstream Dam	CLEVE-049	ACTIVE
(Cliffside Steam	Downstream Dam		
Station)			
James E. Rogers	Cliffside Retention Basin	CLEVE-047	ACTIVE
Energy Complex	Dam (Formerly Inactive Ash	CLEVE-04/	ACTIVE
(Cliffside Steam	Basin #1-4 Main Dam)		
Station)			
James E. Rogers	Cliffside Active Ash Basin	CLEVE-054	ACTIVE
Energy Complex	Internal Dam	CLL VL-054	ACTIVE
(Cliffside Steam	Internal Dam		
Station)			
Dan River Combined	Dan River Active Primary	ROCKI-237	ON-GOING
Cycle Station	Ash Basin Dam	10011 237	DECOMISSIONIN
Cycle Station	7 Sii Busiii Buiii		G
Dan River Combined	Dan River Active Secondary	ROCKI-238	ON-GOING
Cycle Station	Ash Basin Dam	110 0111 200	DECOMISSIONIN
			G
Dan River Combined	Dan River Service Water	ROCKI-241	ACTIVE
Cycle Station	Settling Pond Dam		
Dan River Combined	Dan River Low Head	ROCKI-239	ACTIVE
Cycle Station	Diversion Dam		
H.F. Lee Energy	H.F. Lee Cooling Lake Dam	WAYNE-009	ACTIVE
Complex			
H.F. Lee Energy	H.F. Lee Active Ash Basin	WAYNE-022	ACTIVE
Complex	Dam		
H.F. Lee Energy	H.F. Lee Inactive Ash Basin 1	WAYNE-031	INACTIVE
Complex	Dam		
H.F. Lee Energy	H.F. Lee Inactive Ash Basin 2	WAYNE-032	INACTIVE
Complex	Dam		
H.F. Lee Energy	H.F. Lee Inactive Ash Basin 3	WAYNE-033	INACTIVE
Complex	Dam		

HE L E	III D	WAYNE TOD	ACTIVE
H.F. Lee Energy	H.F. Lee Permanent	WAYNE-TBD	ACTIVE
Complex	Stormwater Pond Dam	THE STATE OF A	DEGO! MAGIONED
H.F. Lee Energy	H.F. Lee Triangular Pond	WAYNE-034	DECOMISSIONED
Complex	Dam	GATAXX OF A	A CITY III
Marshall Steam	Marshall Active Ash Basin	CATAW-054	ACTIVE
Station	Dam	G . T . YYY T .	A COMPANY AND
Marshall Steam	Marshall Retention Basin	CATAW-076	ACTIVE
Station	Dam	GATANIA OF F	A CITY III
Marshall Steam	Marshall Holding Basin Dam	CATAW-075	ACTIVE
Station	) ( 1 11 W . T	GATANIA AT	A CITY III
Marshall Steam	Marshall West Temporary	CATAW-077	ACTIVE
Station	SWP	G . T . XXX T .	DEGGA WAGYANIED
Marshall Steam	Marshall East Temporary	CATAW-078	DECOMISSIONED
Station	SWP		
Mayo Steam Electric	Mayo Lake Dam	PERSO-034	ACTIVE
Plant			
Mayo Steam Electric	Mayo Active Ash Pond Dam	PERSO-035	ACTIVE
Plant			
Mayo Steam Electric	Mayo FGD Settling Pond	PERSO-036	ACTIVE
Plant	Dam	DED 6.0.02	A COMMAND
Mayo Steam Electric	Mayo FGD Flush Pond Dam	PERSO-037	ACTIVE
Plant	2 121 2	777 60 046	A COMMAND
Mayo Steam Electric	Mayo Coal Pile Dam	PERSO-046	ACTIVE
Plant	11 707 0 11 7	777 66 646	A COMMAND
Mayo Steam Electric	Mayo FGD Settling Basin	PERSO-049	ACTIVE
Plant	Dam	DED CO OCO	A COTTAIN
Mayo Steam Electric	Mayo Retention Basin Dam	PERSO-050	ACTIVE
Plant	B: 1 14 : B:	CACTO 007	OM CODIC
Riverbend Steam	Riverbend Active Primary	GASTO-097	ON-GOING
Station	Ash Basin Dam		DECOMISSIONIN
D' 1 1 C	D: 1 14 : 2 1	GAGTO 000	G
Riverbend Steam	Riverbend Active Secondary	GASTO-098	ON-GOING
Station	Ash Basin Dam		DECOMISSIONIN
D' 1 1 C	D: 1 11 4 D	CACTO 000	G DECOMISSIONED
Riverbend Steam	Riverbend Intermediate Dam	GASTO-099	DECOMISSIONED
Station	D: 1 1F 1C +: +	CACTO 105	DECOMISSIONED
Riverbend Steam	Riverbend Fuel Containment	GASTO-105	DECOMISSIONED
Station	Dam	DED CO 002	A CONTRACT
Roxboro Steam	Lake Hyco Dam	PERSO-002	ACTIVE
Electric Plant	Darelana Afteri	DEDGO 013	ACTIVE
Roxboro Steam	Roxboro Afterbay Dam	PERSO-013	ACTIVE
Electric Plant	Reservoir	DEDGO 020	ACTIVE
Roxboro Steam	Roxboro West Ash Basin	PERSO-038	ACTIVE
Electric Plant	Dam	DEDGG 020	ACTIVE
Roxboro Steam	Roxboro West Ash Basin	PERSO-039	ACTIVE
Electric Plant	Rock Filter Dam		

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